

C14 Decanting, mixing and filling of guns, cups or small containers with mixtures containing chromates¹

This sheet will help employers to comply with the requirements of EU Directive 2004/37 and the terms of the REACH authorizations for uses of chromates. Working with chromates may cause cancer. This sheet describes good practice to reduce exposure. It covers the points that should be followed to reduce exposure. It is important to follow all the points, or use equally effective measures. This document should be made available to all persons who may be exposed to chromates in the workplace so that they make the best use of the control measures available.

The Process

This GPS covers the decanting, mixing and filling of guns, cups or small containers with mixtures (e.g. primers, slurry coatings) containing chromates.

The container in which the mixture is delivered is opened in a dedicated preparation room or in a spray booth. The primer or coating is mixed at low speed using an automated or handheld manual tool for a set time to achieve a high level of consistency. Occasionally, small quantities of other components may be added during this mixing process. Once adequate consistency is achieved, the primer or coating is filled into paint guns, cups or small containers. This is typically a manual process using appropriate equipment (e.g. funnel). Application of primers and other coatings are covered in separate GPS. Cleaning of equipment is covered in separate GPS. No water is used in the process.

Equipment Design and Access

- ✓ The operation is conducted in a dedicated preparation room or in a spray booth with enhanced ventilation.
- ✓ LEV must be provided on the work bench.
- ✓ Operations should be designed to minimise the potential for release.
- ✓ Adequate protection should be provided to capture spills.

Measures relevant for ancillary tasks are also described in separate GPS. A full list of GPS is available at [Link](#).

¹ Chromates may include the following substances: Strontium chromate (S6), Pentazinc chromate octahydroxide (S7), and Potassium hydroxyoctaoxidizincatedichromate (S8).

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Chromates Emissions

There is potential for spillage during filling of spray guns, cups and containers. Residual chromates on equipment surfaces is possible.

No water is used in the process.

Risk Management Measures - Workers

- LEV must be regularly inspected and maintained to ensure full working order.
- Equipment must be regularly inspected. Residual chromates should be carefully removed with a disposable rag.
- Implement appropriate measures e.g. provision of local cleaning facilities and hazardous waste management bins to prevent cross-contamination between equipment and PPE to adjacent areas.

Risk Management Measures - Environment

- Floors, drains and equipment in process and chemical and waste storage areas should be sealed and regularly maintained to ensure integrity.
- Contaminated materials used to capture spills or release must be collected, clearly marked and disposed of as hazardous waste by a licensed contractor according to relevant regulations.

PPE

To minimize potential exposure to chromates, all persons conducting decanting, mixing and filling of guns, cups or small containers must wear:

- protective eye goggles
- protective gloves
- safety clothing / footwear.

GPS E1 and your supplier's extended SDS provide relevant information on PPE.

Training and Supervision

All persons conducting decanting, mixing and filling of guns, cups or small containers must be instructed about the risks of working with chromates, the safe way of handling chromates and use of PPE and other control equipment. Workers must be properly trained and equipped to carry out their duties, and to safely cease such duties as needed. Adequate supervision must be available at all times.

Monitoring

Adequate monitoring data must be available to evidence that potential exposure of workers and potential environmental release are maintained to as low as reasonably practicable level. Expert input is advisable.

Monitoring should be carried out at least annually. Downstream users may reduce the frequency of measurements once it is demonstrated that exposure of humans and releases to the environment has been reduced to as low a level as technically and practically possible and that the risk management measures and operational conditions correspond to the exposure scenarios and function appropriately.

GPS E2 provide further information on monitoring, including reference to relevant standards.

Other Relevant Good Practice Sheets

Other GPS are also likely to be applicable. A full list can be accessed at [Link](#).

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