



SAFETY DATA SHEET

MATERION

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture Chromium-Aluminum (Cr-Al)
Registration number -
Document number 1RT
Synonyms None.
Materion Code 1RT
Issue date 02-September-2014
Revision date 12-January-2018

1.3. Details of the supplier of the safety data sheet

Supplier

Company name Materion Advanced Chemicals Inc.
Address 407 N. 13th Street
1316 W. St. Paul Avenue
Milwaukee, WI 53233
United States
Division Milwaukee
Telephone 414.212.0257
e-mail advancedmaterials@materion.com
Contact person Laura Hamilton

1.4. Emergency telephone number

Supersedes date 19-January-2016
Version number 03

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Not available.
Uses advised against None known.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

Classification according to Regulation (EC) No 1272/2008 as amended

Environmental hazards

Hazardous to the aquatic environment, acute aquatic hazard Category 1 H400 - Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term aquatic hazard Category 1 H410 - Very toxic to aquatic life with long lasting effects.

Hazard summary Dangerous for the environment if discharged into watercourses.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Hazard pictograms



Signal word Warning

Hazard statements

H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

P273 Avoid release to the environment.

Response

P391 Collect spillage.

Storage

Store away from incompatible materials.

Disposal

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Supplemental label information

75 % of the mixture consists of component(s) of unknown acute hazards to the aquatic environment.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Chromium	60 - 80	7440-47-3 231-157-5	-	-	#
Classification:	Aquatic Chronic 3;H412				
Other components below reportable levels	20 - 40				

List of abbreviations and symbols that may be used above

CLP: Regulation No. 1272/2008.

DSD: Directive 67/548/EEC.

M: M-factor

vPvB: very persistent and very bioaccumulative substance.

PBT: persistent, bioaccumulative and toxic substance.

#: This substance has been assigned Community workplace exposure limit(s).

Composition comments

The full text for all R- and H-phrases is displayed in section 16.

SECTION 4: First aid measures

General information

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

4.1. Description of first aid measures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact

Rinse with water. Get medical attention if irritation develops and persists.

Ingestion

Rinse mouth. Get medical attention if symptoms occur.

4.2. Most important symptoms and effects, both acute and delayed

Direct contact with eyes may cause temporary irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Provide general supportive measures and treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards

No unusual fire or explosion hazards noted.

5.1. Extinguishing media

Suitable extinguishing media

Powder. Dry sand.

Unsuitable extinguishing media

Water. Do not use water jet as an extinguisher, as this will spread the fire. Carbon dioxide (CO2).

5.2. Special hazards arising from the substance or mixture

During fire, gases hazardous to health may be formed.

5.3. Advice for firefighters

Special protective equipment for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Special firefighting procedures

Move containers from fire area if you can do so without risk.

Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate personal protective equipment. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

For emergency responders

Keep unnecessary personnel away.

6.2. Environmental precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up

Stop the flow of material, if this is without risk. Collect spillage. Prevent entry into waterways, sewer, basements or confined areas.

6.4. Reference to other sections

Not available.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid release to the environment. Do not empty into drains.

7.2. Conditions for safe storage, including any incompatibilities

Store in original tightly closed container.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational exposure limits****Austria. MAK List, OEL Ordinance (GwV), BGBl. II, no. 184/2001**

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	MAK	5 mg/m ³	Respirable fraction.
		10 mg/m ³	Inhalable fraction.
	STEL	20 mg/m ³	Inhalable fraction.
		10 mg/m ³	Respirable fraction.
Chromium (CAS 7440-47-3)	MAK	2 mg/m ³	

Belgium. Exposure Limit Values.

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	1 mg/m ³	Respirable fraction.
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m ³	

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	2 mg/m ³	
		10 mg/m ³	Dust.
		1,5 mg/m ³	Respirable fraction.
Chromium (CAS 7440-47-3)	TWA	2 mg/m ³	

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	MAC	4 mg/m ³	Respirable dust.
		10 mg/m ³	Total dust.
Chromium (CAS 7440-47-3)	MAC	2 mg/m ³	

Czech Republic. OELs. Government Decree 361

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	10 mg/m ³	Dust.

Czech Republic. OELs. Government Decree 361 Components

Components	Type	Value	Form
Chromium (CAS 7440-47-3)	Ceiling	1,5 mg/m ³	
	TWA	0,5 mg/m ³	
		0,5 mg/m ³	Dust.

Denmark. Exposure Limit Values Components

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TLV	5 mg/m ³	Dust and fume.
		5 mg/m ³	Fume.
		2 mg/m ³	Respirable dust and/or fume.
Chromium (CAS 7440-47-3)	TLV	0,5 mg/m ³	Dust.

Estonia. OELs. Occupational Exposure Limits of Hazardous Substances. (Annex of Regulation No. 293 of 18 September 2001)

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	4 mg/m ³	Respirable dust.
		10 mg/m ³	Total dust.
Chromium (CAS 7440-47-3)	TWA	2 mg/m ³	

Finland. Workplace Exposure Limits Components

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	1,5 mg/m ³	Welding fume.
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m ³	

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984 Components

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	VME	5 mg/m ³	Dust.
		5 mg/m ³	Welding fume.
		10 mg/m ³	
Chromium (CAS 7440-47-3)	VME	2 mg/m ³	

Regulatory status: Indicative limit (VL)

Regulatory status: Indicative limit (VL)

Regulatory status: Indicative limit (VL)

Germany. DFG MAK List (advisory OELs). Commission for the Investigation of Health Hazards of Chemical Compounds in the Work Area (DFG)

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	4 mg/m ³	Inhalable fraction.
		1,5 mg/m ³	Respirable fraction.

Germany. TRGS 900, Limit Values in the Ambient Air at the Workplace Components

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	AGW	10 mg/m ³	Inhalable fraction.
		1,25 mg/m ³	Respirable fraction.
Chromium (CAS 7440-47-3)	AGW	2 mg/m ³	Inhalable fraction.

Greece. OELs (Decree No. 90/1999, as amended) Components

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	5 mg/m ³	Inhalable
		10 mg/m ³	Welding fume.
		10 mg/m ³	Pyrophoric powder.
		10 mg/m ³	Respirable.
Chromium (CAS 7440-47-3)	TWA	1 mg/m ³	

Hungary. OELs. Joint Decree on Chemical Safety of Workplaces

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	6 mg/m ³	Respirable.
Chromium (CAS 7440-47-3)	TWA	2 mg/m ³	

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	5 mg/m ³	Fume.
		10 mg/m ³	Dust.
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m ³	Dust.

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	1 ppm	Respirable dust.
Chromium (CAS 7440-47-3)	TWA	2 mg/m ³	

Italy. Occupational Exposure Limits

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	1 mg/m ³	Respirable fraction.
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m ³	

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment

Components	Type	Value	
Aluminium (CAS 7429-90-5)	TWA	2 mg/m ³	
Chromium (CAS 7440-47-3)	TWA	2 mg/m ³	

Lithuania. OELs. Limit Values for Chemical Substances, General Requirements

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	5 mg/m ³	Inhalable fraction.
		2 mg/m ³	Respirable fraction.
Chromium (CAS 7440-47-3)	TWA	2 mg/m ³	

Luxembourg. Binding Occupational exposure limit values (Annex I), Memorial A

Components	Type	Value	
Chromium (CAS 7440-47-3)	TWA	2 mg/m ³	

Netherlands. OELs (binding)

Components	Type	Value	
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m ³	

Norway. Administrative Norms for Contaminants in the Workplace

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TLV	5 mg/m ³	Welding fume.
		5 mg/m ³	Pyrophoric powder.
Chromium (CAS 7440-47-3)	TLV	0,5 mg/m ³	

Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	2,5 mg/m ³	Inhalable fraction.
		1,2 mg/m ³	Respirable fraction.
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m ³	

Portugal. OELs. Decree-Law n. 290/2001 (Journal of the Republic - 1 Series A, n.266)

Components	Type	Value	
Chromium (CAS 7440-47-3)	TWA	2 mg/m ³	

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	1 mg/m ³	Respirable fraction.
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m ³	

Romania. OELs. Protection of workers from exposure to chemical agents at the workplace

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	STEL	3 mg/m ³	Fume.
		10 mg/m ³	Dust.
	TWA	3 mg/m ³	Dust.
		1 mg/m ³	Fume.
Chromium (CAS 7440-47-3)	TWA	2 mg/m ³	

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	4 mg/m ³	Inhalable fraction.
		1,5 mg/m ³	Respirable fraction.

Slovenia. OELs. Regulations concerning protection of workers against risks due to exposure to chemicals while working (Official Gazette of the Republic of Slovenia)

Components	Type	Value
Chromium (CAS 7440-47-3)	TWA	2 mg/m ³

Spain. Occupational Exposure Limits

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	5 mg/m ³	Welding fume.
		10 mg/m ³	Dust.
Chromium (CAS 7440-47-3)	TWA	2 mg/m ³	

Sweden. OELs. Work Environment Authority (AV), Occupational Exposure Limit Values (AFS 2015:7)

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	5 mg/m ³	Total dust.
		2 mg/m ³	Respirable dust.
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m ³	Total dust.

Switzerland. SUVA Grenzwerte am Arbeitsplatz

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	3 mg/m ³	Respirable fraction.
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m ³	Inhalable fraction.

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Aluminium (CAS 7429-90-5)	TWA	4 mg/m ³	Respirable dust.
		10 mg/m ³	Inhalable dust.
Chromium (CAS 7440-47-3)	TWA	0,5 mg/m ³	

EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU

Components	Type	Value
Chromium (CAS 7440-47-3)	TWA	2 mg/m ³

Biological limit values**Croatia. BLV. Dangerous Substance Exposure Limit Values at Workplace, Annexes 4 (as amended)**

Components	Value	Determinant	Specimen	Sampling Time
Aluminium (CAS 7429-90-5)	200 mg/l	Aluminium	Urine	*

* - For sampling details, please see the source document.

Czech Republic. Limit Values for Indicators of Biological Exposure Tests in Urine and Blood, Annex 2, Tables 1 and 2, Government Decree 432/2003 Sb.

Components	Value	Determinant	Specimen	Sampling Time
Chromium (CAS 7440-47-3)	0,065 µmol/mmol	Total chromium	Creatinine in urine	*
	0,03 mg/g	Total chromium	Creatinine in urine	*

* - For sampling details, please see the source document.

Hungary. Chemical Safety at Workplace Ordinance Joint Decree No. 25/2000 (Annex 2): Permissible limit values of biological exposure (effect) indices

Components	Value	Determinant	Specimen	Sampling Time
Chromium (CAS 7440-47-3)	0,02 mg/g	chromium	Creatinine in urine	*
	0,043 µmol/mmol	chromium	Creatinine in urine	*

* - For sampling details, please see the source document.

Slovakia. BLVs (Biological Limit Value). Regulation no. 355/2006 concerning protection of workers exposed to chemical agents, Annex 2

Components	Value	Determinant	Specimen	Sampling Time
Aluminium (CAS 7429-90-5)	60 µg/g	Aluminium	Creatinine in urine	*

* - For sampling details, please see the source document.

Spain. Biological Limit Values (VLBs), Occupational Exposure Limits for Chemical Agents, Table 4

Components	Value	Determinant	Specimen	Sampling Time
Chromium (CAS 7440-47-3)	25 µg/l	Cromo total	Urine	*
	10 µg/l	Cromo total	Urine	*

* - For sampling details, please see the source document.

Switzerland. BAT-Werte (Biological Limit Values in the Workplace as per SUVA)

Components	Value	Determinant	Specimen	Sampling Time
Aluminium (CAS 7429-90-5)	60 µg/g	Aluminium	Creatinine in urine	*

* - For sampling details, please see the source document.

UK. EH40 Biological Monitoring Guidance Values (BMGVs)

Components	Value	Determinant	Specimen	Sampling Time
Chromium (CAS 7440-47-3)	10 umol/mol	Chromium	Creatinine in urine	*

* - For sampling details, please see the source document.

Recommended monitoring procedures Follow standard monitoring procedures.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering controls Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

General information Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

Eye/face protection If contact is likely, safety glasses with side shields are recommended.

Skin protection

- **Hand protection** For prolonged or repeated skin contact use suitable protective gloves.

- **Other** Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

Hygiene measures Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls Contain spills and prevent releases and observe national regulations on emissions. Environmental manager must be informed of all major releases.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	
Physical state	Solid.
Form	Solid.
Colour	Not available.
Odour	Not available.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	660 °C (1220 °F) estimated
Initial boiling point and boiling range	2327 °C (4220,6 °F) estimated
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapour pressure	0,00001 hPa estimated
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.
9.2. Other information	
Density	6,03 g/cm ³ estimated
Specific gravity	6,03 estimated

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
10.4. Conditions to avoid	Contact with incompatible materials.
10.5. Incompatible materials	Strong oxidising agents.
10.6. Hazardous decomposition products	No hazardous decomposition products are known.

SECTION 11: Toxicological information

General information	Occupational exposure to the substance or mixture may cause adverse effects.
Information on likely routes of exposure	
Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May cause discomfort if swallowed. However, ingestion is not likely to be a primary route of occupational exposure.
Symptoms	Exposure may cause temporary irritation, redness, or discomfort.
11.1. Information on toxicological effects	
Acute toxicity	No data available.
Skin corrosion/irritation	Due to partial or complete lack of data the classification is not possible.

Serious eye damage/eye irritation	Due to partial or complete lack of data the classification is not possible.
Respiratory sensitisation	Due to partial or complete lack of data the classification is not possible.
Skin sensitisation	Due to partial or complete lack of data the classification is not possible.
Germ cell mutagenicity	Due to partial or complete lack of data the classification is not possible.
Carcinogenicity	Due to partial or complete lack of data the classification is not possible.

Hungary. 26/2000 Eüm Ordinance on protection against and preventing risk relating to exposure to carcinogens at work (as amended)

Not listed.

IARC Monographs. Overall Evaluation of Carcinogenicity

Chromium (CAS 7440-47-3) 3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - single exposure	Due to partial or complete lack of data the classification is not possible.
Specific target organ toxicity - repeated exposure	Due to partial or complete lack of data the classification is not possible.
Aspiration hazard	Due to partial or complete lack of data the classification is not possible.
Mixture versus substance information	No information available.
Other information	Not available.

SECTION 12: Ecological information

12.1. Toxicity Very toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.

Product	Species	Test Results
Chromium-Aluminum (Cr-Al)		
Aquatic		
Fish	LC50 Fish	9,1422 mg/l, 96 hours estimated

* Estimates for product may be based on additional component data not shown.

12.2. Persistence and degradability	No data is available on the degradability of this product.
12.3. Bioaccumulative potential	No data available.
Partition coefficient n-octanol/water (log Kow)	Not available.
Bioconcentration factor (BCF)	Not available.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	Not a PBT or vPvB substance or mixture.
12.6. Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

12.7. Additional information

Estonia Dangerous substances in groundwater Data

Chromium (CAS 7440-47-3) Chromium (Cr) 10 ug/l
Chromium (Cr) 200 ug/l

Estonia Dangerous substances in soil Data

Chromium (CAS 7440-47-3) Chromium (Cr) 100 mg/kg
Chromium (Cr) 300 mg/kg
Chromium (Cr) 800 mg/kg

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

EU waste code	The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Disposal methods/information	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Special precautions	Dispose in accordance with all applicable regulations.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

General information IMDG Regulated Marine Pollutant.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended

Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended

Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended

Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended

Chromium (CAS 7440-47-3)

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA

Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended

Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended

Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.

Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended

Not listed.

Other regulations

The product is classified and labelled in accordance with EC directives or respective national laws. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006.

National regulations

Follow national regulation for work with chemical agents.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

List of abbreviations

Not available.

References

Not available.

Training information

Follow training instructions when handling this material.

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.