

baa:

Bundesanstalt für Arbeitsschutz
und Arbeitsmedizin

Verbesserung des Arbeitsschutzes durch das Zulassungsverfahren

Dr. Urs Schlüter

4.1 „Expositionsszenarien“

Bundesanstalt für Arbeitsschutz und Arbeitsmedizin

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Zulassung von SVHC (Substance of Very High Concern)

Ziel

- Angemessene Beherrschung der Risiken, die von **besonders besorgniserregenden Stoffen** ausgehen
- **Substitution** durch Alternativen (Stoffe oder Technologien)

Instrumente

- Aufnahme in Kandidatenliste und Anhang XIV von REACH
- Auflagen, Bedingungen, Überprüfungszeiträume für Zulassungen



REACH: Info

helpdesk
reach-clp-biozid

<https://www.baua.de/DE/Angebote/Publikationen/Praxis/REACH-Info/REACH-Info-10.pdf>

„SVHC-Roadmap“ erfolgreich abgeschlossen?!

Ziel

- Europäische Kommission 2013: bis 2020 Aufnahme aller SVHC in Kandidatenliste
 - ECHA Ende 2020: alle relevanten und bekannten SVHC identifiziert und aufgenommen
- **Kandidatenliste enthält 211 SVHC**

Weiteres Vorgehen

- Screening aller weiteren Stoffe, Abschluss bis 2027
- Aufnahme weiterer SVHC in Anhang XIV von REACH



EUROPEAN COMMISSION

ENVIRONMENT DIRECTORATE-GENERAL

Water, Marine Environment & Chemicals

Chemicals, Biocides and Nanomaterials

ENTERPRISE AND INDUSTRY DIRECTORATE-GENERAL

Resources Based, Manufacturing and Consumer Goods Industries

REACH

Chemicals Industry

Roadmap for SVHCs identification and implementation of REACH Risk Management measures from now to 2020

<https://data.consilium.europa.eu/doc/document/ST-5867-2013-INIT/en/pdf>

Zahlen zum Zulassungsverfahren

Stoffe auf Anhang XIV

- 54 Stoffe auf Anhang XIV
- Für 43 SVHC Sunset-Date bereits überschritten
- Nur für 28 Stoffe Zulassung beantragt
 - 15 nicht mehr verwendet

Über 200 Zulassungsanträge

- fast 350 Verwendungen
- 50 % mit empfohlenen Auflagen: Schutzmaßnahmen, Monitoring
- $\frac{2}{3}$ mit Bedingungen für den Überprüfungsbericht

Anhang XIV von REACH

Nr.	Stoff	Inhärente Eigenschaft(en) nach Artikel 57	Antragschluss (¹)	Ablauftermin (²)	Ausgenommene Verwendungen oder Verwendungskategorien	Überprüfungszeiträume
1.	5-tert-Butyl-2,4,6- trinitro-m-xylo (Moschus-Xylol) EG-Nr.: 201-329.4 CAS-Nr.: 81-15-2	vPvB	21. Februar 2013	21. August 2014	-	-
2.	4,4'- Diaminodiphenylmethan (MDA) EG-Nr.: 202-974.4 CAS-Nr.: 101-77-9	Krebserzeugend (Kategorie 1B)	21. Februar 2013	21. August 2014	-	-
3.	Hexabromcyclododekan (HBCDD) EG-Nr.: 221-695-9, 247-148-4, CAS-Nr.: 3194-55-6, 25637-99-4 alpha- Hexabromcyclododecan CAS-Nr.: 134237-50-6 beta- Hexabromcyclododecan CAS-Nr.: 134237-51-7 gamma- Hexabromcyclododecan CAS-Nr.: 134237-52-8	PBT	21. Februar 2014	21. August 2015	-	-

https://www.reach-clp-biozid-helpdesk.de/DE/REACH/Verfahren/Zulassungsverfahren/Anhang-XIV-Zulassungspflichtige-Stoffe/Anhang-XIV-Zulassungspflichtige-Stoffe_node.html

Sammelanträge vs. Einzelanträge

Sammelanträge

- Hersteller/Importeure eines SVHC stellen Anträge für nachgeschaltete Anwender
- Viele Anwendungen und Anwender gleichzeitig
- Häufig unkonkrete Verwendungsinformationen
- Größere Unsicherheiten führen zu kürzeren Überprüfungszeiträumen
- Bewertung der Substitution meist unkonkret

Einzelanträge

- nachgeschaltete Anwender stellen selbst Anträge
- Viele unterschiedliche Anträge
- Konkrete Informationen über Anwendungen und Expositionssituation
- Geringere Unsicherheiten führen zu längeren Überprüfungszeiträumen
- Bewertung der Substitution durch Einzelfallbetrachtung einfacher, häufig defizitär

Ziele des Zulassungsverfahrens erreicht?

Substitution

- Im Überprüfungszeitraum weitere Substitution (Gesamtvolumen um 97 % reduziert)
- Substitution unterschiedlich erfolgreich

Arbeitsschutz

- Konkretisierung von Schutzmaßnahmen (Erstzulassung und Überprüfung)
- Expositionsbewertung erkennbar verbessert (Monitoring, Modellierung)



https://echa.europa.eu/documents/10162/13637/socioeconomic_impact_reach_authorisations_en.pdf

Überwachung des Zulassungsverfahrens

- **Bereits 2 Pilotprojekte zum REACH Zulassungsverfahren**
- **REACH-EN-FORCE (REF)-Projekt 9 – Überprüfung, ob**
 - SVHC auch ohne Zulassung in Verkehr gebracht werden,
 - Verwendung unter Einhaltung der Zulassungsbedingungen erfolgt
- **Beteiligung aller 30 EU- und EWR-Länder**
- **Untersuchungen in 2021, Ergebnisse ab Ende 2022**

Upstream-Antrag für Chromate – Bewertung des RAC

Chromium trioxide use: Formulation of mixtures

- **“RAC takes note of the applicant’s intention to develop a detailed set of RMM guidance documents to be provided in support of their DUs for CrO₃.”**
- **“Specific ES shall be developed for the typical formulation processes and individual tasks**
 - Shall describe typical OCs and RMMs to control workers’ exposure and emissions to the environment,
 - Hierarchy of control principles according to CAD (98/24/EC) and CMD (2004/37/EC) shall be followed”
- **“ESs shall be validated and verified by**
 - Analysis of tasks
 - Through representative programs of occupational exposure and environmental release measurements ...”

Beiträge der Antragsteller

Good Practice Sheets (GPS)

- A Formulation,
- B Chromium Plating
- C Surface Treatment
- D Supporting Activities
- E Monitoring

Einordnung

- Grundsätzlich geeignet
- Fehlende Validierung
- Inhaltliche Mängel erkennbar
- Akzeptanz bei REACH- und Arbeitsschutz-Vollzug unklar



Good Practice Sheet for Uses of Chromium Trioxide

B5 Chromium plating operations in open tanks or baths with automated loading to bath

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 the industrial electroplating of articles with a surface layer of metallic chromium in one or more covered plating tanks. The plating line contains an aqueous chromium trioxide solution (electrolyte). Chromium plate is deposited on parts or articles in the tank(s) when an electric current is applied to the system. The treated parts are rinsed following plating.

Photographs show (above) conventional return-type machines for mass production and (below) hoist lines at close range.

Equipment Design and Access

The plating tanks are open. Articles or parts are fixed to / removed from the hoist, racks or grippers manually or automatically at a separate station and fed by an automated conveyor system through the plating system. Splashguards separate the plating line from workers.

The plating system must have all of the following features:

- The plating tanks are fitted with splashguards. ✓
- Articles are mounted/dismounted to the hoist at a dedicated station in an area adjacent or separate to the plating tanks and automatically transported through the plating process. ✓
- Local exhaust ventilation (LEV) is provided to efficiently remove chromium trioxide mist from the tanks. ✓
- Workers are remote from the tanks during operation apart from occasional visual inspection of the tanks. ✓

In case these features are not in place, this GPS does not apply, but another may. Measures relevant for ancillary tasks are also described in separate GPS. A full list of GPS is available at [link](#).

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<https://jonesdayreach.com/substances/>

Downstream-Anträge für Diglyme Verwendung als Lösungsmittel für Natriumnaphthalid

Erster Antrag 2017

- Manuelle Handhabung
- Schutz durch PSA
- Exposition Unbeteiligter
- **Keine angemessene Risikobeherrschung**
- **Verbesserte Maßnahmen und Monitoring vom RAC vorgeschlagen**

https://echa.europa.eu/de/applications-for-authorisation-previous-consultations/-/substance-rev/13536/del/50/col/synonymDynamicField_302/type/asc/pre/4/view

Zweiter Antrag 2020

- Neueinrichtung vollständig geschlossener Anlagen
- Direkter Kontakt vermieden
- Verbesserte Lüftungssituation
- **Angemessene Risikobeherrschung demonstriert**
- **Keine weiteren Maßnahmen vom RAC vorgeschlagen**

https://echa.europa.eu/de/applications-for-authorisation-previous-consultations/-/substance-rev/26010/del/50/col/synonymDynamicField_302/type/asc/pre/8/view

Vielen Dank für die Aufmerksamkeit!
Fragen?

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4.1 – Expositionsszenarien

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