

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Chromium(VI) oxide

Creation date	17th September 2019	Version	2.0
Revision date	29th September 2022		

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

1.1. Product identifier

Substance / mixture	Chromium(VI) oxide substance
Chemical name	chromium (VI) trioxide
CAS number	1333-82-0
Index number	024-001-00-0
EC (EINECS) number	215-607-8
Registration number	01-2119458868-17-xxxx
Other substance name	

Chromium(VI) oxide, Chromium trioxide

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

Substance's intended use

Chemical production, analytical chemistry, laboratory synthesis, industrial applications. Surface treatment of metals.

Substance uses advised against

The product should not be used in ways other than those referred in Section 1.

1.3. Details of the supplier of the safety data sheet

Supplier

Name or trade name	Ing. Petr Švec - PENTA s.r.o.
Address	Radiová 1122/1, Praha 10, 102 00 Czech Republic
Identification number (CRN)	02096013
VAT Reg No	CZ02096013
Phone	+420 226 060 681
E-mail	info@pentachemicals.eu
Web address	www.pentachemicals.eu

Competent person responsible for the safety data sheet

Name	Ing. Petr Švec - PENTA s.r.o.
E-mail	info@pentachemicals.eu

1.4. Emergency telephone number

European emergency number: 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification of the substance in accordance with Regulation (EC) No 1272/2008

The substance is classified as dangerous.

Ox. Sol. 1, H271
Acute Tox. 3, H301
Acute Tox. 2, H310+H330
Skin Corr. 1A, H314
Skin Sens. 1, H317
Resp. Sens. 1, H334
STOT SE 3, H335
Muta. 1B, H340
Carc. 1A, H350
Repr. 2, H361f
STOT RE 1, H372
Aquatic Acute 1, H400 (multiplying factor = 1)
Aquatic Chronic 1, H410 (multiplying factor = 1)

Full text of all classifications and hazard statements is given in the section 16.

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Most serious adverse physico-chemical effects

May cause fire or explosion; strong oxidiser.

Most serious adverse effects on human health and the environment

Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause genetic defects. May cause cancer. Causes damage to organs through prolonged or repeated exposure. Suspected of damaging fertility. Toxic if swallowed. May cause respiratory irritation. Fatal in contact with skin or if inhaled. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

Hazard pictogram



Signal word

Danger

Dangerous substance

chromium (VI) trioxide
(Index: 024-001-00-0; CAS: 1333-82-0)

Hazard statements

H271	May cause fire or explosion; strong oxidiser.
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H340	May cause genetic defects.
H350	May cause cancer.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H310+H330	Fatal in contact with skin or if inhaled.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.

Supplemental information

Restricted to professional users.

2.3. Other hazards

The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Substance does not meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

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SECTION 3: Composition/information on ingredients

3.1. Substances

Chemical characterization

The substance specified below.

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
Index: 024-001-00-0 CAS: 1333-82-0 EC: 215-607-8 Registration number: 01-2119458868-17- xxxx	substance main component chromium (VI) trioxide	>99	Ox. Sol. 1, H271 Acute Tox. 3, H301 Acute Tox. 2, H310+H330 Skin Corr. 1A, H314 Skin Sens. 1, H317 Resp. Sens. 1, H334 STOT SE 3, H335 Muta. 1B, H340 Carc. 1A, H350 Repr. 2, H361f STOT RE 1, H372 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) Specific concentration limit: STOT SE 3, H335: C ≥ 1 %	1, 2, 3

Notes

- 1 Substance of very high concern - SVHC.
- 2 The substance is included in Annex XIV of the REACH Regulation
- 3 The use of the substance is restricted by Annex XVII of REACH Regulation

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free; never induce vomiting. If the person vomits by himself, make sure that the vomit is not inhaled. In life threatening conditions first of all provide resuscitation of the affected person and ensure medical assistance. Respiratory arrest - provide artificial respiration immediately. Cardiac arrest - provide indirect cardiac massage immediately.

If inhaled

Take care of your own safety, do not let the affected person walk! Terminate the exposure immediately; move the affected person to fresh air. Beware of the contaminated clothes. Depending on the situation, call the medical rescue service and ensure medical treatment considering the frequent need of further observation for at least 24 hours.

If on skin

Remove contaminated clothes. Take off any rings, watches, bracelets before or during washing if worn in the contaminated areas of the skin. Depending on the situation, call the medical rescue service and always ensure medical treatment. Rinse contaminated areas with a flow of water, lukewarm at best, for 10-30 minutes; do not use any brush, soap or neutralizers. Rinse skin with water or shower. Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Rinse cautiously with water for several minutes.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. No neutralization should be performed in any case! Rinsing should be continued for 10-30 minutes from the inner to the outer eye corner to make sure that the other eye is not involved. Depending on the situation, call medical rescue service or ensure medical treatment as promptly as possible. Everyone must be referred for treatment even if affected only a little.

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If swallowed

INDUCE VOMITING! Vomiting should be induced in the person only if conscious, within 1 hour from ingestion. If in doubt whether vomiting should be induced, contact the Toxicological Information Centre and give information about the substances or composition of the product as provided on the original packaging or in the safety data sheet of the product. FOLLOWING INGESTION OF TOXIC OR HIGHLY TOXIC SUBSTANCES, GIVE 10-20 CRUSHED TABLETS OF ACTIVATED CARBON, MIXED IN WATER, WITHIN NO LATER THAN 5 MINUTES - irrespective of whether vomiting could be induced. Call medical rescue service.

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

If inhaled

Inhaling dust can cause corrosion of the breathing system. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation.

If on skin

Causes severe skin burns. May cause an allergic skin reaction.

If in eyes

Causes serious eye damage.

If swallowed

Corrosion of the digestion system can occur.

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

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water. Fight fire remotely due to the risk of explosion. Evacuate area.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Provide sufficient ventilation. The substance is flammable. May cause fire or explosion; strong oxidiser. Remove all ignition sources. Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Do not inhale dust. Prevent contact with skin and eyes.

6.2. Environmental precautions

Do not allow to enter drains. Prevent contamination of the soil and entering surface or ground water.

6.3. Methods and material for containment and cleaning up

Place the product mechanically in an appropriate manner. Dispose of the collected material according to the instructions in the section 13.

6.4. Reference to other sections

See the Section 7, 8 and 13.

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Prevent formation of gases and vapours in concentrations exceeding the occupational exposure limits. The product should be used only in the areas where it is not in contact with open fire and other ignition sources. Use of antistatic clothes and footwear is recommended. Do not inhale dust. Prevent contact with skin and eyes. No smoking. Contaminated work clothing should not be allowed out of the workplace. Obtain special instructions before use. Do not eat, drink or smoke when using this product. Wash hands and exposed parts of the body thoroughly after handling. Do not handle until all safety precautions have been read and understood. Use only outdoors or in a well-ventilated area. Take any precaution to avoid mixing with combustibles. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Do not expose to sunlight. Store locked up. Keep container tightly closed.

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DMEL

chromium (VI) trioxide

Workers / consumers	Route of exposure	Value	Effect	Value determination	Source
Workers	Inhalation	0.01 mg/m ³	Systemic chronic effects		
Workers	Inhalation	0.01 mg/m ³	Systemic acute effects		

PNEC

chromium (VI) trioxide

Route of exposure	Value	Value determination	Source
Drinking water	0.0034 mg/l		
Freshwater sediment	0.15 mg/kg		
Soil (agricultural)	0.031 mg/kg		
Microorganisms in wastewater treatment plants	0.21 mg/l		
Seawater	0.0034 mg/l		
Sea sediments	0.00015 µg/kg		
Food chain	17000000 mg/kg		

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. If exposure limits cannot be observed in this mode, suitable protection of airways must be used. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Closed goggles which are protected against dust penetration.

Skin protection

When choosing appropriate thickness, material and permeability of the gloves, observe recommendations of their particular manufacturer. Observe other recommendations of the manufacturer. Other protection: protective workwear. Contaminated skin should be washed thoroughly. Wear fire/flame resistant/retardant clothing. Hand protection: Protective gloves resistant to the product (nitrile rubber).

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Respiratory protection

Use insulating breathing apparatus when the exposition limits of the substances are exceeded or at the place with insufficient ventilation. In case of inadequate ventilation wear respiratory protection. Mask with dust filter.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Collect spillage.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	solid
Colour	red
Odour	without fragrance
Melting point/freezing point	196 °C
Boiling point or initial boiling point and boiling range	>230 °C
Flammability	The product is non-flammable.
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	<1 (undiluted)
Kinematic viscosity	data not available
Solubility in water	1854 g/l
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	2,7 g/cm ³ at 20 °C

9.2. Other information

Evaporation rate	non-applicable
Oxidising properties	May cause fire or explosion; strong oxidiser.

SECTION 10: Stability and reactivity

10.1. Reactivity

The substance is oxidizing.

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Inhalation of solvent vapors above values exceeding exposure limits for working environment may result in acute inhalation poisoning, depending on the level of concentration and exposure time. No toxicological data is available for the substance.

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Acute toxicity

Toxic if swallowed. Fatal in contact with skin or if inhaled.
chromium (VI) trioxide

Route of exposure	Parameter	Value	Exposure time	Species	Sex
Oral	LD50	52 mg/kg		Rat (Rattus norvegicus)	
Dermal	LD50	57 mg/kg		Rabbit	
Inhalation	LC50	217 mg/kg	4 hour	Rat (Rattus norvegicus)	

Skin corrosion/irritation

Causes severe skin burns and eye damage.
chromium (VI) trioxide

Route of exposure	Result	Exposure time	Species
	Corrosive		Rabbit

Serious eye damage/irritation

Causes severe skin burns and eye damage.
chromium (VI) trioxide

Route of exposure	Result	Exposure time	Species
	Causes damage		

Respiratory or skin sensitisation

May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled.
chromium (VI) trioxide

Route of exposure	Result	Exposure time	Species	Sex
	Positive			

Germ cell mutagenicity

May cause genetic defects.

Carcinogenicity

May cause cancer.

chromium (VI) trioxide

Route of exposure	Parameter	Value	Result	Species	Sex
Inhalation			Positive		

Reproductive toxicity

Suspected of damaging fertility.
chromium (VI) trioxide

Effect	Parameter	Value	Result	Species	Sex
	NOAEL	40 mg/kg			

Toxicity for specific target organ - single exposure

May cause respiratory irritation.

Toxicity for specific target organ - repeated exposure

Causes damage to organs through prolonged or repeated exposure.
chromium (VI) trioxide

Route of exposure	Parameter	Value	Result	Species	Sex
Inhalation			Total effects, Rhinitis, Causes damage		

Aspiration hazard

Based on available data the classification criteria are not met.

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11.2. Information on other hazards

The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Very toxic to aquatic life with long lasting effects.
chromium (VI) trioxide

Parameter	Value	Exposure time	Species	Environment
LC50	40 mg/l	96 hour	Fishes (Colisa fasciatus)	
EC50	0.035 mg/l	48 hour	Daphnia (Daphnia magna)	
LC50	37.5 mg/l	96 hour	Fishes (Pimephales promelas)	
NOEC	0.06 mg/l	21 hour	Daphnia (Daphnia magna)	
NOEC	0.11 mg/l	07 day	Bacteria (Pseudomonas fluorescens)	

12.2. Persistence and degradability

not available

12.3. Bioaccumulative potential

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to non-target organisms as it does not meet the criteria set out in section B of Regulation (EU) No 2017/2100. The substance does not have endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1. UN number or ID number

UN 1463

14.2. UN proper shipping name

CHROMIUM TRIOXIDE, ANHYDROUS

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14.3. Transport hazard class(es)

5.1 Oxidizing substances

14.4. Packing group

II - substances presenting medium danger

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

not available

14.7. Maritime transport in bulk according to IMO instruments

not relevant

Additional information

Hazard identification No.

568

UN number

1463

Classification code

OTC

Safety signs

5.1+6.1+8+hazardous for the environment



Air transport - ICAO/IATA

Packaging instructions passenger

558

Cargo packaging instructions

562

Marine transport - IMDG

EmS (emergency plan)

F-A, S-Q

SECTION 15: Regulatory information

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

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

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Restrictions pursuant to Annex XVII of Regulation (EC) No. 1907/2006 (REACH), as amended

chromium (VI) trioxide

Restriction	Conditions of restriction
47	<p>1. Cement and cement-containing mixtures shall not be placed on the market, or used, if they contain, when hydrated, more than 2 mg/kg (0,0002 %) soluble chromium VI of the total dry weight of the cement.</p> <p>2. If reducing agents are used, then without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of cement or cement-containing mixtures is visibly, legibly and indelibly marked with information on the packing date, as well as on the storage conditions and the storage period appropriate to maintaining the activity of the reducing agent and to keeping the content of soluble chromium VI below the limit indicated in paragraph 1.</p> <p>3. By way of derogation, paragraphs 1 and 2 shall not apply to the placing on the market for, and use in, controlled closed and totally automated processes in which cement and cement-containing mixtures are handled solely by machines and in which there is no possibility of contact with the skin.</p> <p>4. The standard adopted by the European Committee for Standardization (CEN) for testing the water-soluble chromium (VI) content of cement and cement-containing mixtures shall be used as the test method for demonstrating conformity with paragraph 1.</p> <p>5. Leather articles coming into contact with the skin shall not be placed on the market where they contain chromium VI in concentrations equal to or greater than 3 mg/kg (0,0003 % by weight) of the total dry weight of the leather.</p> <p>6. Articles containing leather parts coming into contact with the skin shall not be placed on the market where any of those leather parts contains chromium VI in concentrations equal to or greater than 3 mg/kg (0,0003 % by weight) of the total dry weight of that leather part.</p> <p>7. Paragraphs 5 and 6 shall not apply to the placing on the market of second-hand articles which were in end-use in the Union before 1 May 2015.</p>
28	<p>Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30:</p> <p>1. Shall not be placed on the market, or used,</p> <ul style="list-style-type: none"> — as substances, — as constituents of other substances, or, — in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than: <ul style="list-style-type: none"> — either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or, — the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008. <p>Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows:</p> <p>“Restricted to professional users”.</p> <p>2. By way of derogation, paragraph 1 shall not apply to:</p> <ul style="list-style-type: none"> (a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC; (b) cosmetic products as defined by Directive 76/768/EEC; (c) the following fuels and oil products: <ul style="list-style-type: none"> — motor fuels which are covered by Directive 98/70/EC, — mineral oil products intended for use as fuel in mobile or fixed combustion plants, — fuels sold in closed systems (e.g. liquid gas bottles); (d) artists’ paints covered by Regulation (EC) No 1272/2008; (e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date. (f) devices covered by Regulation (EU) 2017/745.

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chromium (VI) trioxide

Restriction	Conditions of restriction
29	<p>Without prejudice to the other parts of this Annex the following shall apply to entries 28 to 30:</p> <ol style="list-style-type: none">1. Shall not be placed on the market, or used,<ul style="list-style-type: none">– as substances,– as constituents of other substances, or,– in mixtures, for supply to the general public when the individual concentration in the substance or mixture is equal to or greater than:<ul style="list-style-type: none">– either the relevant specific concentration limit specified in Part 3 of Annex VI to Regulation (EC) No 1272/2008, or,– the relevant generic concentration limit specified in Part 3 of Annex I of Regulation (EC) No 1272/2008. <p>Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of substances and mixtures, suppliers shall ensure before the placing on the market that the packaging of such substances and mixtures is marked visibly, legibly and indelibly as follows:</p> <p>“Restricted to professional users”.</p> <ol style="list-style-type: none">2. By way of derogation, paragraph 1 shall not apply to:<ol style="list-style-type: none">(a) medicinal or veterinary products as defined by Directive 2001/82/EC and Directive 2001/83/EC;(b) cosmetic products as defined by Directive 76/768/EEC;(c) the following fuels and oil products:<ul style="list-style-type: none">– motor fuels which are covered by Directive 98/70/EC,– mineral oil products intended for use as fuel in mobile or fixed combustion plants,– fuels sold in closed systems (e.g. liquid gas bottles);(d) artists’ paints covered by Regulation (EC) No 1272/2008;(e) the substances listed in Appendix 11, column 1, for the applications or uses listed in Appendix 11, column 2. Where a date is specified in column 2 of Appendix 11, the derogation shall apply until the said date.(f) devices covered by Regulation (EU) 2017/745.

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chromium (VI) trioxide

Restriction	Conditions of restriction
72	<p>1. Shall not be placed on the market after 1 November 2020 in any of the following:</p> <ul style="list-style-type: none">(a) clothing or related accessories;(b) textiles other than clothing which, under normal or reasonably foreseeable conditions of use, come into contact with human skin to an extent similar to clothing;(c) footwear; <p>if the clothing, related accessory, textile other than clothing or footwear is for use by consumers and the substance is present in a concentration, measured in homogeneous material, equal to or greater than that specified for that substance in Appendix 12.</p> <p>2. By way of derogation, in relation to the placing on the market of formaldehyde [CAS No 50-00-0] in jackets, coats or upholstery, the relevant concentration for the purposes of paragraph 1 shall be 300 mg/kg during the period between 1 November 2020 and 1 November 2023. The concentration specified in Appendix 12 shall apply thereafter.</p> <p>3. Paragraph 1 shall not apply to:</p> <ul style="list-style-type: none">(a) clothing, related accessories or footwear, or parts of clothing, related accessories or footwear, made exclusively of natural leather, fur or hide;(b) non-textile fasteners and non-textile decorative attachments;(c) second-hand clothing, related accessories, textiles other than clothing or footwear(d) wall-to-wall carpets and textile floor coverings for indoor use, rugs and runners. <p>4. Paragraph 1 shall not apply to clothing, related accessories, textiles other than clothing, or footwear within the scope of Regulation (EU) 2016/425 of the European Parliament and of the Council (*) or Regulation (EU) 2017/745 of the European Parliament and of the Council (**).</p> <p>5. Paragraph 1(b) shall not apply to disposable textiles. 'Disposable textiles' means textiles that are designed to be used only once or for a limited time and are not intended for subsequent use for the same or a similar purpose.</p> <p>6. Paragraphs 1 and 2 shall apply without prejudice to the application of any stricter restrictions set out in this Annex or in other applicable Union legislation.</p> <p>7. The Commission shall review the exemption in paragraph 3(d) and, if appropriate, modify that point accordingly.</p> <p>(*) Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC (OJ L 81, 31.3.2016, p. 51).</p> <p>(**) Regulation (EU) 2017/745 of the European Parliament and of the Council of 5 April 2017 on medical devices, amending Directive 2001/83/EC, Regulation (EC) No 178/2002 and Regulation (EC) No 1223/2009 and repealing Council Directives 90/385/EEC and 93/42/EEC (OJ L 117, 5.5.2017, p. 1).</p>

15.2. Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H271	May cause fire or explosion; strong oxidiser.
H301	Toxic if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H340	May cause genetic defects.
H350	May cause cancer.
H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

SAFETY DATA SHEET

according to Regulation (EC) No 1907/2006 (REACH) as amended

Chromium(VI) oxide

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H310+H330 Fatal in contact with skin or if inhaled.

Guidelines for safe handling used in the safety data sheet

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P405 Store locked up.

P273 Avoid release to the environment.

Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR European agreement concerning the international carriage of dangerous goods by road

BCF Bioconcentration Factor

CAS Chemical Abstracts Service

CLP Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures

DMEL Derived minimal effect level

EC50 Concentration of a substance when it is affected 50% of the population

EINECS European Inventory of Existing Commercial Chemical Substances

EmS Emergency plan

ES Identification code for each substance listed in EINECS

EU European Union

EuPCS European Product Categorisation System

IATA International Air Transport Association

IBC International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals

ICAO International Civil Aviation Organization

IMDG International Maritime Dangerous Goods

INCI International Nomenclature of Cosmetic Ingredients

ISO International Organization for Standardization

IUPAC International Union of Pure and Applied Chemistry

LC50 Lethal concentration of a substance in which it can be expected death of 50% of the population

LD50 Lethal dose of a substance in which it can be expected death of 50% of the population

log Kow Octanol-water partition coefficient

MARPOL International Convention for the Prevention of Pollution from Ships

NOAEL No observed adverse effect level

NOEC No observed effect concentration

OEL Occupational Exposure Limits

PBT Persistent, Bioaccumulative and Toxic

PNEC Predicted no-effect concentration

ppm Parts per million

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Agreement on the transport of dangerous goods by rail

UN Four-figure identification number of the substance or article taken from the UN Model Regulations

UVCB Substances of unknown or variable composition, complex reaction products or biological materials

VOC Volatile organic compounds

vPvB Very Persistent and very Bioaccumulative

Acute Tox. Acute toxicity

Aquatic Acute Hazardous to the aquatic environment

Aquatic Chronic Hazardous to the aquatic environment (chronic)

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Carc.	Carcinogenicity
Muta.	Germ cell mutagenicity
Ox. Sol.	Oxidising solid
Repr.	Reproductive toxicity
Resp. Sens.	Respiratory sensitization
Skin Corr.	Skin corrosion
Skin Sens.	Skin sensitization
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

The version 2.0 replaces the SDS version from 17 September 2019. Changes were made in sections 1, 2,4,5,6,7,8,11, 13, 15 and 16.

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.