

JONES DAY

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February 17, 2025

TO WHOM IT MAY CONCERN

Dear Applicant,

Re: Styrene REACH Consortium

This document contains the relevant information for purchasing a letter of access 'LoA' for joining the joint REACH registration for the substances:

- **STYRENE EC 202-851-5 (CAS 100-42-5)**

prepared by the **STYRENE REACH CONSORTIUM**. In addition, this PDF provides the relevant earlier SIEF communications issued by the Lead Registrant / Consortium.

If you wish to purchase a LoA, please fill in the next pages '**LOA APPLICATION FORM**' and **pdf them to the attention of ReachTeam@jonesday.com**. You will then receive a pre-payment notice by email for payment of the LoA price. As soon as we have received your payment in full, we will confirm that payment has been received and you will receive the joint submission token and any other necessary documentation (Chemical Safety Report, Guidance on Safe Use as the case may be) that you may need to join the Joint Submission via the ECHA REACH-IT portal (please see the ECHA Guidance on joining the Joint Submission). Potential registrants have to submit their individual parts (Article 10 (a) (i), (ii), (iii) and (x)) of the IUCLID 5 registration dossiers separately to ECHA by the relevant deadline.

Invoices for paid LoA fees will be issued by the Consortium on a periodic basis as soon as a sufficient number of LoAs have been processed and pre-paid.

If you have any questions, please do not hesitate to contact:

Preslava Dilkova at p.dilkova@jonesday.com / Telephone +32-2-645-1433

EUI-1219508312v1

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Letter of Access ('LoA') Application Form

Styrene REACH Consortium

LoA will be issued per legal entity. Please fill in the application form for each legal entity within an affiliated group of companies.

(To be filled in and emailed back to ReachTeam@jonesday.com)

NOTE:

*** By completing and sending the LoA application form to Jones Day, you shall be considered as having accepted the terms of the respective *Cooperation Agreement for REACH compliance after May 31, 2018 ("post-SIEF")* overleaf.**

*** Only once formal invoices will have been issued and settled, the LoA will be considered as issued and effective.**

* LoA applicants will be informed by separate email or via SIEF communication if the CSR and guidance on safe use will be prepared jointly and also **submitted jointly**, or rather whether they will be prepared jointly but will have to be **submitted individually**. In the latter case, LoA applicants will receive the CSR and guidance on safe use via a lucid so-called "export file" and must then insert it themselves into their individual REACH registration.

Substance:

- Styrene EC 202-851-5; CAS 100-42-5

Current Prices LoA:

- Up to 100 tons: EUR 3,637 (excl. VAT)
- 100 - 1000 tons: EUR 10,277 (excl. VAT)
- Above 1000 tons: EUR 29,620 (excl. VAT)

Please fill in applicable joint submission category. Any change in category (higher tonnage or change from intermediate to full substance registration) will require notification to Jones Day to adapt price.

Restrictions (optional):	
a.	<input type="checkbox"/> 'Opt-out' pursuant to Article 11 (3) for the following mandatory joint parts. <input type="checkbox"/> Article 10 (a) <input type="checkbox"/> Article 10 (a) (iv), <input type="checkbox"/> Article 10 (a) (vi), <input type="checkbox"/> Article 10 (a) (vii), <input type="checkbox"/> Article 10 (a) (ix)

Identification		
Company:		
.....		
REACH-IT UUID Number:		
Company reference name or number (optional):		
VAT number:		
<i>If you do not fill out a VAT number, you will be charged 21%.</i>		
Address:		
.....		
Postal Code:	City:	Country:
<i>Please give full details of person authorized to make the application:</i>		
Mr <input type="checkbox"/> Ms <input type="checkbox"/> Dr <input type="checkbox"/>		
Last Name:		First Name:
Phone Number:		Fax Number:
E-mail address:		

Registration

In his registration, the Applicant acts:

- a. for **himself**
- b. as **Only Representative** pursuant to Article 8 REACH for the following non-EU manufacturer;
Please give full contact details of **non-EU legal entity** represented by Only Representative
If you act on behalf of several non-EU legal entities that are not related to each other, please fill in new application form for each of your principals.

Company:

.....

Address:

.....

Postal Code: City: Country:

Mr Ms Dr

Last Name: First Name:

Phone Number: Fax Number:

E-mail address:

- c. as **Third Party Representative** pursuant to Article 4 REACH.

Do you want to disclose the name of the party you represent?

- a. Yes
- b. No

Company Name:

.....

REACH-IT UUID Number:

Address:

.....

Postal Code: City: Country:

Mr Ms Dr

Last Name: First Name:

Phone Number: Fax Number:

E-mail address:

Applicable Joint Submission:

Is the **company to be invoiced** the same as the legal entity registering under REACH?

a. Yes

b. No

If no, please give full company details of legal entity to be invoiced:

Company Name:

VAT number:

If you do not fill in a VAT number, you will be charged 21%.

Address:

Postal Code: City: Country:

General Terms and Conditions:

1. The right of referral only gives access to the Joint Registration Dossier of the substance for the registration as specified above.
2. The right of referral is solely granted in favor of the Applicant (and, only where applicable, the Affiliates listed herein), and is not transferable to any other entity or person.
3. Unless otherwise specified below at 6., the Applicant is not authorized to receive any copies of the Joint Registration Dossier nor is the Applicant authorized to inspect or view the Joint Registration Dossier or any related specific document in whole or in part, outside the general inspection period granted by the Consortium and outside the conditions set out in the SIEF Agreement *(or as replaced by Cooperation Agreement for some consortia)*.
4. This Letter of Access shall in no event be construed as granting the Applicant any property rights whatsoever in the Joint Registration Dossier.
5. Nothing in this letter shall require the Consortium members to file any additional data.
6. In as far as the Joint Registration Dossier may contain a chemical safety report ("CSR") and guidance on safe use, and the Applicant is participating in joint submission for those parts of the dossier, or has otherwise acquired rights to them, those will be made available to the Applicant as needed and may be used by it in as far as needed for purposes of safe handling and elaboration of eSDS and must be filed by it individually if set out in the SIEF Agreement *(or as replaced by Cooperation Agreement for some consortia)*.
7. If the Applicant has chosen to prepare itself the CSR, exposure scenarios and guidance on safe use, but does otherwise fully participate in the Joint Registration Dossier, it shall receive an electronic copy of parts Article 10 (a) (iv), (vi), (vii) and (ix) REACH of the Joint Registration Dossier and shall have the rights to use for this purpose only the (robust) study summaries and other information contained therein as well as to refer to the full study reports on which basis the (robust) study summaries have been developed.
8. In any event and regardless of the rights and restrictions set forth above, the Applicant shall always receive a list of uses which are covered by the CSR, the proposed classification and labeling as well as the PNECs and DNELs where available.

This Letter of Access does not create any rights for third parties or any liability towards third parties in relation to the data for which access is granted.

This letter of access is issued by the above Lead Registrant or Consortium Members and they have prepared the respective registration dossier(s). No attorney-client relationship with Jones Day is created by signing this LoA application / change form / the SIEF / Cooperation / Joint Submission Agreement or payment of the LoA (proforma) invoice.

Applicant's certifications and undertakings:

- The Applicant hereby declares that it is aware of, agrees and complies with the provisions of the SIEF Agreement *(or as replaced by Cooperation Agreement for some consortia)* issued by the Lead Registrant, which shall apply in its entirety in addition to the provisions set out hereunder.
- In case the Applicant has applied for an intermediate LoA only, the Applicant hereby declares that it is aware that registration as an intermediate pursuant to Articles 17 and 18 REACH is conditional upon fulfillment of the conditions set out there under.
- The Applicant declares that it has wired the Letter of Access Pre-payment fee to the following bank account within 30 calendar days of signature of this Letter of Access. Following receipt of the payment in full, the applicant will receive the security token. The invoice for the Letter of Access / Joint Submission will be issued at latest at the end of the applicable year of registration (end 2010, end 2013, end of 2018, as the case may be).
- If Applicant chooses not to disclose the Third Party represented, Jones Day reserves the right to appoint a neutral party that is entitled to audit the accuracy of the Third Party Representative's submission whilst guaranteeing the confidentiality of the Third Party. The Third Party Representative hereby agrees to such third party audit.

I have read and I agree with the legal Terms of the Agreement.

Signature of LoA applicant:

Name:

Date:

* * *

REACH: SIEF Communications Styrene
EC 202-851-5; CAS 100-42-5

- Updated October 16, 2024 -

SIEF Communications:

(Please see the most recent information at the end of the PDF)

- 1) SIEF Communication dated August 31, 2010 (including SIEF Agreement) (49 pages)
- 2) SIEF Communication dated April 7, 2011 (1 page)
- 3) SIEF Communication dated May 13, 2011 (1 page)
- 4) SIEF Communication dated March 14, 2013 (2 pages)
- 5) SIEF Communication dated December 26, 2013 (8 pages)
- 6) SIEF Communication dated December 16, 2015 (1 page)
- 7) SIEF Communication dated July 27, 2017 (1 page)
- 8) SIEF Communication dated December 5, 2018 (including Cooperation Agreement for the post May 31, 2018 period (“post-SIEF”) (30 pages)
- 9) SIEF Communication dated April 5, 2023 (Registration Dossier update – April 2023) (1 page)
- 10) SIEF Communication dated October 27, 2023 (Registration Dossier update – October 2023) (1 page)
- 11) SIEF Communication dated October 11, 2024 (Registration Dossier update – September 2024) (3 pages)

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URSULA SCHLISSNER
(32-2) 278-1224

EMAIL ADDRESS
uschliessner@mckennalong.com

August 31, 2010

BY ELECTRONIC MAIL

TO WHOM IT MAY CONCERN

Re: REACH: SIEF Communication Styrene (EC number 202-851-5)

Dear SIEF Member:

McKenna Long & Aldridge LLP act as Manager of the Styrene REACH Consortium (the 'Consortium'). The Consortium has developed the REACH joint registration dossier for styrene, as well as Chemical Safety Report, Exposure Assessment and guidance on safe use. Consortium member BASF SE ('BASF') has been appointed as Lead Registrant within the styrene SIEF.

We are writing to you today on behalf of BASF and the Consortium to notify you that the joint registration dossier for styrene has been finalized, submitted and accepted by ECHA. Set out below and overleaf is critical information for your perusal as well as about the next steps to be taken by SIEF members.

1) Data

Due to the amount of data on styrene, it was unfortunately not feasible to post a list of data in REACH IT. Please note that the Consortium has based its dossier to a large extent on the data used for the EU Reg. 793/93 risk assessment report undertaken for styrene. Further data has been added.

We shall assume that you agree with the Consortium's selection of data for use in the joint registration dossier per Article 11 (1) and 29 (3) REACH.

2) Joint Registration Dossier - Inspection Period

The final joint registration dossier will be made available for inspection at the offices of McKenna Long & Aldridge LLP during office hours between **September 6 and September 15, 2010, upon appointment taken at least 48 hours in advance.**

IUCLID Chapters 4-7 will be made available to co-registrants upon request after 9) below has been completed.

3) Classification & Labeling

Based on the data available and reviewed, the C&L attached as **Annex 1** was submitted in the dossier as communicated and agreed earlier in the SIEF. R 65 was added in the final submission..

4) DNEL & PNECs

Based on the data available and reviewed, the DNELs and PNECs attached as **Annex 2** have been derived and were submitted in the dossier.

5) CSR

The CSR was prepared jointly but shall be submitted individually (see Scenario 4.3 of ECHA Data Submission Manual.¹) A copy of the CSR will be provided to interested SIEF members simultaneously with the joint submission name and token.

6) Uses and Guidance on safe use

The following uses, as earlier communicated to SIEF via REACH IT are covered in the joint registration dossier:

- a) production of expandable polystyrene (EPS);
- b) production of polystyrene (HIPS) and GPPS;
- c) production of styrenic co-polymers;
- d) production of unsaturated polyester resins;
- e) production of styrene-butadiene rubber;
- f) production of styrene-butadiene latex;
- g) production of styrene isoprene co-polymers;
- h) production of styrene based polymeric dispersions;
- i) production of filled polyols.

The final list of uses and use descriptors is attached as **Annex 3**.

The Guidance on safe use was prepared by the Consortium and will be provided to co-registrants as part of the letter of access upon request so that they can individually file it with ECHA.

¹ http://echa.europa.eu/doc/reachit/dsm_19_how_joint_csr_en.pdf

7) Substance ID

Substance sameness was communicated earlier in REACH IT. The substance identity used is attached as **Annex 4**.

8) SIEF Agreement

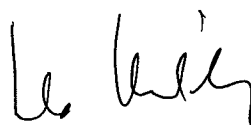
We ask that those SIEF members that wish to participate in joint registration sign and return to us by e-mail the signature page of the BASF SIEF Agreement attached hereto (**Annex 5**).

9) Participation in Joint Submission - Letters of Access

We would further kindly ask those SIEF members who wish to participate in joint submission to fill in a letter of access (LoA) application at www.mlalaw.eu. An on-line tool will guide you through the procedure, options (e.g. different tonnage band prices) and payment requirements. For your information, the price for an LoA (1,000 tons) will be €29,620.00 (excl. VAT where applicable). Once your LoA application has been duly accepted and payment has been made, you shall automatically receive the joint submission token to file the individual parts of your styrene registration dossier. **Participation in joint submission is conditional upon completing the procedure and obtaining an LoA at www.mlalaw.eu.**

Thank you very much for your attention.

Kind regards,



Ursula Schliessner
Partner
McKenna Long & Aldridge LLP

1. CLASSIFICATION AND LABELLING

1.1. Classification and labelling according to CLP / GHS

Name: Styrene

Implementation: EU

Remarks: EC/1272/2008 Annex VI + self classification

Classification

The substance is classified as follows:

- for physical-chemical properties:

Explosives:	Reason for no classification: conclusive but not sufficient for classification
Flammable gases:	Reason for no classification: conclusive but not sufficient for classification
Flammable aerosols:	Reason for no classification: conclusive but not sufficient for classification
Oxidising gases:	Reason for no classification: conclusive but not sufficient for classification
Gases under pressure:	Reason for no classification: conclusive but not sufficient for classification
Flammable liquids:	Flam. Liquid 3 (Hazard statement: H226: Flammable liquid and vapour.)
Flammable solids:	Reason for no classification: conclusive but not sufficient for classification
Self-reacting substances and mixtures:	Reason for no classification: conclusive but not sufficient for classification
Pyrophoric liquids:	Reason for no classification: conclusive but not sufficient for classification
Pyrophoric solids:	Reason for no classification: conclusive but not sufficient for classification
Self-heating	Reason for no classification: conclusive but not sufficient for

substances and mixtures:	classification
Substances and mixtures which in contact with water emits flammable gases:	Reason for no classification: conclusive but not sufficient for classification
Oxidising liquids:	Reason for no classification: conclusive but not sufficient for classification
Oxidising solids:	Reason for no classification: conclusive but not sufficient for classification
Organic peroxides:	Reason for no classification: conclusive but not sufficient for classification
Corrosive to metals:	Reason for no classification: conclusive but not sufficient for classification
• for health hazards:	
Acute toxicity - oral:	Reason for no classification: conclusive but not sufficient for classification
Acute toxicity - dermal:	Reason for no classification: conclusive but not sufficient for classification
Acute toxicity - inhalation:	Acute Tox. 4 (Hazard statement: H332: Harmful if inhaled.)
Skin corrosion/irritation:	Skin Irrit. 2 (Hazard statement: H315: Causes skin irritation.)
Serious damage/eye irritation:	Eye Irrit. 2 (Hazard statement: H319: Causes serious eye irritation.)
Respiration sensitization:	Reason for no classification: conclusive but not sufficient for classification
Skin sensitization:	Reason for no classification: conclusive but not sufficient for classification
Aspiration	Asp. Tox. 1 (Hazard statement: H304: May be fatal if swallowed and

hazard:	enters airways.)
Reproductive Toxicity:	Reason for no classification: conclusive but not sufficient for classification
Reproductive Toxicity: Effects on or via lactation:	Reason for no classification: conclusive but not sufficient for classification
Germ cell mutagenicity:	Reason for no classification: conclusive but not sufficient for classification
Carcinogenicity:	Reason for no classification: conclusive but not sufficient for classification
Specific target organ toxicity - single:	STOT Single Exp. 3 (Hazard statement: H335: May cause respiratory irritation.)
Specific target organ toxicity - repeated:	STOT Rep. Exp. 1 (Hazard statement: H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.) Affected organs: ear Route of exposure: Inhalation

- for environmental hazards:

Hazards to the aquatic environment:	Reason for no classification: conclusive but not sufficient for classification
Hazardous to the atmospheric environment:	Reason for no classification: conclusive but not sufficient for classification

Labelling

Signal word: Danger

Hazard pictogram:

GHS02: flame



GHS08: health hazard

Hazard statements:

H226: Flammable liquid and vapour.

H332: Harmful if inhaled.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H315: Causes skin irritation.

H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. (hearing)

H304: May be fatal if swallowed and enters airways.

1.2. Classification and labelling according to DSD / DPD**1.2.1. Classification and labelling in Annex I of Directive 67/548/EEC**

Remarks: C&L according to 67/548/EEC Annex I + self classification

1.2.2. Self classification(s)

Remarks: C&L according to 67/548/EEC Annex I + self classification

Chemical name: Styrene**Table 1. Classification according to Directive 67/548/EEC criteria**

Endpoints	Classification	Reason for no classification	Justification for (non) classification can be found in section
Explosiveness		conclusive but not sufficient for classification	6.1
Oxidising properties		conclusive but not sufficient for classification	6.3
Flammability	R10 Flammable.		6.2
Thermal stability		conclusive but not sufficient for	

		classification	
Acute toxicity	Xn; R20 Harmful; Harmful by inhalation. Xn; R65 Harmful; Harmful: may cause lung damage if swallowed.		5.2
Acute toxicity-irreversible damage after single exposure		conclusive but not sufficient for classification	5.2
Repeated dose toxicity	Xn; R48/20 Harmful; Harmful: danger of serious damage to health by prolonged exposure through inhalation.		5.6
Irritation / Corrosion	Xi; R36/37/38 Irritant; Irritating to eyes, respiratory system and skin.		5.3.4 and 5.4.3
Sensitisation		conclusive but not sufficient for classification	5.5.3
Carcinogenicity		conclusive but not sufficient for classification	5.8.3
Mutagenicity - Genetic Toxicity		conclusive but not sufficient for classification	5.7.3
Toxicity to reproduction- fertility		conclusive but not sufficient for classification	5.9.3
Toxicity to reproduction-development		conclusive but not sufficient for classification	5.9.3
Toxicity to reproduction - breastfed babies		conclusive but not sufficient for classification	5.9.3
Environment		conclusive but not sufficient for classification	7.6

Labelling

Indication of danger:

Xn - harmful

R-phrases:

R10 - flammable

R20 - harmful by inhalation

R36/37/38 - irritating to eyes, respiratory system and skin

R48/20 - harmful: danger of serious damage to health by prolonged exposure through inhalation

R65 - harmful: may cause lung damage if swallowed

S-phrases:

S23 - do not breathe gas/fumes/vapour/spray (appropriate wording to be specified by the manufacturer) (vapour)

S62 - if swallowed, do not induce vomiting: seek medical advice immediately and show this container or label

Notes:

Note D

1.2.3. Other classification(s)

No data available.

Table 1. DN(M)ELs for workers

Exposure pattern	Route	Descriptor	DNEL / DMEL	Most sensitive endpoint	Justification
Acute - systemic effects	Dermal				Assessment of hazard sufficiently covered by derivation of the respective DNEL for long-term exposure
Acute - systemic effects	Inhalation	DNEL (Derived No Effect Level)	289 mg/m ³	acute toxicity	
Acute - local effects	Dermal				Assessment of hazard sufficiently covered by derivation of the respective DNEL for long-term exposure
Acute - local effects	Inhalation	DNEL (Derived No Effect Level)	306 mg/m ³	acute toxicity	
Long-term - systemic effects	Dermal	DNEL (Derived No Effect Level)	406 mg/kg bw/day	repeated dose toxicity	
Long-term - systemic effects	Inhalation	DNEL (Derived No Effect Level)	85 mg/m ³	repeated dose toxicity	
Long-term - local effects	Dermal				Assessment of hazard sufficiently covered by derivation of the respective DNEL for long-term exposure
Long-term - local effects	Inhalation				Assessment of hazard sufficiently covered by derivation of the respective DNEL for long-term exposure

Table 2. DN(M)ELs for the general population

Exposure pattern	Route	Descriptor	DNEL / DMEL	Most sensitive endpoint	Justification
Acute - systemic effects	Dermal				Assessment of hazard sufficiently covered by derivation of the respective DNEL for long-term exposure
Acute - systemic effects	Inhalation	DNEL (Derived No Effect Level)	174.25 mg/m ³	acute toxicity	
Acute - systemic effects	Oral				Assessment of hazard sufficiently covered by derivation of the respective DNEL for long-term exposure
Acute - local effects	Dermal				Assessment of hazard sufficiently covered by derivation of the respective DNEL for long-term exposure
Acute - local effects	Inhalation	DNEL (Derived No Effect Level)	182.75 mg/m ³	acute toxicity	
Long-term - systemic effects	Dermal	DNEL (Derived No Effect Level)	343 mg/kg bw/day	repeated dose toxicity	
Long-term - systemic effects	Inhalation	DNEL (Derived No Effect Level)	10.2 mg/m ³	repeated dose toxicity	
Long-term - systemic effects	Oral	DNEL (Derived No Effect Level)	2.1 mg/kg bw/day	repeated dose toxicity	
Long-term - local effects	Dermal				Assessment of hazard sufficiently covered by derivation of the respective DNEL for long-term exposure

Long-term - local effects	Inhalation				Assessment of hazard sufficiently covered by derivation of the respective DNEL for long- term exposure
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Table 3. PNEC water

PNEC	Assessment factor	Remarks/Justification
PNEC aqua (freshwater): 0.028 mg/L	10	Extrapolation method: assessment factor Two chronic NOEC's are available for algae and daphnids. The most sensitive species tested is <i>Selenastrum capricornutum</i> with an EC10 (96h) of 0.28 mg/l (measured concentration). Besides these two NOEC's only information on effects following short-term exposure are available and no reliable results concerning the chronic toxicity for fish are available. An assessment factor of 10 is taken into account to determine the PNEC for the aqueous freshwater phase (please see also summary on chapter 6.1).
PNEC aqua (marine water): 0.0028 mg/L	100	Extrapolation method: assessment factor Two NOEC's are available for algae and daphnids. The most sensitive species tested is <i>Selenastrum capricornutum</i> with an EC10 (96h) of 0.28 mg/l (measured concentration). Besides these two NOEC's only information on effects following short-term exposure are available and no reliable results concerning the chronic toxicity for fish are available. An assessment factor of 100 is taken into account to determine the PNEC for the marine aqueous phase (please see also summary on chapter 6.1).
PNEC aqua (intermittent releases): 0.04 mg/L	100	Extrapolation method: assessment factor The most sensitive species in acute toxicity tests was <i>Pimephales promelas</i> LC50(96h) = 4.02 mg/l, measured, freshwater. An assessment factor of 100 was used to derive the PNEC for intermittent releases.

Table 4. PNEC sediment

PNEC	Assessment factor	Remarks/Justification
PNEC sediment (freshwater): 0.614 mg/kg sediment dw		Extrapolation method: partition coefficient The PNEC sediment was derived from the PNEC water using the equilibrium partitioning method.
PNEC sediment (marine water): 0.0614 mg/kg sediment dw		Extrapolation method: partition coefficient The PNEC sediment was derived from the PNEC water using the equilibrium partitioning method.

Table 5. Overview of effects on soil macro-organisms

Method	Results	Remarks	Reference
<p><i>Eisenia fetida</i> (annelids)</p> <p>short-term toxicity (laboratory study)</p> <p>Substrate: artificial soil</p> <p>OECD Guideline 207 (Earthworm, Acute Toxicity Tests) (Artificial Soil Test)</p>	<p>NOEC (14 d): 34 mg/kg soil dw test mat. (meas. (arithm. mean)) based on: mean percent weight change</p> <p>LOEC (14 d): 65 mg/kg soil dw test mat. (meas. (arithm. mean)) based on: burrowing time and mean percent weight change</p> <p>LOEC (14 d): 180 mg/kg soil dw test mat. (meas. (arithm. mean)) based on: survival</p> <p>LC50 (14 d): 120 mg/kg soil dw test mat. (meas. (arithm. mean)) based on: mortality</p>	<p>1 (reliable without restriction)</p> <p>key study</p> <p>experimental result</p> <p>Test material (EC name): styrene</p>	<p>Springborn Laboratories Inc. (1995e)</p> <p>Cushman, J.R. et al. (1997)</p> <p>European Chemicals Bureau (2002)</p> <p>Alexander, M. (1997)</p>

Table 6. Overview of effects on terrestrial plants

Method	Results	Remarks	Reference
<p><i>tobacco</i> (Dicotyledonae (dicots))</p> <p>short-term toxicity (laboratory study)</p> <p>vegetative vigour test</p> <p>Substrate: potted in bell jars or appended in suction flasks</p> <p>review data</p>	<p><i>tobacco</i>: EC0 (10 h): 32.4 g/m³ commercial benzene</p> <p><i>tobacco</i>: LC100 (10 h): 130 g/m³ pure benzene</p>	<p>2 (reliable with restrictions)</p> <p>weight of evidence</p> <p>read-across from supporting substance (structural analogue or surrogate)</p> <p>Test material (EC name): Benzene (See endpoint summary for justification of read-across)</p>	<p>European Chemicals Bureau (2002)</p> <p>Bundesanstalt für Arbeitsschutz und Arbeitsmedizin Anmeldestelle Chemikalie (2002)</p>

<p><i>different species</i> (no data)</p> <p>short-term toxicity (laboratory study)</p> <p>review data</p>	<p><i>different species</i>: NOEC (14 d): 60 mg/m³</p>	<p>2 (reliable with restrictions)</p> <p>weight of evidence</p> <p>read-across from supporting substance (structural analogue or surrogate)</p> <p>Test material (EC name): Toluene (See endpoint summary for justification of read-across)</p>	<p>European Chemicals Bureau (2002)</p>
<p><i>tomato</i> (Dicotyledonae (dicots))</p> <p>short-term toxicity (laboratory study)</p> <p>review data</p>	<p><i>tomato</i>: no data (2 d): 125 g/m³</p>	<p>2 (reliable with restrictions)</p> <p>weight of evidence</p> <p>read-across from supporting substance (structural analogue or surrogate)</p> <p>Test material (EC name): Butylene (See endpoint summary for justification of read-across)</p>	<p>European Chemicals Bureau (2002)</p>
<p><i>tomato</i> (Dicotyledonae (dicots))</p> <p><i>Pisum sativum</i> (Dicotyledonae (dicots))</p> <p>short-term toxicity (laboratory study)</p> <p>review data</p>		<p>2 (reliable with restrictions)</p> <p>weight of evidence</p> <p>read-across from supporting substance (structural analogue or</p>	<p>European Chemicals Bureau (2002)</p>

		surrogate) Test material (EC name): Propylene (See endpoint summary for justification of read-across)	
<i>different species</i> (no data) short-term toxicity (laboratory study) review data		2 (reliable with restrictions) weight of evidence read-across from supporting substance (structural analogue or surrogate) Test material (EC name): Ethylene (See endpoint summary for justification of read-across)	European Chemicals Bureau (2002)

Table 7. PNEC soil

PNEC	Assessment factor	Remarks/Justification
PNEC soil: 0.2 mg/kg soil dw		Extrapolation method: partition coefficient The PNEC soil was derived from the PNEC water using the equilibrium partitioning method.

Table 8. Overview of effects on micro-organisms

Method	Results	Remarks	Reference
activated sludge of a predominantly domestic sewage freshwater static equivalent or similar to OECD	EC50 (30 min): ca. 500 mg/L test mat. (nominal) based on: respiration rate	2 (reliable with restrictions) key study experimental result	BASF AG (1988) European Chemicals Bureau (2002)

Guideline 209 (Activated Sludge, Respiration Inhibition Test)		Test material (EC name): styrene	
Pseudomonas putida freshwater static Preparation of bacteria stock cultures in agar vials. Stock cultures incubated for 24 h at 25°C. Continuous preparation of new stock cultures in a one week interval. For the preparation of the bacteria suspension bacteria are washed away by aid of sterile NaCl-solution and further diluted with NaCl-solution. Adjustment of extinction value to formacine-standard suspension. Preparation of different concentrations of the test solution. Preparation of final test solution: 80 mL test solution of respective concentrations, 5 mL stock solution I, 5 mL stock solution II and 10 mL bacteria suspension. 3 replicates of each concentration. Incubation of flaks for 16 hours at 25°C. At end of incubation period measurement of extinction of monochromatic radiation.	NOEC (16 h): 72 mg/L test mat. based on: starting inhibition effect on cell proliferation	2 (reliable with restrictions) key study experimental result Test material (EC name): styrene	Bringmann, G. and Kühn, R. (1977) European Chemicals Bureau (2002)
Uronema parduzci freshwater static Cell multiplication inhibition test and determination of toxicity treshold (TKG "Toxische Grenzkonzentration")	NOEC (20 h): 185 mg/L test mat. (nominal) based on: cell multiplication inhibition	2 (reliable with restrictions) supporting study experimental result Test material (EC name): styrene	Bringmann, G. and Kühn, R. (1980) European Chemicals Bureau (2002)
Spirillum volutans freshwater static	MEC90 (minimum effective concentration to eliminate reversing motility in greater than 90% of cells within 5	2 (reliable with restrictions) supporting study	Qureshi, A.A., et al. (1982) European Chemicals

Motility inhibition test of <i>Spirillum volutans</i> exposed to styrene	minutes) (5 min): 636 mg/L test mat. (meas. (not specified)) based on: motility	experimental result Test material (EC name): styrene	Bureau (2002)
<i>Photobacterium phosphoreum</i> saltwater static Luminescent bacterial assay (Microtox assay), monitoring changes in the light production by hydrated luminescent bacteria in a temperature-controlled photometer when exposed to the test substance	EC50 (5 min): 5.4 mg/L test mat. (nominal) based on: luminescence inhibition	2 (reliable with restrictions) supporting study experimental result Test material (EC name): styrene	Qureshi, A.A., et al. (1982) European Chemicals Bureau (2002)
<i>Pseudomonas fluorescens</i> freshwater static Measurement of starting inhibition of glucose assimilation during log-phase of <i>Pseudomonas fluorescens</i> exposed to styrene. Effects are measured by photometric determination of turbidity. A deviation of 3 % from the arithmetic mean of the turbidity equivalent value of non-toxic reference concentration is considered to be indicative of inhibition of glucose assimilation.	NOEC (16 h): 72 mg/L test mat. (nominal) based on: inhibition of glucose assimilation	2 (reliable with restrictions) supporting study experimental result Test material (EC name): styrene	Bringmann, G. (1973) European Chemicals Bureau (2002)
<i>Chilomonas paramecium</i> freshwater static Cell multiplication inhibition test and determination of toxicity threshold (TKG "Toxische Grenzkonzentration")	NOEC (48 h): > 100 test mat. (nominal) based on: Cell multiplication inhibition	2 (reliable with restrictions) supporting study experimental result Test material (EC name): styrene	Bringmann, G. et al. (1980) European Chemicals Bureau (2002)
<i>Entosiphon sulcatum</i>	NOEC (72 h): > 256	2 (reliable with	Bringmann, G.

freshwater static Cell multiplication inhibition test and determination of toxicity treshold (TKG "Toxische Grenzkonzentration")	mg/L test mat. (nominal) based on: Cell multiplication inhibition	restrictions) supporting study experimental result Test material (EC name): styrene	(1978) European Chemicals Bureau (2002)
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Table 9. PNEC sewage treatment plant

Value	Assessment factor	Remarks/Justification
PNEC STP: 5 mg/L	100	Extrapolation method: assessment factor A short term respiration test with activated sludge has been used to derive the PNEC STP. The EC50 was 500 mg/l styrene. An assessment factor of 100 has been used.

Table 10. PNEC oral

PNEC	Assessment factor	Remarks/Justification
		The environmental fate and the low log Kow of Styrene indicate, that secondary poisoning is an unlikely exposure pathway.

Identified uses

Table 1. Uses by workers in industrial settings

Confidential	IU number	Identified Use (IU) name	Substance supplied to that use	Use descriptors
	1	Manufacturing of styrene	as such (substance itself)	<p>Process category (PROC): PROC 1: Use in closed process, no likelihood of exposure PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 15: Use as laboratory reagent</p> <p>Environmental release category (ERC): ERC 1: Manufacture of substances</p> <p>Sector of end use (SU): SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites SU 8: Manufacture of bulk, large scale chemicals (including petroleum products)</p> <p>Subsequent service life relevant for that use?: no</p>
	2	Continuous mass polymerisation of	as such (substance itself)	<p>Process category (PROC): PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p>

	<p>Polystyrene (HIPS and GPPS)</p>	<p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 15: Use as laboratory reagent</p> <p>Environmental release category (ERC): ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Sector of end use (SU): SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites SU 12: Manufacture of plastics products, including compounding and conversion</p> <p>Subsequent service life relevant for that use?: no</p>
<p>3</p>	<p>Batch suspension polymerisation of Polystyrene (HIPS and GPPS)</p>	<p>Process category (PROC): PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 15: Use as laboratory reagent</p> <p>Environmental release category (ERC):</p>

			<p>ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Sector of end use (SU): SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites SU 12: Manufacture of plastics products, including compounding and conversion</p> <p>Subsequent service life relevant for that use?: no</p> <p>Process category (PROC): PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 15: Use as laboratory reagent</p> <p>Environmental release category (ERC): ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Sector of end use (SU): SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites SU 12: Manufacture of plastics products, including compounding and conversion</p> <p>Subsequent service life relevant for that use?: no</p> <p>Process category (PROC):</p>
4	Production of Expandable Polystyrene	Production of as such (substance itself)	
5	Production of as such		

	Styrenic Copolymers	(substance itself)	<p>PROC 2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 3: Use in closed batch process (synthesis or formulation)</p> <p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p> <p>PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p> <p>PROC 15: Use as laboratory reagent</p> <p>Environmental release category (ERC):</p> <p>ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Sector of end use (SU):</p> <p>SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites</p> <p>SU 12: Manufacture of plastics products, including compounding and conversion</p> <p>Subsequent service life relevant for that use?: no</p>
6	Manufacturing of UP/VE resins and formulated resins	as such (substance itself)	<p>Process category (PROC):</p> <p>PROC 1: Use in closed process, no likelihood of exposure</p> <p>PROC 3: Use in closed batch process (synthesis or formulation)</p> <p>PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises</p> <p>PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)</p> <p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p> <p>PROC 9: Transfer of substance or preparation into small containers (dedicated</p>

			<p>filling line, including weighing) PROC 15: Use as laboratory reagent</p> <p>Environmental release category (ERC): ERC 2: Formulation of preparations</p> <p>Sector of end use (SU): SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites SU 12: Manufacture of plastics products, including compounding and conversion</p> <p>Subsequent service life relevant for that use?: no</p>
7a	FRP manufacturing in an industrial setting	as such (substance itself)	<p>Process category (PROC): PROC 3: Use in closed batch process (synthesis or formulation) PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 7: Industrial spraying PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 10: Roller application or brushing PROC 13: Treatment of articles by dipping and pouring PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 15: Use as laboratory reagent</p> <p>Environmental release category (ERC): ERC 6d: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers</p> <p>Sector of end use (SU): SU 3: Industrial uses: Uses of substances as such or in preparations at industrial</p>

				<p>sites</p> <p>SU 12: Manufacture of plastics products, including compounding and conversion</p> <p>Subsequent service life relevant for that use?: no</p> <p>Process category (PROC):</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 3: Use in closed batch process (synthesis or formulation)</p> <p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p> <p>PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p> <p>PROC 15: Use as laboratory reagent</p> <p>Environmental release category (ERC):</p> <p>ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Sector of end use (SU):</p> <p>SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites</p> <p>SU 11: Manufacture of rubber products</p> <p>Subsequent service life relevant for that use?: no</p> <p>Process category (PROC):</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 3: Use in closed batch process (synthesis or formulation)</p> <p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p>
8	Production of Styrene Butadiene Rubber (SBR)	as such (substance itself)		
9	Production of Styrene Butadiene Latex (SBL)	as such (substance itself)		

			<p>PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 15: Use as laboratory reagent</p> <p>Environmental release category (ERC): ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Sector of end use (SU): SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites SU 11: Manufacture of rubber products</p> <p>Subsequent service life relevant for that use?: no</p>
10	Production of Styrene Isoprene Copolymers	as such (substance itself)	<p>Process category (PROC): PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 15: Use as laboratory reagent</p> <p>Environmental release category (ERC): ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Sector of end use (SU): SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites SU 11: Manufacture of rubber products</p>

	11	Production of other Styrene based polymeric dispersions	as such (substance itself)	<p>Subsequent service life relevant for that use?: no</p> <p>Process category (PROC): PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 15: Use as laboratory reagent</p> <p>Environmental release category (ERC): ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Sector of end use (SU): SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites SU 12: Manufacture of plastics products, including compounding and conversion</p> <p>Subsequent service life relevant for that use?: no</p>
	12	Production of filled Polyols	as such (substance itself)	<p>Process category (PROC): PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p>

				<p>PROC 15: Use as laboratory reagent</p> <p>Environmental release category (ERC): ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Sector of end use (SU): SU 3: Industrial uses: Uses of substances as such or in preparations at industrial sites SU 12: Manufacture of plastics products, including compounding and conversion</p> <p>Subsequent service life relevant for that use?: no</p>
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Table 2. Uses by professional workers

Confidential	IU number	Identified Use (IU) name	Substance supplied to that use	Use descriptors
	7b	FRP manufacturing in a professional setting	as such (substance itself)	<p>Process category (PROC): PROC 3: Use in closed batch process (synthesis or formulation) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 10: Roller application or brushing PROC 11: Non industrial spraying</p> <p>Environmental release category (ERC): ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p>

					<p>Sector of end use (SU): SU 12: Manufacture of plastics products, including compounding and conversion SU 22: Professional uses: Public domain (administration, education, entertainment, services, craftsmen)</p> <p>Subsequent service life relevant for that use?: no</p>
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Table 3. Uses by consumers

Confidential	IU number	Identified Use (IU) name	Use descriptors
	13	Consumer use of Liquid UP resin for repair purposes	<p>Chemical product category (PC): PC 9a: Coatings and paints, thinners, paint removes</p> <p>Environmental release category (ERC): ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Sector of end use (SU): SU 21: Consumer uses: Private households (= general public = consumers)</p> <p>Subsequent service life relevant for that use?: no</p>
	14	Consumer use of Resin paste used as fillers/putties	<p>Chemical product category (PC): PC 9b: Fillers, putties, plasters, modelling clay</p> <p>Environmental release category (ERC): ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Sector of end use (SU):</p>

				SU 21: Consumer uses: Private households (= general public = consumers) Subsequent service life relevant for that use?: no
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1. IDENTITY OF THE SUBSTANCE

1.1. *Name and other identifiers of the substance*

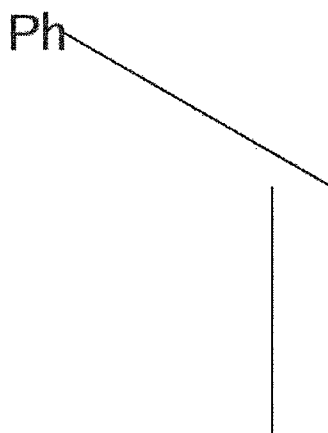
The substance **styrene** is a mono constituent substance (origin: organic) having the following characteristics and physical–chemical properties (see the IUCLID dataset for further details).

The following public name is used: styrene.

Table 1. Substance identity

EC number:	202-851-5
EC name:	styrene
CAS number (EC inventory):	100-42-5
CAS name:	Benzene, ethenyl-
IUPAC name:	styrene
Molecular formula:	C ₈ H ₈
Molecular weight range:	104.1491

Structural formula:



1.2. *Composition of the substance*

Degree of purity: 99.0 — 100.0 % (w/w)

Table 2. Constituents

Constituent	Typical concentration	Concentration range	Remarks
styrene EC no.: 202-851-5		99.0 — 100.0 % (w/w)	

Table 3. Impurities

Impurity	Typical concentration	Concentration range	Remarks
2-phenylpropene EC no.: 202-705-0		0.011 — 0.04 % (w/w)	max. 1000 ppm
ethylbenzene EC no.: 202-849-4		0.0068 — 0.3 % (w/w)	max. 3000 ppm
toluene EC no.: 203-625-9		1.0E-4 — 0.0010 % (w/w)	max. 10 ppm
cumene EC no.: 202-704-5		80.0 — 230.0 ppm	
benzene EC no.: 200-753-7		0.0 — 0.04 % (w/w)	max. 400 ppm
p-xylene EC no.: 203-396-5	< 120.0 ppm		
m-xylene EC no.: 203-576-3	< 200.0 ppm		
o-xylene EC no.: 202-422-2	< 300.0 ppm		
propylbenzene EC no.: 203-132-9		150.0 — 220.0 ppm	
hydrogen peroxide EC no.: 231-765-0	< 100.0 ppm		
phenylacetylene EC no.: 208-645-1	< 300.0 ppm		
benzaldehyde EC no.: 202-860-4	< 200.0 ppm		
ethyltoluene EC no.: 247-093-6	< 200.0 ppm		

1.3. Analytical information (recommendation only, each registrant is responsible to establish substance identity)

Analytical data (IUCLED Chapter 1.4)

JSIA proposal

Analytical method	Reason for taking data	Condition
Gas Chromatography	To show mono-constituent and high purity (99.5%<)	
IR spectroscopy	Most popular analytical method for qualitative analysis. To identify styrene as aromatic hydrocarbon	liquid film
Mass spectroscopy	To identify molecular weight	
¹ H NMR	To identify molecular structure	in CDCl ₃

BASF

Analytical Method	Conditions
Gas Chromatography	
IR spectroscopy	
¹ H-NMR	in CDCl ₃
¹³ C-NMR	in CDCl ₃
UV/VIS spectrometry	specific absorbance and molar absorptivities in methanol

GC, IR and NMR are considered as core methods, others are optional.

SIEF Agreement

Styrene

August 31, 2010

For

Styrene (C₆H₅-CH-CH₂, CAS RN: 100-42-5; EC No.: 202-851-5; EEC Annex I Index No.: 601-026-00-0) according to ASTM Designation D 2827/2000 ('Styrene)

This SIEF Agreement (hereinafter the "Agreement") is entered into by and between:

BASF SE, Germany, as Lead Company under the Consortium Agreement for REACH for Styrene (hereinafter the "Consortium"), acting in its own name and in the name and on behalf of all members of the Consortium (hereinafter referred to as "**Lead Registrant**")

And the SIEF Participant signatory of the present Agreement (hereinafter referred to as "**Non-Lead Member**")

Hereinafter referred to as "the Parties"

Preamble

Whereas the Parties to this Agreement have pre-registered Styrene (hereinafter the "Substance"), have agreed on the identity and the sameness of the Substance, and thus are Participants of the same Substance Information Exchange Forum ("SIEF") as potential registrants for that Substance under the meaning of Article 29 of Regulation EC 1907/2006 ("REACH", or the "REACH Regulation");

Whereas the REACH Regulation imposes on manufacturers and importers as well as on only representatives the obligation to register the Substance within the prescribed deadlines;

Whereas the REACH Regulation requires, subject to certain exceptions, multiple registrants of the same substance to share certain data and jointly submit through a Lead Registrant part of the information required for the registration relating to the Substance to the European Chemicals Agency ("Agency");

Whereas the Lead Members defined in the Article 1 of this Agreement have prepared/will have prepared the Joint Registration Dossier to be submitted to the Agency through the Lead Registrant;

Whereas the Members of the Consortium are aware that they have co-operation and data sharing obligations with other SIEF participants.

Whereas the Non-Lead Member has the intention to register the Substance and he is willing to appoint the Lead Registrant as lead registrant in order to have him to submit the Joint Registration Dossier.

Whereas the Agency represented in its REACH guidance that it is advisable for the SIEF participants to agree in writing certain SIEF operational rules concerning data sharing, rights on the developed information and sharing of costs.

Therefore, with a view to fulfilling their regulatory obligations under the REACH Regulation in respect to the Substance, the Parties hereto have decided to pursue the following objectives (hereinafter the "Purpose"):

1. to agree on the operating rules governing the exchanges of information between the SIEF potential registrants (Title I);
2. to agree on the rules regarding the rights to participate in the joint submission of data, to use the (robust) study summaries and to refer to the relevant full study reports in the Joint Registration Dossier developed by the Lead Member (Title II);

under the terms and conditions set forth in this Agreement.

THE PARTIES HAVE AGREED UPON THE FOLLOWING:

Article I. Definitions

Terms written in capital letters are defined in the Preamble above, in this Article 1 or in other parts of this Agreement. To the extent not otherwise defined in this Agreement, any definition specified in REACH, in particular in Article 3, shall apply to this Agreement:

Affiliate: Any person, which directly or indirectly through one or more intermediaries owns, controls, is controlled by, or is under common control with, another legal person. For the purpose of this definition, a legal person shall be deemed to 'control' another legal person if it has the direct or indirect power to direct or cause the direction of the general management and policies of another legal person, whether through the ownership of securities or capital stock, voting stock, by contract or otherwise. A legal person shall presumptively be deemed to control another legal person if it owns, directly or indirectly through one or more intermediaries and whether legally or beneficially fifty per cent (50 %) or more of the outstanding voting securities or capital stock or other comparable equity or ownership interest of such legal person.

Data Owner: Any entity holding rights to use Information on the Substance, either as SIEF participant or as non SIEF participant.

Information: studies, other scientific, statistical, or technical data, including but not limited to composition, characteristics, properties and processes and applications, and any information in any form made available by a Party or generated by the Parties jointly, pursuant to or in the course of this Agreement.

Joint Registration Dossier: The data that the Parties are required to submit jointly to the Agency in order to register the Substance, pursuant to Article 11 (1), paragraph 2 of REACH.

Parties: being the parties to this Agreement, having the quality of either:

-Lead Member: a SIEF participant who is subject to the registration requirements under REACH, who participates to the SIEF discussions in order to compile the Joint Registration Dossier and who is a member of the Consortium.

-Lead Registrant: a SIEF participant who is subject to the registration requirements under REACH, which the Non-Lead Member agree hereto to appoint acting as Lead Registrant as defined under Article 11 (1) REACH. The

Lead Registrant is a member of and duly represents and acts in the name and on behalf of the other members of the Consortium ('Lead Members').

-Non-Lead Member: a SIEF participant being neither a Lead Member nor a data holder (Article 28 (7) REACH)) and that agrees to rely on the Joint Registration Dossier prepared and/or made available by the Lead Registrant, on his own behalf, and/or on behalf of the represented potential registrants in case he is a third party representative.

Title I: SIEF OPERATING RULES

Article II. Confidentiality

1. The Parties shall:

- a) treat all Information as confidential and not disclose it to third parties, unless regulatory disclosure requirements apply. Each Party shall advise immediately the other Parties in writing of any disclosure or misuse by any Party or a third party of Information, as well as of any request by competent authorities relating to the disclosure of that Information.

Disclosure of Information as required for legal and/or regulatory purposes including the REACH Regulation, shall only take place by the Parties in a form (for example short summaries where possible) reflecting the minimum information required to be disclosed. This restriction does not apply to the Party who has provided the Information.

- b) use the Information only for the Purpose or otherwise as permitted under or in accordance with this Agreement.
 - c) disclose the Information to their employees, Affiliates, external experts and/or consultants and if the Non-Lead Member is an only representative or a third party representative, the non-EU manufacturer(s) or the legal entity(ies) represented by any of them, only on a need to know basis and only to the extent absolutely necessary for the Purpose or otherwise as permitted under or in accordance with this Agreement. Each Party shall have in place policies and procedures to ensure the confidentiality of Information, and require that its external experts and/or consultants also have such policies and procedures in place to ensure their compliance with these confidentiality obligations.
- #### 2. The obligations specified in Article II.1 above shall not apply to Information for which the receiving Party can reasonably demonstrate that such Information:
- a) was known to the receiving Party on a non-confidential basis prior to its disclosure pursuant to this Agreement;
 - b) is publicly known at the time of disclosure or thereafter becomes publicly known without breach of the terms of this Agreement on the part of the receiving Party;
 - c) becomes known to the receiving Party through disclosure by sources other than the disclosing Party, having a right to disclose such Information;

- d) was independently developed by the receiving Party without access to the disclosing Party's Information, as evidenced by documentary records.

Specific items of Information shall not fall within any exception merely because they are combined with more general Information falling within any exception. Likewise, any combination of specific items of Information shall not fall within any exception merely because the specific items fall within any exception, but only if the combination itself, and its principles of operation, fall within any exception.

Article III. Competition Law compliance

1. The Parties acknowledge that any activities carried out under this Agreement have to be carried out in full compliance with EU competition law, in particular but not limited to Articles 101 and 102 TFEU as well as any applicable national laws. The Parties explicitly agree to observe Cefic REACH Competition Law compliance guidance referenced in Annex 1 to this Agreement.

2. Should it become apparent at any time that this Agreement, any provision of this Agreement, or any activity or decision of the Parties, can have a potentially restrictive effect on open and fair competition, in breach of any statutory provision, each Party to this Agreement shall take immediate steps to remedy that situation.

Article IV. Legal personality

This Agreement or the cooperation contemplated herein shall not constitute or be deemed to constitute a legal entity or partnership between the Parties.

Article V. Regular report of the preparation of the Joint Registration Dossier

1. The Lead Registrant undertakes to inform the Non-Lead Member regularly on the development of the Joint Registration Dossier.

2. In particular, in case the chemical safety report is jointly developed, the Lead Registrant undertakes to inform the Non-Lead Member on the list of uses to be covered in that chemical safety report without undue delay.

3. The Non-Lead Member undertakes to make all best efforts to check proactively and regularly all up-dated Information that is made available by the Lead Registrant on the development of the Joint Registration Dossier.

4. The Parties agree that such communication may be channelled via the use of Reach IT.

TITLE II: DATA SHARING AND JOINT SUBMISSION OF THE DOSSIER

1. OBLIGATIONS OF THE LEAD REGISTRANT

Article VI. Participation in the joint submission of data by multiple registrants

1. According to Article 11 (1) REACH, the Parties hereto agree to have the Joint Registration Dossier for the Substance submitted by the Lead Registrant on behalf of the Non-Lead Member having fulfilled its obligations under Article IX to this Agreement, at least 3 months before the end of the applicable registration deadline. Upon demand of the Agency, within the requested deadline and to the extent necessary, the Lead Registrant agrees to complete the Joint Registration Dossier.
2. Notwithstanding anything to the contrary under this Agreement, the Parties remain individually responsible to comply with REACH, in particular, but not limited to, in relation to the individual submission of the information required under Article 11(1) REACH.
3. The participation in the Joint Registration Dossier may deviate per requesting Non-Lead Member according to its tonnage band or possible opt-outs for certain endpoints.
4. If the Non-Lead Member is a third party representative and requests the submission of the Joint Registration Dossier on behalf of a legal entity represented by him in the SIEF, the Lead Registrant reserves the right to request the Third Party Representative to reveal the identity of the third party represented under strict confidentiality obligations to a neutral Trustee who shall not in turn reveal it to the Lead Registrant. This obligation is only to ascertain that Third Party Representatives participating in joint submission fulfill correctly their payment obligations for all legal entities they represent.
5. The Lead Registrant shall open a joint submission object in REACH-IT.
6. The Lead Registrant shall pay the fee (in accordance to Article 11 (4) REACH) as invoiced by the Agency for the submission of the Joint Registration Dossier without undue delay.
7. The Lead Registrant shall on request make available the technical dossier (Chapters 4 - 7) in IUCLID format (i.e. to the Non-Lead Member, provided the Non-Lead Member has fulfilled its obligations under Article IX of this Agreement).

Article VII. Grant of right to use the (robust) studies summaries in the Joint Registration Dossier and to refer to the full study reports.

1. Subject to the payment of the Joint Registration Compensation as specified under Article IX of this Agreement, the Lead Registrant grants the Non-Lead Member the non-exclusive, non-transferable and non-terminable right:
 - (a) to use the (robust) studies summaries and other Information used in the Joint Registration Dossier within the applicable tonnage band and for which no opt-out has been claimed by the Non-Lead Member;
 - (b) to refer to the full study reports on which basis the (robust) studies summaries have been developed.

2. Notwithstanding the foregoing, if the Non-Lead Member is a third party representative, he is granted only with the rights specified under (a) and (b) hereabove, and only for the purpose to pass them to the individual legal entity represented by him in the SIEF.

3. The rights granted under this Article can be exercised only for the purpose of compliance with REACH. The Parties shall abstain from any other use, whether commercial or non-commercial. For the avoidance of doubt, any further use of the studies shall be subject to an additional written agreement.

Article VIII. Information on the submission of the Joint Registration Dossier

1. Provided the Non-Lead Member has fulfilled its obligations under Article IX, the Lead Registrant shall inform without undue delay the Non-Lead Member of the creation of the joint submission object in REACH-IT and shall provide the valid security token number and the name of the joint submission.

2. The Lead Registrant shall inform without undue delay the Non-Lead Member of the submission of the Joint Registration Dossier to the Agency and provide documentation of the same.

3. The Lead Registrant shall further communicate the confirmation that the joint registration has been successful and shall inform the Non-Lead Member of the reception of the relevant registration number that has been obtained from the Agency without undue delay.

2. OBLIGATIONS OF THE NON-LEAD MEMBER

Article IX. Financial compensation for the Joint Registration Dossier

1. Before execution by the Lead Registrant of its obligations pursuant to Title II.1 of this Agreement, the Non-Lead Member shall compensate in a fair, transparent and non-discriminatory way the Lead Registrant with a "Joint Registration Compensation" for the development and submission of the Joint Registration Dossier, the development of the Chemical Safety report and Guidance on Safe Use, and the rights granted under Article VII. The costs, expenses and Joint Registration Compensation are set out in Annex 2.

2. The Joint Registration Compensation will comprise following elements:

a) Administrative expenses reasonably incurred by the Lead Members and the Lead Registrant including but not limited to, secretarial services, management of confidential data, costs for the joint dossier preparation and costs of external experts.

b) Expenses to acquire rights to use existing studies of an individual Lead Member and costs for studies jointly developed by the Lead Members according to Annexes VI to VIII of REACH.

c) Costs for rights to use studies from Data Owners, if the Lead Registrant is authorized by Data Owners to transfer to Non-Lead Member the rights specified under Article VII. paragraph 1.

d) Costs for the preparation of the chemical safety report and the Guidance on Safe Use for nine main uses set out in the Consortium Agreement, which are made available once by the Lead Registrant to the Non-Lead member for individual submission.

3. Expenses referred to above shall be allocated equally, in a transparent, fair and non discriminatory way, to all SIEF participants with the intent to register the Substance, taking into account the following exceptions:

a) Where a Non-Lead Member registers the Substance in a tonnage band lower than the one covered by the Joint Registration Dossier, it shall only be requested to compensate for those parts of the Registration Dossier that it is included in and for those studies it receives a right to refer for.

b) Where the Non-Lead Member decides, based on Article 11 (3) REACH, to opt-out from the Joint Submission or some parts of the Joint Registration Dossier and submit the relevant information separately, it shall only be requested to compensate for those parts of the Joint Registration Dossier that are submitted jointly or which he otherwise uses.

4. Based on the above, a payment notice will be sent to the Non-Lead Members for their cost share after their request for joint submission (2010, 2013, 2018 and first time registrants). The Non-Lead Members will only receive the valid security token number after receipt of the payment. Payment is due within thirty (30) days as of the date of the payment notice. A letter of access document specifying the Non-Lead Members rights' and obligations will be issued.

5. In case new studies have to be purchased or performed after conclusion of this Agreement, the resulting cost will be equally divided between all SIEF participants who are required to incorporate the results of these new studies into their registration dossier, unless they claim to opt out in accordance with Article 11 (3) REACH.

The Non-Lead Member will be granted on these new studies the same rights as referred to under Article VII.1 (a) and (b) hereabove.

6. If an only representative represents more than one non-EU entity within the SIEF, such only representative shall compensate the Lead Registrant on account of each non-EU entity it represents by the payment of a separate Joint Registration Compensation per Non-EU entity.

7. If a third party representative represents more than one entity within the SIEF, such third party representative shall compensate the Lead Registrant on account of each entity it represents by the payment of a separate Joint Registration Compensation per entity.

8. All payments due hereunder shall be net payments, i.e. free of any bank or transfer charges or similar charges and without deduction of any taxes, levies or other dues payable. If payer is required to withhold any tax or to make any other deduction from any such payments, then the said payments shall be increased to the extent necessary to ensure that, after making of the required deduction or withholding, payee receives and retains (free from any liability in respect of any such deduction or withholding) a net sum equal to the sum which it would have received and so retained had no such deduction or withholding been made or required to be made (gross-up amount). If upon application of the beneficiary any withholding tax can be reduced, or refunded, or an exemption from withholding tax is granted, payer shall file on behalf of payee for such reduction, refund or exemption. Payee shall render any assistance to payer to obtain such withholding tax reduction, refund or exemption. Payer shall be entitled to any refund of withholding taxes.

9. Indirect taxes, including but not limited to Value Added Tax (VAT), Goods and Service Tax (GST), service tax, business tax, as applicable pursuant to the relevant tax law, shall be borne by payer. However, payer is entitled to withhold any payment of indirect taxes unless payee has provided payer with a sufficient invoice for purposes of indirect taxation.

3. OWNERSHIP OF INFORMATION

Article X. Ownership of Information

1. This Agreement does not grant any ownership rights or change existing ownership rights to any of the Information provided under this Agreement to the Non-Lead Member, on whatever form and whenever, by the Lead Registrant, including without limitation, the Joint Registration Dossier.

2. Such Information shall consist in any and all data and/or studies:

- a) Individually developed by one of the Lead Members;
- b) Collectively developed by the Lead Members for which they have acquired valid title or right to use; and
- c) Acquired from Data Owner(s) for which the Lead Members, or the Lead Registrant as the case may be, have been granted valid rights.

3. Neither this Agreement nor any disclosure of Information shall vest any present or future rights in any patents, trade secrets or property rights and no license is granted.

TITLE III: FINAL PROVISIONS

Article XI. Limitation of liability in the SIEF

1. The Parties shall undertake their Purpose related activities specified hereunder in good faith and according to all applicable laws and regulations, and they shall use all reasonable endeavours to ensure the best possible results based on the evidence, methods and techniques known at the time.

2. Each Party having submitted a study which has been used in the Joint Registration Dossier represents to the others (i) that it is the rightful owner or grantee of the study(ies) and free to grant rights therein, (ii) that, to the knowledge of this Party, these studies do not infringe on the rights, in particular, but without limitation, intellectual property rights, of any third party and (iii) that this Party has not received a claim or notice of any alleged infringement.

3. It is the individual responsibility of each Party to critically assess the Information that is generated or that is made available. Each Party assumes the full responsibility for its own use of the Information so developed or received. No warranty for acceptance by the Agency of the Joint Registration Dossier or any data it contains is given.

4. None of the Parties, including the Lead Registrant, shall be held liable for any direct, indirect or consequential loss or damage incurred by any Party in connection with the activities contemplated in this Agreement, unless caused by gross negligence or wilful misconduct. In particular, the Lead Members, including the Lead Registrant, shall not be held responsible and liable for delays in the completion and submission of the Joint Registration Dossier, unless caused by gross negligence or wilful misconduct.

Article XII. Term and termination

1. This Agreement shall be in force until 1 June 2018.

2. This Article and the provisions relating to the protection of confidentiality (Article II), ownership of Information (Article X), dispute resolution and applicable law (Article XV) and limitation of the liability (Article XI) shall survive the termination of this Agreement. With regard to the studies, the obligations specified in Article II of this Agreement shall survive for a period of twelve (12) years following the initial submission to the Agency. With regard to all other Information, the obligations specified in Article II shall survive for a period of 5 years after termination of the SIEF.

3. The Lead Registrant has the right to terminate its functions as lead registrant under the cumulative conditions that:

- it has been validly replaced in its functions within the SIEF;
- its assignee has accepted to be bound by the obligations of the Lead Registrant under this Agreement; and
- the Non-Lead Member has been notified about such replacement.

4. The Non-Lead Member has the right to terminate the present Agreement subject a prior written notice to the Lead Registrant at the latest nine (9) months before the relevant registration deadline. No reimbursement shall be due.

Article XIII. Legal entity change

The consent of the other Party shall not be required in case a Party assigns, transfers or delegates its rights and obligations under this Agreement to any of its Affiliates or to a legal successor in ownership by sale, division, merger or consolidation of all or substantially the whole of the business relevant to the Substance referred to in this Agreement, subject to acceptance by the assignee of the terms of this Agreement, to be notified to the other Party without undue delay.

Article XIV. Administration and reporting of costs

1. All financial settlements, billings, and reports rendered under this Agreement shall reflect properly the facts which may be relied upon as being complete and accurate in any further recording and reporting made by a Party for any purpose.

2. In accordance with generally accepted accounting procedures, documentation will be maintained and preserved including but not limited to written or electronic records, records on expenses, books of account, correspondence, memoranda and receipts.

Article XV. Dispute resolution and applicable law

1. The Parties shall first attempt to settle amicably any dispute arising out of this Agreement. Any dispute shall be resolved by arbitration, ousting jurisdiction by ordinary courts, by a panel of three arbitrators. Each party to the dispute will nominate one arbitrator. These two arbitrators will then designate a third arbitrator who will also act as chairman. The arbitration decision shall be binding on the parties. The CEPANI arbitration rules shall be applicable. The place of any hearing shall be Brussels and the language of the arbitration shall be English.

Each Party may at any time request from any competent judicial authority any interim or conservatory measure.

2. This Agreement shall be governed by the laws of Belgium.

3. If at any time any provision of this Agreement is or becomes invalid or illegal in any respect, this shall have no effect on the validity of the remaining contractual provisions. The invalid provisions are to be replaced, backdated to the time of their becoming ineffective, by provisions which come closest to achieving their objective.

The Parties are validly bound by this Agreement when the Non-Lead Member has either given its consent to this Agreement, through the communication IT platform specified under Article V or has not explicitly objected to it within 30 calendar days of issuance of this SIEF Agreement, and/or has made the payment(s) requested in the letter of access.

SIEF Member:

Name: Legal Entity _____

Authorized Representative to sign (name) _____

Signature: _____

ANNEXES:

Annex 1

Cefic guidance on competition compliance

Please see website:

<http://www.cefic.be/files/downloads/Cefic-REACH-guidance-DO-&-DON'T.pdf>

Annex 2**LoA price calculation****Styrene REACH Consortium : LoA price calculation**

	TOTAL	Above 1000 tons per Registrant
2008 budget	€ 297,805	€ 6,926
2009 budget	€ 469,035	€ 10,908
2010 Budget less LOA	€ 302,630	€ 7,038
Expenses	€ 10,000	€ 233
TOTAL	€ 1,079,470	€ 25,104
Admin cost		€ 3,766
TOTAL WITH ADMIN COST		€ 28,870
Handling Fee		€ 750
<u>TOTAL LOA PRICE</u>		€ 29,620

Notes

1. Full price including CSR
2. No reduced price without CSR
3. LoA price is a fixed price except if substantial new work to be conducted post 2010
4. There will be no reimbursement (overflow income will be used for post 2010 ECHA required work and 50% of the remaining funds will be used depending on the fair value of studies (original invoice value minus 30%) to reimburse data owners for license fee waivers provided pursuant to License Fee Waiver Agreements of Styrene REACH Consortium with JSIA, SIRC and SSC respectively)
5. For 100 to 999 tons : €10,277
6. For 1 to 99 tons : €3,637

STYRENE REACH CONSORTIUM - APPROVED BUDGETS	<u>2008 Budget</u>
Styrene Consortium Kick-off meeting	€ 5,000
Meeting and follow-up work to finalize consortium legal documents and business plan. Setting up of bank account for consortium	€ 12,800
Assistance in setting up Technical Committee and working groups and provision of services as required in particular review of minutes	€ 3,520
Technical Committee support including preparation, attendance, preparation of agenda and minutes, follow up and action lists of meetings maintaining records of progress versus agreed targets, coordination Technical Committee and Technical Consultant	€ 15,840
Technical Committees (setting up and support)	€ 19,360
Steering Committee meetings prior to the registration date plus preparation and debriefing	€ 25,760
Accounting fee	€ 6,000
Annual management and archiving fee	€ 5,000
Consortium Documentation Archiving System (Extranet) & SIEFreach IT tool subscription	€ 4,525
IUCLID 5 file	€ 160,000
Level 2 consultant	€ 40,000
TOTAL APPROVED BUDGET	€ 297,805

STYRENE REACH CONSORTIUM - APPROVED BUDGETS		2009 Budget
Assistance in setting up Technical Committee and working groups and provision of services as required in particular review of minutes (1)	MLA	€ 7,840
Steering Committee meetings prior to the registration date plus preparation and debriefing	MLA	€ 27,040
Accounting fee	MLA	€ 20,000
Annual management and archiving fee	MLA	€ 11,500
Third party communications & legal advice	MLA	€ 34,000
Documentation Archiving System & SIEFreach IT tool subscription	MLA	€ 1,760
Task Force Exposure scenario : reviewing of minutes only	MLA	€ 4,000
IUCLID 5 update	BASF	€ 16,000
Preparation of the CSR	Cintox	€ 126,000
Technical Committee support including preparation, attendance, preparation of agenda and minutes, follow up and action lists of meetings maintaining records of progress versus agreed targets, coordination TC and Technical Consultant between meetings	Altran	€ 45,280
Exposure scenarios	Quantor/CEHTRA	€ 175,615
TOTAL APPROVED BUDGETS		€ 469,035

STYRENE REACH CONSORTIUM - APPROVED BUDGETS		<u>2010 BUDGET</u>
Assistance in setting up Technical Committee and working groups and provision of services as required in particular review of minutes	MLA	€ 8,640
Steering Committee meetings prior to the registration date plus preparation and debriefing	MLA	€ 28,480
Accounting fee	MLA	€ 27,500
Annual management and archiving fee	MLA	€ 16,500
Consortium Documentation Archiving System (Extranet) & SIEFreach IT tool subscription	MLA	€ 1,760
Third party communication and legal advice	MLA	€ 30,000
LOAs	MLA	€ 37,500
LoA Management - MLA IT tool	MLA	€ 1,500
SIEF Communication - estimate	MLA	€ 10,000
Task Force Exposure Scenarios : review of minutes only	MLA	€ 1,050
Technical Committee support including preparation, attendance, preparation of agenda and minutes, follow up and action lists of meetings maintaining records of progress versus agreed targets, coordination Technical Committee, exposure scenarios	Altran	€ 29,700
IUCLID finalization & technical part of CSR & ES	BASF	€ 45,000
ECETOC Workshop	Cintox	€ 2,500
Budget Reserve (Licensing of data, etc.)		€ 100,000
TOTAL APPROVED BUDGETS		€ 340,130

BR:235029.8

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April 7, 2011

TO WHOM IT MAY CONCERN

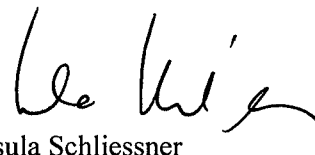
Re: REACH: SIEF Communication Styrene (EC Number 202-851-5)

For those of you who may have joined the SIEF for styrene recently, we would wish to remind you that the REACH registration dossier for styrene was submitted by Lead Registrant BASF SE and accepted by ECHA in August 2010. We therefore invite you to join BASF's submission.

In the annex to the present letter, please find the earlier SIEF Communication to Styrene SIEF members of August 2010, including the critical information on participation in Joint Submission and on Letters of Access (point 9). For purchase of a letter of access, please go to www.mlalaw.eu and follow the steps outlined therein.

Thank you very much for your attention.

Kind regards,



Ursula Schliessner
Partner
McKenna Long & Aldridge LLP

Annex: SIEF Communication Styrene of August 31, 2010

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May 13, 2011

TO WHOM IT MAY CONCERN

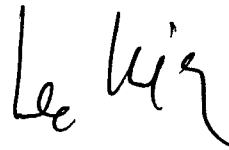
**Re: REACH: SIEF Communication Styrene (EC Number 202-851-5)
Styrene CLP Classification; additional pictogram**

Dear SIEF Members,

Pursuant to our SIEF communication of August 31, 2010 (page 7 of the PDF), please note that with regard to the recommended single exposure classification H 335 (may cause respiratory irritation), the respective pictogram GHS 07 (exclamation mark pictogram) should be added.

Thank you very much for your attention.

Kind regards,



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March 14, 2013

To Styrene SIEF Members

Re: Classification and Labeling of Styrene (EC 202-851-5; CAS 100-42-5) - Update

Dear SIEF Members,

On behalf of BASF, the Lead Registrant of styrene, and the Styrene REACH Registration Consortium, we would wish to inform you pursuant to Article 29(3) REACH about the updated classification & labeling of styrene for purposes of REACH and the CLP Regulation and related potential future regulatory developments.

The current updated harmonized CLP classification for styrene as per CLP Regulation 1272/2008 that must be used is as follows:

Flam. Liq. 3 ***H226***
Acute Tox. 4 * ***H332***
Eye Irrit. 2 ***H319***
Skin Irrit. 2 ***H315***
GHS02 GHS07 Wng Note D.

As agreed upon in the Styrene REACH consortium, the following voluntary self-classifications have been additionally included in the joint REACH registration dossier¹:

STOT single 3 ***H335***
STOT repeated 1 ***H372***
Aspiration Tox. 1 ***H304***
GHS08

Pursuant to Regulation 286/2011 (2nd adaptation to CLP Regulation) (Table 4.1.0), it would now appear appropriate to self-classify styrene additionally as aqua chronic cat. 3 H412. The Lead Registrant will be preparing a registration dossier update in this regard and is planning to have this update available to co-registrants by August 2013. We will inform you accordingly.

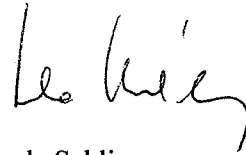
Finally, we note that the ECHA Risk Assessment Committee (RAC) (corrigendum December 14, 2012²) recently adopted an opinion that styrene ought to be classified as “causing damage to the

¹ Letters of access can be purchased at www.mlalaw.eu.

² http://echa.europa.eu/view-article/-/journal_content/c89bdb13-09e9-497c-8e73-ddae13a842c8

hearing organs through prolonged or repeated exposure via inhalation and as a substance suspected of damaging the unborn child (Repr. 2). For both effects the RAC opinion deviated from the proposal from Denmark who had originally proposed to classify styrene as causing damage to the nervous system through prolonged or repeated exposure via inhalation and as a substance which may damage the unborn child.” These proposed new classifications with the STOT RE already being considered in the joint registration dossier are now forwarded to the European Commission which shall further process them and proceed to adoption via comitology if it deems appropriate pursuant to Article 37(5) CLP Regulation (possibly 2014). Should such a new classification be adopted in the future, the current mandatory harmonized classification (see in bold above) would change and the new potential classification would then have to be used (see Article 16(2) CLP Regulation).

Kind regards,



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Partner
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December 26, 2013

To Styrene SIEF Members

Re: Styrene (EC 202-851-5; CAS 100-42-5) – Registration Dossier Update

Dear SIEF Members,

On behalf of BASF, the Lead Registrant of styrene, and the Styrene REACH Registration Consortium, following up on our SIEF communication of March 14, 2013, we have the pleasure to inform you that the Styrene REACH Registration Consortium has now finalized and submitted to ECHA on December 13, 2013 its complete registration dossier review and update (including environmental exposure assessment and scenarios). The updated CSR, which was prepared jointly, may be **filed by individual co-registrants** and is available from McKenna Long & Aldridge LLP for all previous LoA applicants upon their request, without further payment.

There are no further changes to classification & labeling in addition to those that we communicated in March 2013, see at <http://www.mlalaw.eu/Home/DownloadSubstanceDescription/20>. An updated table of use descriptors is attached.

In accordance with Article 4(3) of Regulation 1272/2008, the draft EU reprotox2 classification has not been implemented in this dossier update, as this draft classification is not yet in effect.

Letters of access may continue to be purchased at the 2010 prices.¹

Kind regards,



Ursula Schliessner
Partner
McKenna Long & Aldridge LLP

¹ Letters of access can be purchased at www.mlalaw.eu.

2.1. Manufacture

Table 1. Manufacture

Identifiers	Use descriptors	Other information
M-1: ES1: Manufacturing of styrene	<p>Environmental release category (ERC):</p> <p>ERC 1: Manufacture of substances</p> <p>Process category (PROC):</p> <p>PROC 15: Use as laboratory reagent PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 1: Use in closed process, no likelihood of exposure</p>	

Table 2. Manufacturing process related to the specified manufacture(s)

Related manufacture(s)	Description of manufacturing process
	<p>Styrene is manufactured by dehydrogenation of ethyl benzene: Iron oxide is used as a catalyst, together with zinc and magnesium oxides. Steam is added as a dilution agent and to improve the heat transfer. The reaction is carried out at approximately 700°C and 0.8 bar. The purification of the reaction product is done by vacuum distillation. To prevent the polymerisation of the styrene, the conversion is carried out to only 60%, and there is always a reasonable dilution. The by-product gases formed in this reaction are used as a fuel or they are used as an intermediate in other applications.</p>
	<p>Alternatively, styrene may be manufactured by oxidation of ethylbenzene to the hydroperoxide by bubbling air through the liquid reaction mixture. The hydroperoxide is then reacted with propylene to yield propylene oxide and a co-product, methyl phenyl carbinol, again in the liquid phase. The carbinol is dehydrated to styrene over an acid catalyst at about 225°C.</p>

No information available on production of articles covered by the specified use(s)

2.2. Identified uses

Table 3. Formulation

Identifiers	Use descriptors	Other information
F-6: ES6: Manufacturing of UP/VE resins and formulated resins (Gelcoat, Colour Paste, Putty, Bonding paste / Adhesive, etc.)	<p>Environmental release category (ERC):</p> <p>ERC 2: Formulation of preparations</p> <p>Process category (PROC):</p> <p>PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 15: Use as laboratory reagent PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p>	<p>Substance supplied to that use:</p> <p>As such</p>

Identifiers	Use descriptors	Other information
	<p>PROC 3: Use in closed batch process (synthesis or formulation)</p> <p>PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p> <p>PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)</p> <p>PROC 1: Use in closed process, no likelihood of exposure</p> <p>Technical function of the substance during formulation:</p> <p>Manufacturing of UP/VE resins and formulated resins (Gelcoat, Colour Paste, Putty, Bonding paste / Adhesive, etc.)</p>	

Table 4. Uses at industrial sites

Identifiers	Use descriptors	Other information
<p>IW-3: ES3: Batch suspension polymerisation of Polystyrene (HIPS and GPPS)</p>	<p>Environmental release category (ERC):</p> <p>ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Process category (PROC):</p> <p>PROC 3: Use in closed batch process (synthesis or formulation)</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p> <p>PROC 15: Use as laboratory reagent</p> <p>PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation</p> <p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>Technical function of the substance during formulation:</p> <p>Batch suspension polymerisation of Polystyrene (HIPS and GPPS)</p>	<p>Substance supplied to that use:</p> <p>In a mixture</p> <p>As such</p>
<p>IW-2: ES2: Continuous mass polymerisation of Polystyrene (HIPS and GPPS)</p>	<p>Environmental release category (ERC):</p> <p>ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Process category (PROC):</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p>	<p>Substance supplied to that use:</p> <p>In a mixture</p> <p>As such</p>

Identifiers	Use descriptors	Other information
	<p>PROC 15: Use as laboratory reagent PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation</p> <p>Technical function of the substance during formulation:</p> <p>Continuous mass polymerisation of Polystyrene (HIPS and GPPS)</p>	
<p>IW-4: ES4: Production of Expandable Polystyrene</p>	<p>Environmental release category (ERC):</p> <p>ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Process category (PROC):</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 3: Use in closed batch process (synthesis or formulation) PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 15: Use as laboratory reagent</p> <p>Technical function of the substance during formulation:</p> <p>Production of Expandable Polystyrene</p>	<p>Substance supplied to that use:</p> <p>In a mixture As such</p>
<p>IW-12: ES12: Production of other Styrene based polymeric dispersions</p>	<p>Environmental release category (ERC):</p> <p>ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Process category (PROC):</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 3: Use in closed batch process (synthesis or formulation) PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 15: Use as laboratory reagent PROC 8a: Transfer of substance or preparation</p>	<p>Substance supplied to that use:</p> <p>In a mixture As such</p>

Identifiers	Use descriptors	Other information
	<p>(charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>Technical function of the substance during formulation:</p> <p>Production of other Styrene based polymeric dispersions</p>	
<p>IW-7: ES7: FRP manufacturing in an industrial setting, using UP/VE resins and/or formulated resins (gelcoat, bonding paste, putty etc.)</p>	<p>Environmental release category (ERC):</p> <p>ERC 6d: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers</p> <p>Process category (PROC):</p> <p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact)</p> <p>PROC 3: Use in closed batch process (synthesis or formulation)</p> <p>PROC 13: Treatment of articles by dipping and pouring</p> <p>PROC 14: Production of preparations or articles by tableting, compression, extrusion, pelletisation</p> <p>PROC 10: Roller application or brushing</p> <p>PROC 15: Use as laboratory reagent</p> <p>PROC 7: Industrial spraying</p> <p>Technical function of the substance during formulation:</p> <p>FRP manufacturing in an industrial setting, using UP/VE resins and/or formulated resins (gelcoat, bonding paste, putty etc.)</p>	<p>Substance supplied to that use:</p> <p>In a mixture</p> <p>As such</p>
<p>IW-10: ES10: Production of Styrene Butadiene Latex (SBL)</p>	<p>Environmental release category (ERC):</p> <p>ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Process category (PROC):</p> <p>PROC 2: Use in closed, continuous process with occasional controlled exposure</p> <p>PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p> <p>PROC 3: Use in closed batch process (synthesis or formulation)</p> <p>PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities</p> <p>PROC 15: Use as laboratory reagent</p> <p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>Technical function of the substance during formulation:</p>	<p>Substance supplied to that use:</p> <p>In a mixture</p> <p>As such</p>

Identifiers	Use descriptors	Other information
	Production of Styrene Butadiene Latex (SBL)	
IW-5: ES5: Production of Styrenic Copolymers	<p>Environmental release category (ERC): ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Process category (PROC): PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 3: Use in closed batch process (synthesis or formulation) PROC 15: Use as laboratory reagent PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing)</p> <p>Technical function of the substance during formulation: Production of Styrenic Copolymers</p>	Substance supplied to that use: In a mixture As such
IW-13: ES13: Production of filled Polyols	<p>Environmental release category (ERC): ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Process category (PROC): PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 15: Use as laboratory reagent</p> <p>Technical function of the substance during formulation: Production of filled Polyols</p>	Substance supplied to that use: In a mixture As such
IW-9: ES9: Production of Styrene Butadiene Rubber (SBR)	<p>Environmental release category (ERC): ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Process category (PROC): PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large</p>	Substance supplied to that use: In a mixture As such

Identifiers	Use descriptors	Other information
	<p>containers at dedicated facilities PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 3: Use in closed batch process (synthesis or formulation) PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 15: Use as laboratory reagent PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>Technical function of the substance during formulation: Production of Styrene Butadiene Rubber (SBR)</p>	
IW-11: ES11: Production of Styrene Isoprene Copolymers	<p>Environmental release category (ERC): ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Process category (PROC): PROC 9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC 8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC 15: Use as laboratory reagent PROC 3: Use in closed batch process (synthesis or formulation) PROC 2: Use in closed, continuous process with occasional controlled exposure PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities</p> <p>Technical function of the substance during formulation: Production of Styrene Isoprene Copolymers</p>	Substance supplied to that use: In a mixture As such

Table 5. Uses by professional workers

Identifiers	Use descriptors	Other information
PW-8: ES8: FRP manufacturing in a professional setting, using UP/VE resins and/or formulated resins (gelcoat, bonding paste, putty etc.)	<p>Environmental release category (ERC): ERC 6c: Industrial use of monomers for manufacture of thermoplastics</p> <p>Process category (PROC): PROC 3: Use in closed batch process (synthesis or formulation) PROC 10: Roller application or brushing PROC 5: Mixing or blending in batch processes for formulation of preparations and articles (multistage and/or significant contact) PROC 4: Use in batch and other process (synthesis) where opportunity for exposure arises</p>	Substance supplied to that use: In a mixture As such

Identifiers	Use descriptors	Other information
	<p>PROC 8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC 11: Non industrial spraying</p> <p>Technical function of the substance during formulation:</p> <p>FRP manufacturing in a professional setting, using UP/VE resins and/or formulated resins (gelcoat, bonding paste, putty etc.)</p>	

Table 6. Consumer uses

Identifiers	Use descriptors	Other information
<p>C-15: ES 15: Consumer use of Resin paste used as fillers/putties</p>	<p>Environmental release category (ERC):</p> <p>ERC 8b: Wide dispersive indoor use of reactive substances in open systems</p> <p>Product Category used:</p> <p>PC 9b: Fillers, putties, plasters, modelling clay</p> <p>Technical function of the substance during formulation:</p> <p>Consumer use of Resin paste used as fillers/putties</p>	<p>Substance supplied to that use: In a mixture</p>
<p>C-14: ES 14: Consumer use of liquid UP resin for repair purposes</p>	<p>Environmental release category (ERC):</p> <p>ERC 8b: Wide dispersive indoor use of reactive substances in open systems</p> <p>Product Category used:</p> <p>PC 9a: Coatings and paints, thinners, paint removes</p> <p>Technical function of the substance during formulation:</p> <p>Consumer use of liquid UP resin for repair purposes</p>	<p>Substance supplied to that use: In a mixture</p>

2.3. Uses advised against

No information available

JONES DAY

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USCHLIESSNER@JONESDAY.COM

BY ELECTRONIC MAIL

December 16, 2015

TO WHOM IT MAY CONCERN

Dear SIEF Member,

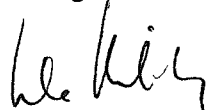
Re: REACH SIEF Communication Styrene (EC number 202-851-5)

We are writing to you today on behalf of Lead Registrant BASF SE and the Styrene REACH Consortium (the 'Consortium') to inform you that earlier this month, the Consortium has completed a REACH registration dossier update with ECHA. The dossier update consisted of, among others, (i) implementation of the additional new harmonized classification¹ of styrene as reprotox 2, H 361d applicable as of January 1, 2016,² (2) periodical literature search; (3) transfer to IUCLID 5.6.0; and most importantly (4) update and refinement of the human exposure assessment (including the omission of consumer use of UPR resins, and adaptations of the hierarchy of workers protection / prevention measures in general) plus related update of the CSR.

Those of you that are Letter of Access ('LoA') licensees, please be advised that as per the SIEF Agreement, the **CSR has been prepared jointly by the Consortium but should be checked, adapted and submitted individually by each registrant**. Those LoA licensees that wish to receive the updated CSR, please write an email to amccabe@jonesday.com and indicate the legal entity name mentioned in your earlier LoA application and if possible also the date when you applied for the LoA. We will subsequently send you the CSR by email. Given the large number of LoAs it may take a couple of days for you to receive the CSR after you have written to us.

Any SIEF Members who wish to purchase LoAs, please see at www.jonesdayreach.com.

Kind regards,



Ursula Schliessner

¹ Commission Regulation 605/2014; OJ L 167 of 2014.

² Commission Regulation 491/2015; OJ L 78 of 2015.

JONES DAY

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BY ELECTRONIC MAIL

July 27, 2017

TO WHOM IT MAY CONCERN

Dear SIEF Member,

Re: REACH SIEF Communication Styrene (EC number 202-851-5)

We are writing to you today on behalf of Lead Registrant BASF SE and the Styrene REACH Consortium (the 'Consortium') to inform you that earlier this month, the Consortium has completed another registration dossier and CSR update consisting of (i) formal entry of a 'use advised against' as regards the consumer uses of UPR (unsaturated polyester resins); (ii) refinement of UPR exposure scenarios; and (iii) conversion to the IUCLID 6 software.

Those of you that are Letter of Access ('LoA') licensees, please be advised that as per the SIEF Agreement, the **CSR has been prepared jointly by the Consortium but should be checked, adapted and submitted individually by each registrant.** Those LoA licensees that wish to receive the updated CSR, please write an email to amccabe@jonesday.com and indicate the legal entity name mentioned in your earlier LoA application and if possible also the date when you applied for the LoA. We will subsequently send you the CSR by email or through a protected site. Given the large number of LoAs it may take a couple of days for you to receive the CSR after you have written to us.

Any SIEF Members who wish to purchase LoAs, please see at www.jonesdayreach.com.

Kind regards,



Ursula Schliessner

JONES DAY

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BY ELECTRONIC MAIL

December 5, 2018

TO WHOM IT MAY CONCERN


Dear SIEF Members and Joint Registrants,

Re: REACH SIEF Communication Styrene (EC number 202-851-5) – Replacement of previous SIEF Agreement

Please find attached the new Styrene Cooperation Agreement for the period as of June 1, 2018, replacing the previous SIEF Agreement, operational until that day. The new Agreement will be applicable to the relationship of Lead Registrant BASF SE and the REACH Registration Consortium with both existing and new joint registrants.

For any information on purchasing a Letter of Access, please visit our website at www.jonesdayreach.com.

Kind regards,



Ursula Schliessner

Attachment: Cooperation Agreement

ALKHOBAR • AMSTERDAM • ATLANTA • BEIJING • BOSTON • BRISBANE • BRUSSELS • CHICAGO • CLEVELAND • COLUMBUS • DALLAS
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Cooperation Agreement for REACH compliance after May 31, 2018

This Cooperation Agreement (hereinafter the "Agreement") is entered into by and between:

BASF SE, Germany, as Lead Company under the Consortium Agreement for REACH registration of Styrene (hereafter the "**Consortium**"), acting in its own name and in the name and on behalf of all members of the Consortium and having previously been appointed as Lead Registrant for the registration of Styrene (hereinafter referred to as "**Lead Registrant**")

and

The joint registrant (not being a Consortium member) signatory to the present Agreement (hereinafter referred to as "**Joint Registrant**")

Hereinafter referred to as "**the Parties**"

Preamble

Whereas the Lead Registrant submitted a joint registration dossier and successfully registered Styrene [CAS No: 100-42-5; EC No: 202-851-5], (as further defined herein to as "**Substance**") before the European Chemicals Agency ("**Agency**") in accordance with Article 10 of Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (hereinafter referred to as "**REACH**") in 2010;

Whereas numerous legal entities either as Consortium members or by purchasing a letter of access joined the joint registration;

Whereas the Parties to this Agreement agreed on the identity and the sameness of the Substance and were thus participants of the same Substance Information Exchange Forum ("SIEF") as registrants for that Substance under the meaning of Article 29 of REACH;

Whereas for that purpose the Parties concluded a SIEF Agreement on August 31, 2010;

Whereas, pursuant to Article 29(3) REACH, SIEFs shall only be operational until June 1, 2018;

Whereas, REACH registration dossiers must be updated from time to time and whereas the Substance may be subject to further regulatory scrutiny by the Agency or Member States;

Whereas, further future Joint Registrants may wish to join the joint registration of the Substance;

Whereas, therefore the cooperation of the Lead Registrant and the Joint Registrants should continue beyond June 1, 2018;

Whereas, the cooperation of the Lead Registrant and the Joint Registrants under the SIEF Agreement was smooth and the principles of the former cooperation under the SIEF Agreement should therefore be maintained;

Whereas the Parties agree that the principles of the joint submission of data set out in the SIEF Agreement will continue to apply to the current Agreement;

Whereas the Parties acknowledge that their cooperation should reflect the changes brought by the Commission Implementing Regulation (EU) 2016/9 of 5 January 2016 on joint submission of data and data-sharing in accordance with REACH (hereinafter referred to as the “**Implementing Regulation 2016/9**”);

Whereas the Parties are aware that they have co-operation and data sharing obligations with other participants of the joint registration for the Substance;

Whereas REACH requires existing Joint Registrants and/or potential Joint Registrants to make every effort to reach an agreement on sharing the data and to ensure that the cost of sharing the Information required for registration are determined in a fair, transparent and non-discriminatory way.

Therefore, with a view to fulfilling their regulatory obligations under REACH after the last registration deadline of May 31, 2018 set out in Article 23(3) of REACH in respect to the Substance,

THE PARTIES HAVE AGREED UPON THE FOLLOWING AGREEMENT:

Article I. Scope and General Obligations

1. The current Agreement replaces the existing SIEF Agreement, which is set out in its entirety as **Annex 1** hereto. However, the Parties shall continue to apply the following terms, conditions and principles laid down in the SIEF Agreement, which become an integral part of the present Agreement, in particular:

- (i) Article I – Definitions;
- (ii) Article II – Confidentiality;
- (iii) Article III, except point 1 – Compliance;
- (iv) Article IV – Legal personality;
- (v) Article V – Regular report of the preparation of the Joint Registration Dossier;
- (vi) Article VI – Participation in the joint submission of data by multiple registrants;
- (vii) Article VII – Grant of right to use the (robust) studies summaries in the Joint Registration Dossier and to refer to the full study reports;
- (viii) Article VIII – Information on the submission of the Joint Registration Dossier;
- (ix) Article IX, except point 5 – Financial compensation for the Joint Registration Dossier;
- (x) Article X – Ownership of Information;
- (xi) Article XI – Limitation of liability in the SIEF;
- (xii) Article XII, except point 1 – Term and termination;
- (xiii) Article XIII – Legal entity change;

- (xiv) Article XIV – Administration and reporting of costs;
- (xv) Article XV – Dispute resolution and applicable law.

Article II. Compliance

Article III. 1. of the SIEF Agreement shall be replaced as follows:

1. The Parties acknowledge that any activities carried out under this Agreement have to be carried out in full compliance with EU competition law, in particular but not limited to Articles 101 and 102 TFEU as well as any applicable national laws. The Parties explicitly agree to observe the Implementing Regulation 2016/9 and Section 7 (Information sharing under competition rules) of the ECHA Guidance on data-sharing (Version 3.1, January 2017), as may be adapted from time to time.¹

Each Party shall, with respect to such Party's activities in relation to this Agreement, comply with all applicable laws and regulations, including export, import, and sanctions laws, regulations, orders, and authorizations to include without limitation, the Export Administration Regulations (EAR), International Traffic in Arms Regulations (ITAR), and regulations and orders administered by the Treasury Department's Office of Foreign Assets Control. Such performance shall apply to the export, re-export and import of controlled technology, data, software, services, and/or hardware. Accordingly, Party or Parties shall not transfer Information without the appropriate government export authorization. Each Party shall be individually responsible for its compliance with any applicable laws and regulations. No Party shall be required to indemnify another Party with regard to legal compliance.

Article III. Participation in the joint submission of data by multiple registrants

The following new point 8 shall complement article VI.

8. The Lead Registrant shall settle any inquiry or regulatory scrutiny of the Agency or other competent authorities (including but not limited to draft compliance check decisions, substance evaluation, Annex XV REACH dossiers, Risk Management Options Analyses etc.) connected to the Substance in compliance with REACH and Regulation 1272/2008 and in a way to minimize related expenses. This shall also apply to inquiries of other third parties (including but not limited to other potential Joint Registrants). In the event that such inquiries or regulatory scrutiny could lead to additional costs to be shared by the Joint Registrants or if there could be a critical impact to the uses of the Substance (e.g. classification, risk management issues, etc.) the Lead Registrant shall inform the Joint Registrants promptly of any inquiry or regulatory scrutiny of the Agency or other competent authorities or other third parties. The Parties shall cooperate closely and consent on any formal responses to such inquiry or scrutiny without undue delay. Should a Joint Registrant fail to react or unduly delay its comments or unreasonably withhold its consent to the Lead Registrant's responses to such inquiry or regulatory scrutiny, the Lead Registrant may respond on its own. Any related Cost and Expenses shall be charged to the Joint Registrants as 'Joint Registration Compensation'.

¹ https://echa.europa.eu/documents/10162/23036412/guidance_on_data_sharing_en.pdf/545e4463-9e67-43f0-852f-35e70a8ead60

Article IV. Financial compensation for the Joint Registration Dossier

Article IX point 5 of the SIEF Agreement shall be replaced as follows.

In case new studies have to be purchased or performed or other dossier preparation, administrative or other cost have to be engaged after conclusion of this Agreement due to regulatory scrutiny or inquiries of the Agency, other competent authorities, or third parties, or due to requirements pursuant to Article 22(1)(e) of REACH, the resulting costs will be equally divided between all Joint Registrants who are required to incorporate the new information into the Joint Registration Dossier.

Article V. Term and termination

This Agreement shall be in force for as long as there is a valid Joint Registration for the Substance. The Lead Registrant shall be entitled to terminate this Agreement at any time with prior written notice of one month if he is no longer subject to registration obligations in relation to the Substance.

Article VI. Annexes

1. The SIEF Agreement shall be set out as **Annex 1** to this Agreement. Annex 2 of the SIEF Agreement laying down the LoA cost shall remain unchanged.
2. The Cefic REACH Competition Law compliance guidance set out in Annex 1 of the SIEF Agreement shall be complemented by Section 7 (Information sharing under competition rules) of the ECHA Guidance on data-sharing (Version 3.1, January 2017), as may be amended from time to time.
3. A new **Annex 2** with the Substance Identity Profile and classification and labelling shall be attached to this Agreement. The Lead Registrant may amend this Annex 2 unless a simple majority of the Joint Registrants expressly objects.
4. Since the Letter of Access pricing mechanism has been running smoothly since submission of the Joint Registration Dossier, the Lead Registrant shall reserve its right set out Article 4(5) of the Implementing Regulation 2016/9 not to amend this model. The Joint Registrant will be provided with a detailed list of studies and related costs upon request.

Article VII. Miscellaneous

1. The Parties shall be validly bound by this Agreement when the Joint Registrant has either given its consent to this Agreement through the communication IT Platform through which the letters of access are issued, or by signing it, or by paying letters of access; or by not expressly objecting to the Agreement within 30 days of its issuance.

The Parties by their duly authorized representatives, sign this Agreement

For The Joint Registrant

Name of legal entity:

Street:

ZIP-Code :

City:

Country:

Contact Name:

Contact Email:

Place:

Date:

signed by:

For BASF SE

Name of legal entity: BASF SE

Street: Carl-Bosch-Str. 38

ZIP-Code : 67056

City: Ludwigshafen

Country: Germany

Contact Name: Dr. Uwe Blumenstein

Contact Email: uwe.blumenstein@basf.com

Place: Ludwigshafen

Date: 04.12.18

signed by:



A handwritten signature in blue ink, appearing to read 'Blumenstein', is written over a horizontal line.

SIEF Agreement**Styrene****August 31, 2010**

For

Styrene (C₆H₅-CH-CH₂, CAS RN: 100-42-5; EC No.: 202-851-5; EEC Annex I Index No.: 601-026-00-0) according to ASTM Designation D 2827/2000 ("Styrene")

This SIEF Agreement (hereinafter the "Agreement") is entered into by and between:

BASF SE, Germany, as Lead Company under the Consortium Agreement for REACH for Styrene (hereinafter the "Consortium"), acting in its own name and in the name and on behalf of all members of the Consortium (hereinafter referred to as "**Lead Registrant**")

And the SIEF Participant signatory of the present Agreement (hereinafter referred to as "**Non-Lead Member**")

Hereinafter referred to as "the Parties"

Preamble

Whereas the Parties to this Agreement have pre-registered Styrene (hereinafter the "Substance"), have agreed on the identity and the sameness of the Substance, and thus are Participants of the same Substance Information Exchange Forum ("SIEF") as potential registrants for that Substance under the meaning of Article 29 of Regulation EC 1907/2006 ("REACH", or the "REACH Regulation");

Whereas the REACH Regulation imposes on manufacturers and importers as well as on only representatives the obligation to register the Substance within the prescribed deadlines;

Whereas the REACH Regulation requires, subject to certain exceptions, multiple registrants of the same substance to share certain data and jointly submit through a Lead Registrant part of the information required for the registration relating to the Substance to the European Chemicals Agency ("Agency");

Whereas the Lead Members defined in the Article 1 of this Agreement have prepared/will have prepared the Joint Registration Dossier to be submitted to the Agency through the Lead Registrant;

Whereas the Members of the Consortium are aware that they have co-operation and data sharing obligations with other SIEF participants.

Whereas the Non-Lead Member has the intention to register the Substance and he is willing to appoint the Lead Registrant as lead registrant in order to have him to submit the Joint Registration Dossier.

Whereas the Agency represented in its REACH guidance that it is advisable for the SIEF participants to agree in writing certain SIEF operational rules concerning data sharing, rights on the developed information and sharing of costs.

Therefore, with a view to fulfilling their regulatory obligations under the REACH Regulation in respect to the Substance, the Parties hereto have decided to pursue the following objectives (hereinafter the "Purpose"):

1. to agree on the operating rules governing the exchanges of information between the SIEF potential registrants (Title I);
2. to agree on the rules regarding the rights to participate in the joint submission of data, to use the (robust) study summaries and to refer to the relevant full study reports in the Joint Registration Dossier developed by the Lead Member (Title II);

under the terms and conditions set forth in this Agreement.

THE PARTIES HAVE AGREED UPON THE FOLLOWING:

Article I. Definitions

Terms written in capital letters are defined in the Preamble above, in this Article 1 or in other parts of this Agreement. To the extent not otherwise defined in this Agreement, any definition specified in REACH, in particular in Article 3, shall apply to this Agreement:

Affiliate: Any person, which directly or indirectly through one or more intermediaries owns, controls, is controlled by, or is under common control with, another legal person. For the purpose of this definition, a legal person shall be deemed to 'control' another legal person if it has the direct or indirect power to direct or cause the direction of the general management and policies of another legal person, whether through the ownership of securities or capital stock, voting stock, by contract or otherwise. A legal person shall presumptively be deemed to control another legal person if it owns, directly or indirectly through one or more intermediaries and whether legally or beneficially fifty per cent (50 %) or more of the outstanding voting securities or capital stock or other comparable equity or ownership interest of such legal person.

Data Owner: Any entity holding rights to use Information on the Substance, either as SIEF participant or as non SIEF participant.

Information: studies, other scientific, statistical, or technical data, including but not limited to composition, characteristics, properties and processes and applications, and any information in any form made available by a Party or generated by the Parties jointly, pursuant to or in the course of this Agreement.

Joint Registration Dossier: The data that the Parties are required to submit jointly to the Agency in order to register the Substance, pursuant to Article 11 (1), paragraph 2 of REACH.

Parties: being the parties to this Agreement, having the quality of either:

-Lead Member: a SIEF participant who is subject to the registration requirements under REACH, who participates to the SIEF discussions in order to compile the Joint Registration Dossier and who is a member of the Consortium.

-Lead Registrant: a SIEF participant who is subject to the registration requirements under REACH, which the Non-Lead Member agree hereto to appoint acting as Lead Registrant as defined under Article 11 (1) REACH. The

Lead Registrant is a member of and duly represents and acts in the name and on behalf of the other members of the Consortium ('Lead Members').

-Non-Lead Member: a SIEF participant being neither a Lead Member nor a data holder (Article 28 (7) REACH)) and that agrees to rely on the Joint Registration Dossier prepared and/or made available by the Lead Registrant, on his own behalf, and/or on behalf of the represented potential registrants in case he is a third party representative.

Title I: SIEF OPERATING RULES

Article II. Confidentiality

1. The Parties shall:

- a) treat all Information as confidential and not disclose it to third parties, unless regulatory disclosure requirements apply. Each Party shall advise immediately the other Parties in writing of any disclosure or misuse by any Party or a third party of Information, as well as of any request by competent authorities relating to the disclosure of that Information.

Disclosure of Information as required for legal and/or regulatory purposes including the REACH Regulation, shall only take place by the Parties in a form (for example short summaries where possible) reflecting the minimum information required to be disclosed. This restriction does not apply to the Party who has provided the Information.

- b) use the Information only for the Purpose or otherwise as permitted under or in accordance with this Agreement.
 - c) disclose the Information to their employees, Affiliates, external experts and/or consultants and if the Non-Lead Member is an only representative or a third party representative, the non-EU manufacturer(s) or the legal entity(ies) represented by any of them, only on a need to know basis and only to the extent absolutely necessary for the Purpose or otherwise as permitted under or in accordance with this Agreement. Each Party shall have in place policies and procedures to ensure the confidentiality of Information, and require that its external experts and/or consultants also have such policies and procedures in place to ensure their compliance with these confidentiality obligations.
- #### 2. The obligations specified in Article II.1 above shall not apply to Information for which the receiving Party can reasonably demonstrate that such Information:
- a) was known to the receiving Party on a non-confidential basis prior to its disclosure pursuant to this Agreement;
 - b) is publicly known at the time of disclosure or thereafter becomes publicly known without breach of the terms of this Agreement on the part of the receiving Party;
 - c) becomes known to the receiving Party through disclosure by sources other than the disclosing Party, having a right to disclose such Information;

- d) was independently developed by the receiving Party without access to the disclosing Party's Information, as evidenced by documentary records.

Specific items of Information shall not fall within any exception merely because they are combined with more general Information falling within any exception. Likewise, any combination of specific items of Information shall not fall within any exception merely because the specific items fall within any exception, but only if the combination itself, and its principles of operation, fall within any exception.

Article III. Competition Law compliance

1. The Parties acknowledge that any activities carried out under this Agreement have to be carried out in full compliance with EU competition law, in particular but not limited to Articles 101 and 102 TFEU as well as any applicable national laws. The Parties explicitly agree to observe Cefic REACH Competition Law compliance guidance referenced in Annex 1 to this Agreement.

2. Should it become apparent at any time that this Agreement, any provision of this Agreement, or any activity or decision of the Parties, can have a potentially restrictive effect on open and fair competition, in breach of any statutory provision, each Party to this Agreement shall take immediate steps to remedy that situation.

Article IV. Legal personality

This Agreement or the cooperation contemplated herein shall not constitute or be deemed to constitute a legal entity or partnership between the Parties.

Article V. Regular report of the preparation of the Joint Registration Dossier

1. The Lead Registrant undertakes to inform the Non-Lead Member regularly on the development of the Joint Registration Dossier.

2. In particular, in case the chemical safety report is jointly developed, the Lead Registrant undertakes to inform the Non-Lead Member on the list of uses to be covered in that chemical safety report without undue delay.

3. The Non-Lead Member undertakes to make all best efforts to check proactively and regularly all up-dated Information that is made available by the Lead Registrant on the development of the Joint Registration Dossier.

4. The Parties agree that such communication may be channelled via the use of Reach IT.

TITLE II: DATA SHARING AND JOINT SUBMISSION OF THE DOSSIER

1. OBLIGATIONS OF THE LEAD REGISTRANT

Article VI. Participation in the joint submission of data by multiple registrants

1. According to Article 11 (1) REACH, the Parties hereto agree to have the Joint Registration Dossier for the Substance submitted by the Lead Registrant on behalf of the Non-Lead Member having fulfilled its obligations under Article IX to this Agreement, at least 3 months before the end of the applicable registration deadline. Upon demand of the Agency, within the requested deadline and to the extent necessary, the Lead Registrant agrees to complete the Joint Registration Dossier.
2. Notwithstanding anything to the contrary under this Agreement, the Parties remain individually responsible to comply with REACH, in particular, but not limited to, in relation to the individual submission of the information required under Article 11(1) REACH.
3. The participation in the Joint Registration Dossier may deviate per requesting Non-Lead Member according to its tonnage band or possible opt-outs for certain endpoints.
4. If the Non-Lead Member is a third party representative and requests the submission of the Joint Registration Dossier on behalf of a legal entity represented by him in the SIEF, the Lead Registrant reserves the right to request the Third Party Representative to reveal the identity of the third party represented under strict confidentiality obligations to a neutral Trustee who shall not in turn reveal it to the Lead Registrant. This obligation is only to ascertain that Third Party Representatives participating in joint submission fulfill correctly their payment obligations for all legal entities they represent.
5. The Lead Registrant shall open a joint submission object in REACH-IT.
6. The Lead Registrant shall pay the fee (in accordance to Article 11 (4) REACH) as invoiced by the Agency for the submission of the Joint Registration Dossier without undue delay.
7. The Lead Registrant shall on request make available the technical dossier (Chapters 4 - 7) in IUCLID format (i.e. to the Non-Lead Member, provided the Non-Lead Member has fulfilled its obligations under Article IX of this Agreement).

Article VII. Grant of right to use the (robust) studies summaries in the Joint Registration Dossier and to refer to the full study reports.

1. Subject to the payment of the Joint Registration Compensation as specified under Article IX of this Agreement, the Lead Registrant grants the Non-Lead Member the non-exclusive, non-transferable and non-terminable right:
 - (a) to use the (robust) studies summaries and other Information used in the Joint Registration Dossier within the applicable tonnage band and for which no opt-out has been claimed by the Non-Lead Member;
 - (b) to refer to the full study reports on which basis the (robust) studies summaries have been developed.

2. Notwithstanding the foregoing, if the Non-Lead Member is a third party representative, he is granted only with the rights specified under (a) and (b) hereabove, and only for the purpose to pass them to the individual legal entity represented by him in the SIEF.

3. The rights granted under this Article can be exercised only for the purpose of compliance with REACH. The Parties shall abstain from any other use, whether commercial or non-commercial. For the avoidance of doubt, any further use of the studies shall be subject to an additional written agreement.

Article VIII. Information on the submission of the Joint Registration Dossier

1. Provided the Non-Lead Member has fulfilled its obligations under Article IX, the Lead Registrant shall inform without undue delay the Non-Lead Member of the creation of the joint submission object in REACH-IT and shall provide the valid security token number and the name of the joint submission.

2. The Lead Registrant shall inform without undue delay the Non-Lead Member of the submission of the Joint Registration Dossier to the Agency and provide documentation of the same.

3. The Lead Registrant shall further communicate the confirmation that the joint registration has been successful and shall inform the Non-Lead Member of the reception of the relevant registration number that has been obtained from the Agency without undue delay.

2. OBLIGATIONS OF THE NON-LEAD MEMBER

Article IX. Financial compensation for the Joint Registration Dossier

1. Before execution by the Lead Registrant of its obligations pursuant to Title II.1 of this Agreement, the Non-Lead Member shall compensate in a fair, transparent and non-discriminatory way the Lead Registrant with a "Joint Registration Compensation" for the development and submission of the Joint Registration Dossier, the development of the Chemical Safety report and Guidance on Safe Use, and the rights granted under Article VII. The costs, expenses and Joint Registration Compensation are set out in Annex 2.

2. The Joint Registration Compensation will comprise following elements:

a) Administrative expenses reasonably incurred by the Lead Members and the Lead Registrant including but not limited to, secretarial services, management of confidential data, costs for the joint dossier preparation and costs of external experts.

b) Expenses to acquire rights to use existing studies of an individual Lead Member and costs for studies jointly developed by the Lead Members according to Annexes VI to VIII of REACH.

c) Costs for rights to use studies from Data Owners, if the Lead Registrant is authorized by Data Owners to transfer to Non-Lead Member the rights specified under Article VII. paragraph 1.

d) Costs for the preparation of the chemical safety report and the Guidance on Safe Use for nine main uses set out in the Consortium Agreement, which are made available once by the Lead Registrant to the Non-Lead member for individual submission.

3. Expenses referred to above shall be allocated equally, in a transparent, fair and non discriminatory way, to all SIEF participants with the intent to register the Substance, taking into account the following exceptions:

a) Where a Non-Lead Member registers the Substance in a tonnage band lower than the one covered by the Joint Registration Dossier, it shall only be requested to compensate for those parts of the Registration Dossier that it is included in and for those studies it receives a right to refer for.

b) Where the Non-Lead Member decides, based on Article 11 (3) REACH, to opt-out from the Joint Submission or some parts of the Joint Registration Dossier and submit the relevant information separately, it shall only be requested to compensate for those parts of the Joint Registration Dossier that are submitted jointly or which he otherwise uses.

4. Based on the above, a payment notice will be sent to the Non-Lead Members for their cost share after their request for joint submission (2010, 2013, 2018 and first time registrants). The Non-Lead Members will only receive the valid security token number after receipt of the payment. Payment is due within thirty (30) days as of the date of the payment notice. A letter of access document specifying the Non-Lead Members rights' and obligations will be issued.

5. In case new studies have to be purchased or performed after conclusion of this Agreement, the resulting cost will be equally divided between all SIEF participants who are required to incorporate the results of these new studies into their registration dossier, unless they claim to opt out in accordance with Article 11 (3) REACH.

The Non-Lead Member will be granted on these new studies the same rights as referred to under Article VII.1 (a) and (b) hereabove.

6. If an only representative represents more than one non-EU entity within the SIEF, such only representative shall compensate the Lead Registrant on account of each non-EU entity it represents by the payment of a separate Joint Registration Compensation per Non-EU entity.

7. If a third party representative represents more than one entity within the SIEF, such third party representative shall compensate the Lead Registrant on account of each entity it represents by the payment of a separate Joint Registration Compensation per entity.

8. All payments due hereunder shall be net payments, i.e. free of any bank or transfer charges or similar charges and without deduction of any taxes, levies or other dues payable. If payer is required to withhold any tax or to make any other deduction from any such payments, then the said payments shall be increased to the extent necessary to ensure that, after making of the required deduction or withholding, payee receives and retains (free from any liability in respect of any such deduction or withholding) a net sum equal to the sum which it would have received and so retained had no such deduction or withholding been made or required to be made (gross-up amount). If upon application of the beneficiary any withholding tax can be reduced, or refunded, or an exemption from withholding tax is granted, payer shall file on behalf of payee for such reduction, refund or exemption. Payee shall render any assistance to payer to obtain such withholding tax reduction, refund or exemption. Payer shall be entitled to any refund of withholding taxes.

9. Indirect taxes, including but not limited to Value Added Tax (VAT), Goods and Service Tax (GST), service tax, business tax, as applicable pursuant to the relevant tax law, shall be borne by payer. However, payer is entitled to withhold any payment of indirect taxes unless payee has provided payer with a sufficient invoice for purposes of indirect taxation.

3. OWNERSHIP OF INFORMATION

Article X. Ownership of Information

1. This Agreement does not grant any ownership rights or change existing ownership rights to any of the Information provided under this Agreement to the Non-Lead Member, on whatever form and whenever, by the Lead Registrant, including without limitation, the Joint Registration Dossier.

2. Such Information shall consist in any and all data and/or studies:

- a) Individually developed by one of the Lead Members;
- b) Collectively developed by the Lead Members for which they have acquired valid title or right to use; and
- c) Acquired from Data Owner(s) for which the Lead Members, or the Lead Registrant as the case may be, have been granted valid rights.

3. Neither this Agreement nor any disclosure of Information shall vest any present or future rights in any patents, trade secrets or property rights and no license is granted.

TITLE III: FINAL PROVISIONS

Article XI. Limitation of liability in the SIEF

1. The Parties shall undertake their Purpose related activities specified hereunder in good faith and according to all applicable laws and regulations, and they shall use all reasonable endeavours to ensure the best possible results based on the evidence, methods and techniques known at the time.

2. Each Party having submitted a study which has been used in the Joint Registration Dossier represents to the others (i) that it is the rightful owner or grantee of the study(ies) and free to grant rights therein, (ii) that, to the knowledge of this Party, these studies do not infringe on the rights, in particular, but without limitation, intellectual property rights, of any third party and (iii) that this Party has not received a claim or notice of any alleged infringement.

3. It is the individual responsibility of each Party to critically assess the Information that is generated or that is made available. Each Party assumes the full responsibility for its own use of the Information so developed or received. No warranty for acceptance by the Agency of the Joint Registration Dossier or any data it contains is given.

4. None of the Parties, including the Lead Registrant, shall be held liable for any direct, indirect or consequential loss or damage incurred by any Party in connection with the activities contemplated in this Agreement, unless caused by gross negligence or wilful misconduct. In particular, the Lead Members, including the Lead Registrant, shall not be held responsible and liable for delays in the completion and submission of the Joint Registration Dossier, unless caused by gross negligence or wilful misconduct.

Article XII. Term and termination

1. This Agreement shall be in force until 1 June 2018.

2. This Article and the provisions relating to the protection of confidentiality (Article II), ownership of Information (Article X), dispute resolution and applicable law (Article XV) and limitation of the liability (Article XI) shall survive the termination of this Agreement. With regard to the studies, the obligations specified in Article II of this Agreement shall survive for a period of twelve (12) years following the initial submission to the Agency. With regard to all other Information, the obligations specified in Article II shall survive for a period of 5 years after termination of the SIEF.

3. The Lead Registrant has the right to terminate its functions as lead registrant under the cumulative conditions that:

- it has been validly replaced in its functions within the SIEF;
- its assignee has accepted to be bound by the obligations of the Lead Registrant under this Agreement; and
- the Non-Lead Member has been notified about such replacement.

4. The Non-Lead Member has the right to terminate the present Agreement subject a prior written notice to the Lead Registrant at the latest nine (9) months before the relevant registration deadline. No reimbursement shall be due.

Article XIII. Legal entity change

The consent of the other Party shall not be required in case a Party assigns, transfers or delegates its rights and obligations under this Agreement to any of its Affiliates or to a legal successor in ownership by sale, division, merger or consolidation of all or substantially the whole of the business relevant to the Substance referred to in this Agreement, subject to acceptance by the assignee of the terms of this Agreement, to be notified to the other Party without undue delay.

Article XIV. Administration and reporting of costs

1. All financial settlements, billings, and reports rendered under this Agreement shall reflect properly the facts which may be relied upon as being complete and accurate in any further recording and reporting made by a Party for any purpose.

2. In accordance with generally accepted accounting procedures, documentation will be maintained and preserved including but not limited to written or electronic records, records on expenses, books of account, correspondence, memoranda and receipts.

Article XV. Dispute resolution and applicable law

1. The Parties shall first attempt to settle amicably any dispute arising out of this Agreement. Any dispute shall be resolved by arbitration, ousting jurisdiction by ordinary courts, by a panel of three arbitrators. Each party to the dispute will nominate one arbitrator. These two arbitrators will then designate a third arbitrator who will also act as chairman. The arbitration decision shall be binding on the parties. The CEPANI arbitration rules shall be applicable. The place of any hearing shall be Brussels and the language of the arbitration shall be English.

Each Party may at any time request from any competent judicial authority any interim or conservatory measure.

2. This Agreement shall be governed by the laws of Belgium.

3. If at any time any provision of this Agreement is or becomes invalid or illegal in any respect, this shall have no effect on the validity of the remaining contractual provisions. The invalid provisions are to be replaced, backdated to the time of their becoming ineffective, by provisions which come closest to achieving their objective.

The Parties are validly bound by this Agreement when the Non-Lead Member has either given its consent to this Agreement, through the communication IT platform specified under Article V or has not explicitly objected to it within 30 calendar days of issuance of this SIEF Agreement, and/or has made the payment(s) requested in the letter of access.

SIEF Member:

Name: Legal Entity _____

Authorized Representative to sign (name) _____

Signature: _____

ANNEXES:

Annex 1

Cefic guidance on competition compliance

Please see website:

<http://www.cefic.be/files/downloads/Cefic-REACH-guidance-DO-&-DON'T.pdf>

Annex 2**LoA price calculation****Styrene REACH Consortium : LoA price calculation**

	TOTAL	Above 1000 tons per Registrant
2008 budget	€ 297,805	€ 6,926
2009 budget	€ 469,035	€ 10,908
2010 Budget less LOA	€ 302,630	€ 7,038
Expenses	€ 10,000	€ 233
TOTAL	€ 1,079,470	€ 25,104
Admin cost		€ 3,766
TOTAL WITH ADMIN COST		€ 28,870
Handling Fee		€ 750
<u>TOTAL LOA PRICE</u>		€ 29,620

Notes

1. Full price including CSR
2. No reduced price without CSR
3. LoA price is a fixed price except if substantial new work to be conducted post 2010
4. There will be no reimbursement (overflow income will be used for post 2010 ECHA required work and 50% of the remaining funds will be used depending on the fair value of studies (original invoice value minus 30%) to reimburse data owners for license fee waivers provided pursuant to License Fee Waiver Agreements of Styrene REACH Consortium with JSIA, SIRC and SSC respectively)
5. For 100 to 999 tons : €10,277
6. For 1 to 99 tons : €3,637

STYRENE REACH CONSORTIUM - APPROVED BUDGETS	<u>2008 Budget</u>
Styrene Consortium Kick-off meeting	€ 5,000
Meeting and follow-up work to finalize consortium legal documents and business plan. Setting up of bank account for consortium	€ 12,800
Assistance in setting up Technical Committee and working groups and provision of services as required in particular review of minutes	€ 3,520
Technical Committee support including preparation, attendance, preparation of agenda and minutes, follow up and action lists of meetings maintaining records of progress versus agreed targets, coordination Technical Committee and Technical Consultant	€ 15,840
Technical Committees (setting up and support)	€ 19,360
Steering Committee meetings prior to the registration date plus preparation and debriefing	€ 25,760
Accounting fee	€ 6,000
Annual management and archiving fee	€ 5,000
Consortium Documentation Archiving System (Extranet) & SIEFreach IT tool subscription	€ 4,525
IUCLID 5 file	€ 160,000
Level 2 consultant	€ 40,000
TOTAL APPROVED BUDGET	€ 297,805

STYRENE REACH CONSORTIUM - APPROVED BUDGETS		2009 Budget
Assistance in setting up Technical Committee and working groups and provision of services as required in particular review of minutes (1)	MLA	€ 7,840
Steering Committee meetings prior to the registration date plus preparation and debriefing	MLA	€ 27,040
Accounting fee	MLA	€ 20,000
Annual management and archiving fee	MLA	€ 11,500
Third party communications & legal advice	MLA	€ 34,000
Documentation Archiving System & SIEFreach IT tool subscription	MLA	€ 1,760
Task Force Exposure scenario : reviewing of minutes only	MLA	€ 4,000
IUCLID 5 update	BASF	€ 16,000
Preparation of the CSR	Cintox	€ 126,000
Technical Committee support including preparation, attendance, preparation of agenda and minutes, follow up and action lists of meetings maintaining records of progress versus agreed targets, coordination TC and Technical Consultant between meetings	Altran	€ 45,280
Exposure scenarios	Quantor/CEHTRA	€ 175,615
TOTAL APPROVED BUDGETS		€ 469,035

STYRENE REACH CONSORTIUM - APPROVED BUDGETS		<u>2010 BUDGET</u>
Assistance in setting up Technical Committee and working groups and provision of services as required in particular review of minutes	MLA	€ 8,640
Steering Committee meetings prior to the registration date plus preparation and debriefing	MLA	€ 28,480
Accounting fee	MLA	€ 27,500
Annual management and archiving fee	MLA	€ 16,500
Consortium Documentation Archiving System (Extranet) & SIEFreach IT tool subscription	MLA	€ 1,760
Third party communication and legal advice	MLA	€ 30,000
LOAs	MLA	€ 37,500
LoA Management - MLA IT tool	MLA	€ 1,500
SIEF Communication - estimate	MLA	€ 10,000
Task Force Exposure Scenarios : review of minutes only	MLA	€ 1,050
Technical Committee support including preparation, attendance, preparation of agenda and minutes, follow up and action lists of meetings maintaining records of progress versus agreed targets, coordination Technical Committee, exposure scenarios	Altran	€ 29,700
IUCLID finalization & technical part of CSR & ES	BASF	€ 45,000
ECETOC Workshop	Cintox	€ 2,500
Budget Reserve (Licensing of data, etc.)		€ 100,000
TOTAL APPROVED BUDGETS		€ 340,130

BR:235029.8

ANNEX 2 – Substance Identity Profile – Classification & Labelling

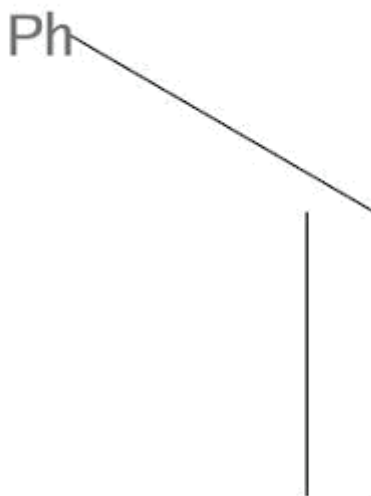
The substance **styrene** is a mono constituent substance (origin: organic) having the following characteristics and physical–chemical properties (see the IUCLID dataset for further details).

The following public name is used: styrene.

Table 1. Substance identity

EC number:	202-851-5
EC name:	styrene
CAS number (EC inventory):	100-42-5
CAS name:	Benzene, ethenyl-
IUPAC name:	styrene
Molecular formula:	C ₈ H ₈
Molecular weight range:	104.1491

Structural formula:



Overall information on composition

Composition	Related composition(s)
(legal entity composition of the substance)	
(boundary composition of the substance)	

Degree of purity: 99.0 — 100.0 % (w/w)

Table 2. Constituents

Constituent	Typical concentration	Concentration range	Remarks
styrene EC no.: 202-851-5		> 99.0 — <= 100.0 % (w/w)	

Table 3. Impurities **CORRECTION: Apply respective Table 3 of [SIEF Agreement of Aug 31, 2010](#).**

Impurity	Typical concentration	Concentration range	Remarks
2-phenylpropene EC no.: 202-705-0		ca.0.001 - <=0.04 % (w/w)	max. 1000 ppm
Ethylbenzene EC no.: 202-849-4		>=0.007 - <=0.3 % (w/w)	max. 3000 ppm
toluene EC no.: 203-625-9		ca.0 - <=0.001 % (w/w)	max. 10 ppm
cumene EC no.: 202-704-5		>=80 - <=230 ppm	max. 500 ppm
benzene EC no.: 200-753-7		ca.0.001 - <=0.04 % (w/w)	
p-xylene EC no.: 203-396-5		ca.10 - <=200 ppm	
m-xylene EC no.: 203-576-3		ca.10 - <=250 ppm	

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propylbenzene EC no.: 203-132-9		ca.10 - <=220 ppm	max. 300 ppm
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benzaldehyde EC no.: 202-860-4		ca.10 - <=250 ppm	
ethyltoluene EC no.: 247-093-6		ca.10 - <=250 ppm	

Classification & Labeling

Implementation: EU

Remarks: EC/1272/2008 Annex VI + self classification

Classification

The substance is classified as follows:

Classification and labelling according to CLP / GHS for physicochemical properties

Hazard class	Hazard category	Hazard statement	Reason for no classification	CSR section*)
Explosives:			conclusive but not sufficient for classification	6.1
Flammable gases and chemically unstable gases:			conclusive but not sufficient for classification	6.2
Aerosols:			conclusive but not sufficient	6.2

Hazard class	Hazard category	Hazard statement	Reason for no classification	CSR section*)
			for classification	
Oxidising gases:			conclusive but not sufficient for classification	6.3
Gases under pressure:			conclusive but not sufficient for classification	
Flammable liquids:	Flam. Liquid 3	H226: Flammable liquid and vapour.		6.2
Flammable solids:			conclusive but not sufficient for classification	6.2
Self-reactive substances and mixtures:			conclusive but not sufficient for classification	
Pyrophoric liquids:			conclusive but not sufficient for classification	6.2
Pyrophoric solids:			conclusive but not sufficient for classification	6.2
Self-heating substances and mixtures:			conclusive but not sufficient for classification	
Substances and mixtures which in contact with water emit flammable gases:			conclusive but not sufficient for classification	6.2

Hazard class	Hazard category	Hazard statement	Reason for no classification	CSR section*)
Oxidising liquids:			conclusive but not sufficient for classification	6.3
Oxidising solids:			conclusive but not sufficient for classification	6.3
Organic peroxides:			conclusive but not sufficient for classification	
Corrosive to metals:			conclusive but not sufficient for classification	

*) Justification for (non) classification can be found in the CSR section indicated

Classification and labelling according to CLP / GHS for health hazards

Hazard class	Hazard category	Hazard statement	Reason for no classification	CSR section*)
Acute toxicity - oral:			conclusive but not sufficient for classification	5.2.3
Acute toxicity - dermal:			conclusive but not sufficient for classification	5.2.3
Acute toxicity - inhalation:	Acute Tox. 4	H332: Harmful if inhaled.		5.2.3
Skin corrosion / irritation:	Skin Irrit. 2	H315: Causes skin irritation.		5.3.4 and 5.4.3

Hazard class	Hazard category	Hazard statement	Reason for no classification	CSR section*)
Serious damage / eye irritation:	Eye Irrit. 2	H319: Causes serious eye irritation.		5.3.4
Respiratory sensitisation:			conclusive but not sufficient for classification	5.5.3
Skin sensitisation:			conclusive but not sufficient for classification	5.5.3
Aspiration hazard:	Asp. Tox. 1	H304: May be fatal if swallowed and enters airways.		5.2.3
Reproductive Toxicity:	Repr. 2 Specific effect: Suspected of damaging the unborn child	H361: Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.		5.9.3
Reproductive Toxicity: Effects on or via lactation:			conclusive but not sufficient for classification	5.9.3
Germ cell mutagenicity:			conclusive but not sufficient for classification	5.7.3
Carcinogenicity:			conclusive but not sufficient for classification	5.8.3

Hazard class	Hazard category	Hazard statement	Reason for no classification	CSR section*)
Specific target organ toxicity - single exposure:	STOT Single Exp. 3 Affected organs: Nose Route of exposure: Inhalation	H335: May cause respiratory irritation.		5.2.3 and 5.3.4
Specific target organ toxicity - repeated exposure:	STOT Rep. Exp. 1 Affected organs: ear Route of exposure: Inhalation	H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>.		5.6.3

*) Justification for (non) classification can be found in the CSR section indicated

Classification and labelling according to CLP / GHS for environmental hazards

Hazard class	Hazard category	Hazard statement	Reason for no classification	CSR section*)
Hazards to the aquatic environment (acute/short-term):			conclusive but not sufficient for classification	7.6
Hazards to the aquatic environment (chronic/long-term):	Aquatic Chronic 3	H412: Harmful to aquatic life with long lasting effects.		7.6
Hazardous to the ozone layer:			conclusive but not sufficient for classification	7.6

*) Justification for (non) classification can be found in the CSR section indicated

Labelling

Signal word: Danger

Hazard pictogram:

GHS02: flame



GHS08: health hazard



GHS07: exclamation mark



Hazard statements:

H412: Harmful to aquatic life with long lasting effects.

H226: Flammable liquid and vapour.

H332: Harmful if inhaled.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H315: Causes skin irritation.

H361: Suspected of damaging fertility or the unborn child <state specific effect if known> <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. (Suspected of damaging the unborn child.)

H372: Causes damage to organs <or state all organs affected, if known> through prolonged or repeated exposure <state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard>. (hearing)

H304: May be fatal if swallowed and enters airways.

* * *

JONES DAY

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April 5, 2023

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BY ELECTRONIC MAIL

TO WHOM IT MAY CONCERN

Dear Joint Registrants,

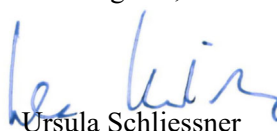
**Re: REACH SIEF Communication Styrene (EC number 202-851-5)
Registration Dossier Update**

The Styrene REACH Registration Consortium including Lead Registrant BASF SE have recently completed a registration dossier update, which has now successfully passed the ECHA manual completeness check. The registration dossier has been updated as follows:

- Pursuant to a comprehensive literature search for all end points covering the period since the last research in 2017, 40 sources were considered relevant for inclusion and were added.
- The dossier was updated to the most recent IUCLID version (from 6.0 to 6.6x).
- Chapters 3.5 and 3.7 were adapted to implement IUCLID changes for the uses and exposure scenarios.
- New relevant information was added in chapters 4 – 7 including new genotox studies (rats and mice, oral exposure)
- The end point summaries were reviewed and revised where necessary, in particular on genotoxicity.
- A testing proposal for chronic toxicity in fish has been included because the current waiver in the dossier is deemed no longer acceptable due to case law.
- Exposure scenarios have been updated and refined (unsaturated polyester resins).

If you wish to receive IUCLID and/or CSR, please contact us at reachteam@jonesday.com and provide us with a copy of your original LoA application. We will then send you the requested documents via a secure mailing system. Please note that the documents are voluminous. As in the past, the CSR was prepared jointly but will have to be submitted individually by the joint registrants. LoA prices will remain the same.

Kind regards,



Ursula Schliessner

EUI-1215420406v1

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October 27, 2023

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BY ELECTRONIC MAIL

TO WHOM IT MAY CONCERN

Dear Joint Registrants,

**Re: REACH SIEF Communication Styrene (EC number 202-851-5)
Registration Dossier Update - October 2023**

The Styrene REACH Registration Consortium including Lead Registrant BASF SE have just completed a second registration dossier update for the year 2023, which was necessary for those registrants who had not implemented in REACH IT the first 2023 registration dossier update before the end of May. A new IUCLID version (IUCLID 6 v7) with additional data fields became applicable as of June 2023, which is now used for this second 2023 update.

We would also like to inform you that over and above the new IUCLID required additional data fields (service life/articles), the genotox endpoint has been supplemented with two new studies.

Finally, for your planning, please note that the next dossier update is planned for June/July 2024.

As in the past, those LoA licensees that wish to receive the updated IUCLID and/or CSR, please contact us at reachteam@jonesday.com and indicate the legal entity name mentioned in your original LoA application, and if possible also the date when you applied for the LoA. We will subsequently send you the requested Dossier files via a secured ShareFile system.

Importantly also, we require that Only Representative registrants confirm to us in their document request that their non-EU Principal is not a Russian based entity (Article 5n(1) of Council Regulation 833/2014), and that in all cases they confirm the name of the non-EU manufacturer.

Please be advised that, as in the past, the CSR was prepared jointly by the Consortium but will have to be checked, amended and submitted individually by each joint registrant.

For any further information of purchase of LoAs, please visit www.jonesdayreach.com.

Kind regards,



Ursula Schliessner

EUI-1217099947v1

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October 11, 2024

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BY ELECTRONIC MAIL

TO WHOM IT MAY CONCERN

Dear Joint Registrants,

**Re: REACH SIEF Communication Styrene (EC number 202-851-5)
Registration Dossier Update – September 2024**

Please note that the Styrene REACH Registration Consortium with Lead Registrant BASF SE updated the registration dossier with two studies on the carcinogenicity and mutagenicity endpoints. There are no other changes to the dossier. The update successfully passed the completeness check yesterday.

Please also note that a **correction** to the SID (Table 3. Impurities) has been inserted into the post-SIEF Cooperation Agreement from December 5, 2018. The previous SID (Table 3. Impurities) from the SIEF Agreement of August 3, 2010 remains applicable.

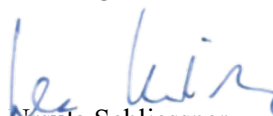
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Kind regards,



Ursula Schliessner

Annex (1)

EUI-1218682119v1

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