

Good Practice Sheet for Use of Chromium Trioxide

D6 Cleaning of spills or releases

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 chromium trioxide. Working with chromium trioxide 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 chromium trioxide in the workplace so that they make the best use of the control measures available.

The Process

This GPS covers activities relating to incidental or accidental release of chromium trioxide during formulation, surface treatment or chromium plating.

Chromium trioxide is primarily used and handled in aqueous form. It is sometimes used in solid form (as flakes or crystals).

Equipment used during handling of and processing with chromium trioxide may need to be cleaned or decontaminated following use.

Release of chromium trioxide is unlikely when equipment is used as specified and adequate management systems are in place. However, the potential for releases or spills cannot be completely discounted.

Equipment Design and Access

Chromium trioxide is very hazardous to human health and the environment. Cleaning or decontamination of equipment must be carried out taking care to minimise worker exposure or release to the environment.

- Masking materials may be used to protect equipment during operations such as spraying or maintenance where there is increased potential for release. The masking material is periodically removed and replaced. ✓
- When cleaning an accidental spill or release, gently sweep up material and place in a designated, labelled waste container. Vacuums should be fitted with a HEPA filter or similar. Use spark-proof tools and explosion-proof equipment. Contain the spill as needed to prevent entry into sewers, water courses or to the ground. ✓
- Chromium trioxide should be moved in containers from spill area, vacuum handled, and stored according to instructions within the supplier's SDS. ✓

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Chromium Trioxide Emissions

Residual chromium trioxide on equipment surfaces is possible. Appropriate risk management measures should be adopted, as necessary.

Risk Management Measures - Workers

- Workers should wash hands and face before eating, drinking and smoking.
- Implement appropriate measures to prevent cross-contamination between equipment and PPE.
- Restrict access to permitted workers only by appropriate measures.

Risk Management Measures - Environment

- Wastewater containing hexavalent chromium should not be discharged to surface or groundwater, but treated to effectively remove hexavalent chromium prior to release to the environment or managed as a hazardous waste.
- Dispose of waste containing chromium trioxide via a licensed waste disposal contractor according to relevant regulatory requirements.

PPE

To minimize potential exposure to chromium trioxide, all persons cleaning spills or releases of chromium trioxide must wear:

- Protective eye goggles.
- Protective gloves.
- Acid-resistant clothing / footwear.
- P3 filter recommended.

GPS E7 and your supplier's extended SDS provide relevant information on PPE.

Training and Supervision

All persons performing cleaning activities must be instructed about the risks of working with chromium trioxide, the safe way of handling chromium trioxide 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 provided at all times.

Monitoring

Adequate monitoring data must be available to evidence absence of worker exposure and evaluate environmental release. GPS E1-E4 provide further information on monitoring. Expert input is advisable to ensure an appropriate monitoring program that also meets regulatory requirements.

Personal monitoring should be conducted during cleaning.

Other Relevant Good Practice Sheets

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

