Potassium dichromate

Safety Data Sheet

according to Regulation (EU) 2015/830

Date of issue: 01/06/2022

Doc No: SDS-960.056/2

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

1.1. Product identifier

Product form : Substance

Substance name : Potassium dichromate

EC Index-No. : 024-002-00-6

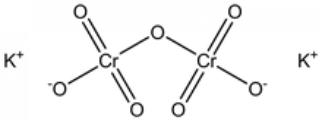
EC-No. : 231-906-6

CAS-No. : 7778-50-9

Type of product : Pure substance

Formula : $Cr_2K_2O_7$

Chemical structure :



Synonyms : bichromate of potash / chromate of potash, red / chromic acid (H2Cr2O7), dipotassium salt / chromic acid, dipotassium salt (=potassium dichromate) / dichromic acid [H2Cr2O7], dipotassium salt / dichromic acid, dipotassium salt / dipotassium bichromate / dipotassium dichromate / iopezite / potassium bichromate / potassium chromate, red / potassium dichromate(VI) / red potassium chromate

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Dyestuff/pigment
Oxidant
Anti-corrosion agent
Explosive: additive
Laboratory chemical

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

ISOLAB Laborgeräte GmbH
Am Dillhof 2 - 63863 Eschau / GERMANY
Tel: + 49 93 74 / 978 55-0
Fax: +49 93 74 / 978 55-29
prodsafe@isolab.de

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Germany	Giftnotruf der Charité CBF, Haus VIII (Wirtschaftgebäude), UG	Hindenburgdamm 30 12203 Berlin	+49 30 19240	

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Ox. Sol. 2	H272
Carc. 1B	H350
Muta. 1B	H340
Repr. 1B	H360FD
Acute Tox. 2 (Inhalation)	H330
Acute Tox. 4 (Dermal)	H312
Acute Tox. 3 (Oral)	H301
STOT RE 1	H372
Skin Corr. 1B	H314
Resp. Sens. 1	H334
STOT SE 3	H335
Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

Full text of hazard classes and H-statements : see section 16

Specific concentration limits:
(C >= 5) STOT SE 3, H335

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :

GHS03 GHS06 GHS08 GHS05 GHS09

Signal word (CLP) : Danger

Hazard statements (CLP) : H272 - May intensify fire; oxidiser
H350 - May cause cancer
H340 - May cause genetic defects
H360FD - May damage fertility. May damage the unborn child
H330 - Fatal if inhaled
H335 - May cause respiratory irritation.
H312 - Harmful in contact with skin
H301 - Toxic if swallowed
H372 - Causes damage to organs through prolonged or repeated exposure (if inhaled)
H314 - Causes severe skin burns and eye damage
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H317 - May cause an allergic skin reaction
H410 - Very toxic to aquatic life with long lasting effects

Precautionary statements (CLP) : P201 - Obtain special instructions before use.
P221 - Take any precaution to avoid mixing with combustibles, heavy-metal compounds, acids and alkalis.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P310 - IF exposed or concerned: immediately call a POISON CENTER or doctor/ physician.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%
Potassium dichromate substance listed as REACH Candidate substance listed in REACH Annex XIV	(CAS-No.) 7778-50-9 (EC-No.) 231-906-6 (EC Index-No.) 024-002-00-6	100

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

First-aid measures after inhalation : Remove the victim into fresh air. Immediately consult a doctor/medical service.

First-aid measures after skin contact : Wash immediately with lots of water (15 minutes)/shower. Remove clothing while washing. Do not apply (chemical) neutralizing agents. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital.

First-aid measures after eye contact : Rinse immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Take victim to an ophthalmologist.

First-aid measures after ingestion : Rinse mouth with water. Do not induce vomiting. Immediately consult a doctor/medical service. Call Poison Information Centre (www.big.be/antigif.htm). Ingestion of large quantities: immediately to hospital. Take the container/vomit to the doctor/hospital.

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

Symptoms/effects after inhalation : Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. EXPOSURE TO HIGH CONCENTRATIONS: Respiratory difficulties. Risk of lung oedema.

Symptoms/effects after skin contact : Caustic burns/corrosion of the skin.

Symptoms/effects after eye contact : Corrosion of the eye tissue.

Symptoms/effects after ingestion : Abdominal pain. Vomiting. Burns to the gastric/intestinal mucosa. Bleeding of the gastrointestinal tract. Blood in vomit. Shock. Disturbances of consciousness. Change in the haemogramme/blood composition. Enlargement/affection of the liver. Affection of the renal tissue. Respiratory collapse.

Chronic symptoms : ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Skin rash/inflammation. Slow-healing wounds. Change in the haemogramme/blood composition. Respiratory difficulties. Lung tissue affection/degeneration. Affection of the nasal septum.

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

No additional information available

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media : EXTINGUISHING MEDIA FOR SURROUNDING FIRES: Adapt extinguishing media to the environment.

Unsuitable extinguishing media : No unsuitable extinguishing media known.

5.2. Special hazards arising from the substance or mixture

Fire hazard : DIRECT FIRE HAZARD. Non combustible. INDIRECT FIRE HAZARD. Promotes combustion. Reactions involving a fire hazard: see "Reactivity Hazard".

Explosion hazard : INDIRECT EXPLOSION HAZARD. Reactions with explosion hazards: see "Reactivity Hazard".

5.3. Advice for firefighters

Precautionary measures fire : Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to fire/heat: have neighbourhood close doors and windows.

Firefighting instructions : Cool tanks/drums with water spray/remove them into safety. Take account of toxic fire-fighting water. Use water moderately and if possible collect or contain it.

Protection during firefighting : Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment : Gloves. Face-shield. Corrosion-proof suit. Dust cloud production: compressed air/oxygen apparatus. See "Material-Handling" to select protective clothing.

Emergency procedures : Mark the danger area. Prevent dust cloud formation. No naked flames. Keep containers closed. Wash contaminated clothes. In case of reactivity hazard: consider evacuation.

Measures in case of dust release : In case of dust production: keep upwind. In case of dust production: consider evacuation. Dust production: have neighbourhood close doors and windows.

6.1.2. For emergency responders

No additional information available

6.2. Environmental precautions

Prevent soil and water pollution. Prevent spreading in sewers.

6.3. Methods and material for containment and cleaning up

For containment : Contain released substance, pump into suitable containers. Consult "Material-handling" to select material of containers. Plug the leak, cut off the supply. Dam up the solid spill. Knock down/dilute dust cloud with water spray. Take account of toxic/corrosive precipitation water.

Methods for cleaning up : Prevent dispersion by covering with dry sand/earth. Scoop solid spill into closing containers. Carefully collect the spill/leftovers. Spill must not return in its original container. See "Material-handling" for suitable container materials. Clean contaminated surfaces with an excess of water. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Pulverization rapidly increases toxic concentration.

Precautions for safe handling : Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Keep the substance free from contamination. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Avoid raising dust. Keep away from naked flames/heat. Observe very strict hygiene - avoid contact. Keep container tightly closed. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

7.2. Conditions for safe storage, including any incompatibilities

Heat and ignition sources : KEEP SUBSTANCE AWAY FROM: heat sources.

Information on mixed storage : KEEP SUBSTANCE AWAY FROM: combustible materials. reducing agents. (strong) acids. oils-fats. organic materials. metal powders.

Storage area : Store in a dry area. Keep container in a well-ventilated place. Keep locked up. Unauthorized persons are not admitted. Store at ambient temperature. Keep only in the original container. Meet the legal requirements.

Special rules on packaging : SPECIAL REQUIREMENTS: closing. clean. correctly labelled. meet the legal requirements. Secure fragile packagings in solid containers.

Packaging materials : MATERIAL TO AVOID: paper. wood. aluminium.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Potassium dichromate (7778-50-9)		
Austria	Local name	Kaliumdichromat
Austria	Remark (AT)	Sah
Belgium	Limit value (mg/m³)	0.05 mg/m³ (Chrome VI, composés solubles dans l'eau en Cr (non classés ailleurs); Belgium; Time-weighted average exposure limit 8 h)
Finland	Local name	Kaliumdikromaatti
Finland	HTP-arvo (8h) (mg/m³)	0.005 mg/m³
Finland	Huomautus (FI)	Cr
France	VME (mg/m³)	0.001 mg/m³ (Chrome hexavalent et ses composés; France; Time-weighted average exposure limit 8 h; VRC: Valeur réglementaire contraignante)
France	VLE (mg/m³)	0.005 mg/m³ (Chrome hexavalent et ses composés; France; Short time value; VRC: Valeur réglementaire contraignante)
Netherlands	Grenswaarde TGG 8H (mg/m³)	0.025 mg/m³ (Chroom(VI)-oplosbare verbindingen (als Cr); Netherlands; Time-weighted average exposure limit 8 h; Public occupational exposure limit value; als Cr)

Potassium dichromate (7778-50-9)		
Netherlands	Grenswaarde TGG 15MIN (mg/m³)	0.05 mg/m³ (Chroom(VI)-oplosbare verbindingen (als Cr); Netherlands; Short time value; Public occupational exposure limit value; als Cr)
Spain	Local name	Dicromato de potasio
Spain	VLA-ED (mg/m³)	0.05 mg/m³ como Cr
Spain	Notes	Sen (Sensibilizante. Véase Apartado 6), r (Esta sustancia tiene establecidas restricciones a la fabricación, la comercialización o el uso en los términos especificados en el "Reglamento (CE) nº 1907/2006 sobre Registro, Evaluación, Autorización y Restricción de sustancias y preparados químicos" (REACH) de 18 de diciembre de 2006 (DOUE L 369 de 30 de diciembre de 2006). Las restricciones de una sustancia pueden aplicarse a todos los usos o sólo a usos concretos. El anexo XVII del Reglamento REACH contiene la lista de todas las sustancias restringidas y especifica los usos que se han restringido), TR1B (Cuando las pruebas utilizadas para la clasificación procedan principalmente de datos en animales).
Sweden	Local name	Kaliumdikromat
Sweden	nivågränsvärde (NVG) (mg/m³)	0.005 mg/m³ totaldamm
Sweden	kortidsvärde (KTV) (mg/m³)	0.015 mg/m³ totaldamm
Sweden	Anmärkning (SE)	C (Ämnet är cancerframkallande Risk för cancer finns även vid annan exponering än via inandning. För vissa cancerframkallande ämnen som inte har gränsvärden gäller förbud eller tillståndskrav enligt föreskrifterna om kemiska arbetsmiljörisker); S (Ämnet är sensibiliserande Sensibiliserande ämnen kan ge allergi eller annan överkänslighet. Överkänslighetsbesvären drabbar främst huden eller andningsorganen. Överkänslighet innebär att man reagerar vid kontakt med ämnen som normalt inte ger besvär. Allergi är en undergrupp av överkänslighet som orsakas av reaktioner i kroppens immunsystem. Särskilt låga gränsvärden har fastställts för ämnen med mer uttalat luftvägssensibiliserande egenskaper. Några ämnen med starkt sensibiliserande egenskaper får endast hanteras efter tillstånd från Arbetsmiljöverket, se föreskrifterna om kemiska arbetsmiljörisker. Dessa ämnen har inga gränsvärden men i vissa fall riktvärden); V (Vägledande korttidsgränsvärde ska användas som ett rekommenderat högsta värde som inte bör överskridas); 2 (Med totaldamm menas de partiklar (aerosoler) som fastnar på ett filter i den provtagare som beskrivs i Metodserien, Provtagning av totaldamm och respirabelt damm, Metod nr 1010, Arbetarskyddsstyrelsen, numera Arbetsmiljöverket. Filterdiametern är normalt 37 mm, men kan även vara 25 mm. Trots sitt namn provtas inte den totala mängden luftburna partiklar med denna metod); 13 (Ämnen som har tagits upp på bilaga XIV (tillstånd) till REACH och kräver tillstånd för att få användas och släppas ut på marknaden (1 juni 2016). För aktuell lista se Echas hemsida)
United Kingdom	WEL TWA (mg/m³)	0.05 mg/m³ Chromium (VI) compounds (as Cr); United Kingdom; Time-weighted average exposure limit 8 h; Workplace exposure limit (EH40/2005)
USA - ACGIH	ACGIH TWA (mg/m³)	0.05 mg/m³ (Chromium, water-soluble inorgan. Cr VI compounds; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)

8.2. Exposure controls

Materials for protective clothing:

GIVE GOOD RESISTANCE: butyl rubber. PVC

Hand protection:

Gloves

Eye protection:

Face shield. In case of dust production: protective goggles

Skin and body protection:

Corrosion-proof clothing. In case of dust production: head/neck protection

Respiratory protection:

Dust production: dust mask with filter type P3. High dust production: self-contained breathing apparatus

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Crystalline solid. Powder.
Molecular mass	:	294.19 g/mol
Colour	:	Yellow-orange to orange-red.
Odour	:	Odourless.
Odour threshold	:	No data available
pH	:	3.6 (10 %)
pH solution	:	10 %
Relative evaporation rate (butylacetate=1)	:	No data available
Melting point	:	398 °C
Freezing point	:	No data available
Boiling point	:	> 500 °C (1013 hPa)
Flash point	:	Not applicable
Auto-ignition temperature	:	Not applicable
Decomposition temperature	:	500 °C
Flammability (solid, gas)	:	No data available
Vapour pressure	:	No data available
Relative vapour density at 20 °C	:	No data available
Relative density	:	2.7 (25 °C)
Density	:	2.7 g/cm3 (20 °C)
Solubility	:	Soluble in water. Water: 11.5 g/100ml
Log Pow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	No data available
Oxidising properties	:	May intensify fire; oxidiser.
Explosive limits	:	No data available

9.2. Other information

Minimum ignition energy	:	Not applicable
SADT	:	Not applicable
VOC content	:	Not applicable
Other properties	:	Substance has acid reaction.

SECTION 10: Stability and reactivity

10.1. Reactivity

On exposure to temperature rise: oxidation which increases fire hazard. On burning: formation of metallic fumes. Reacts violently with combustible materials: risk of spontaneous ignition. Reacts violently with (strong) reducers: (increased) risk of fire/explosion. Reacts violently with organic material. Reacts with (some) acids/bases.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No additional information available

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Inhalation: Fatal if inhaled. Dermal: Harmful in contact with skin. Oral: Toxic if swallowed.

Potassium dichromate (7778-50-9)	
LD50 oral rat	90.5 mg/kg (Rat)
LD50 dermal rabbit	403 - 490 mg/kg (Rabbit)
LC50 inhalation rat (mg/l)	0.094 mg/l/4h (Rat)

Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: 3.6 (10 %)

Serious eye damage/irritation : Serious eye damage, category 1, implicit
pH: 3.6 (10 %)

Respiratory or skin sensitisation : May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.

Germ cell mutagenicity : May cause genetic defects.

Carcinogenicity : May cause cancer.

Reproductive toxicity : May damage fertility. May damage the unborn child.

STOT-single exposure : Not classified

STOT-repeated exposure : Causes damage to organs through prolonged or repeated exposure (if inhaled).

Aspiration hazard : Not classified

IARC group : 3

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Dangerous for the environment.

Ecology - air : Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009). TA-Luft Klasse 5.2.7.1.1/I.

Ecology - water : Maximum concentration in drinking water: 0.050 mg/l (chromium) (Directive 98/83/EC). Harmful to fishes. Very toxic to invertebrates (Daphnia). Highly toxic to algae. Highly toxic to bacteria. pH shift.

Potassium dichromate (7778-50-9)	
LC50 fish 2	63.6 mg/l (LC50; 96 h; Oncorhynchus mykiss)
EC50 Daphnia 1	0.035 mg/l (EC50; 48 h; Daphnia magna)
EC50 Daphnia 2	7.8 mg/l (LC50; 48 h; Artemia salina)
Threshold limit algae 1	0.233 mg/l (ErC50; 72 h; Selenastrum capricornutum)

12.2. Persistence and degradability

Potassium dichromate (7778-50-9)	
Persistence and degradability	Biodegradability: not applicable. Adsorbs into the soil.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

12.3. Bioaccumulative potential

Potassium dichromate (7778-50-9)	
BCF fish 1	17.4 (BCF)
BCF other aquatic organisms 1	32 (BCF; 48 h; Mytilidae)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

Potassium dichromate (7778-50-9)
This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

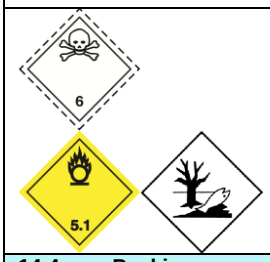
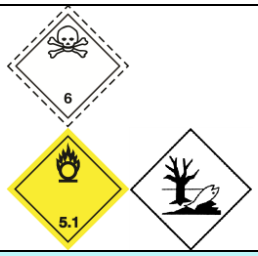
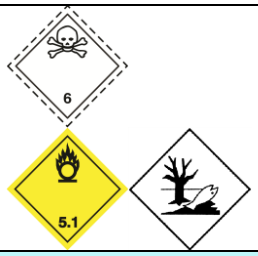
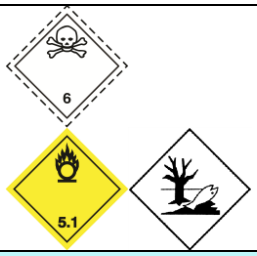
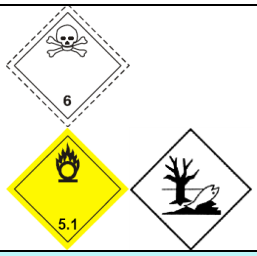
Product/Packaging disposal recommendations : Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle/reuse. Detoxicate. Remove to an authorized dump (Class I). Do not discharge into drains or the environment.

Additional information : LWCA (the Netherlands): KGA category 05. Hazardous waste according to Directive 2008/98/EC.

European List of Waste (LoW) code : 16 09 02* - chromates, e.g. potassium chromate, potassium or sodium dichromate

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
3086	3086	3086	3086	3086
14.2. UN proper shipping name				
TOXIC SOLID, OXIDIZING, N.O.S.	TOXIC SOLID, OXIDIZING, N.O.S.	Toxic solid, oxidizing, n.o.s.	TOXIC SOLID, OXIDIZING, N.O.S.	TOXIC SOLID, OXIDIZING, N.O.S.
Transport document description				
UN 3086 TOXIC SOLID, OXIDIZING, N.O.S., 6.1 (5.1), I, (C/E), ENVIRONMENTALLY HAZARDOUS	UN 3086 TOXIC SOLID, OXIDIZING, N.O.S., 6.1 (5.1), I, MARINE POLLUTANT/ENVIRONMENTALLY HAZARDOUS	UN 3086 Toxic solid, oxidizing, n.o.s., 6.1 (5.1), I, ENVIRONMENTALLY HAZARDOUS	UN 3086 TOXIC SOLID, OXIDIZING, N.O.S., 6.1 (5.1), I, ENVIRONMENTALLY HAZARDOUS	UN 3086 TOXIC SOLID, OXIDIZING, N.O.S., 6.1 (5.1), I, ENVIRONMENTALLY HAZARDOUS
14.3. Transport hazard class(es)				
6.1 (5.1)	6.1 (5.1)	6.1 (5.1)	6.1 (5.1)	6.1 (5.1)
				
14.4. Packing group				
I	I	I	I	I
14.5. Environmental hazards				
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available				

14.6. Special precautions for user

- Overland transport

Classification code (ADR)	:	TO2
Special provisions (ADR)	:	274
Limited quantities (ADR)	:	0
Excepted quantities (ADR)	:	E5
Packing instructions (ADR)	:	P002
Mixed packing provisions (ADR)	:	MP18
Portable tank and bulk container instructions (ADR)	:	T6
Portable tank and bulk container special provisions (ADR)	:	TP33
Tank code (ADR)	:	S10AH, L10CH
Tank special provisions (ADR)	:	TU14, TU15, TE19, TE21
Vehicle for tank carriage	:	AT
Transport category (ADR)	:	1
Special provisions for carriage - Loading, unloading and handling (ADR)	:	CV1, CV13, CV28
Special provisions for carriage - Operation (ADR)	:	S9, S14
Hazard identification number (Kemler No.)	:	665
Orange plates	:	
Tunnel restriction code (ADR)	:	C/E
EAC code	:	2W

- Transport by sea

Transport regulations (IMDG)	:	Subject
Special provisions (IMDG)	:	274
Limited quantities (IMDG)	:	0
Excepted quantities (IMDG)	:	E5
Packing instructions (IMDG)	:	P002
Tank instructions (IMDG)	:	T6
Tank special provisions (IMDG)	:	TP33
EmS-No. (Fire)	:	F-A
EmS-No. (Spillage)	:	S-Q
Stowage category (IMDG)	:	C
Properties and observations (IMDG)	:	Toxic if swallowed, by skin contact or by inhalation.
MFAG-No	:	141

- Air transport

Transport regulations (IATA)	:	Subject to the provisions
PCA Excepted quantities (IATA)	:	E5
PCA Limited quantities (IATA)	:	Forbidden
PCA limited quantity max net quantity (IATA)	:	Forbidden
PCA packing instructions (IATA)	:	665
PCA max net quantity (IATA)	:	1kg
CAO packing instructions (IATA)	:	672
CAO max net quantity (IATA)	:	15kg
Special provisions (IATA)	:	A5
ERG code (IATA)	:	6X

- Inland waterway transport

Classification code (ADN)	:	TO2
Special provisions (ADN)	:	274, 802

Limited quantities (ADN)	:	0
Excepted quantities (ADN)	:	E5
Equipment required (ADN)	:	PP, EP
Number of blue cones/lights (ADN)	:	2

- Rail transport

Transport regulations (RID)	:	Subject
Classification code (RID)	:	TO2
Special provisions (RID)	:	274
Limited quantities (RID)	:	0
Excepted quantities (RID)	:	E5
Packing instructions (RID)	:	P002
Mixed packing provisions (RID)	:	MP18
Portable tank and bulk container instructions (RID)	:	T6
Portable tank and bulk container special provisions (RID)	:	TP33
Tank codes for RID tanks (RID)	:	S10AH, L10CH
Special provisions for RID tanks (RID)	:	TU14, TU15, TU38, TE21, TE22
Transport category (RID)	:	1
Special provisions for carriage - Loading, unloading and handling (RID)	:	CW13, CW28, CW31
Hazard identification number (RID)	:	665

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Potassium dichromate is on the REACH Candidate List

Potassium dichromate is on the REACH Annex XIV List:

Authorisation number	Sunset date	REACH authorisation exemptions
	21/09/2017	

VOC content : Not applicable

15.1.2. National regulations

Germany

VwVwS Annex reference	:	Water hazard class (WGK) 3, severe hazard to waters (KBwS-Beschluss; ID No. 339)
WGK remark	:	Classification water polluting in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 2)
12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV	:	Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

Waterbezwaarlijkheid	:	1 - Black list substance
SZW-lijst van kankerverwekkende stoffen	:	Potassium dichromate is listed
SZW-lijst van mutagene stoffen	:	Potassium dichromate is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding	:	Potassium dichromate is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid	:	Potassium dichromate is listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling	:	Potassium dichromate is listed

Denmark

Recommendations Danish Regulation : Young people below the age of 18 years are not allowed to use the product

Pregnant/breastfeeding women working with the product must not be in direct contact with the product

The requirements from the Danish Working Environment Authorities regarding work with carcinogens must be followed during use and disposal

15.2. Chemical safety assessment

No additional information available

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
EC50	Median effective concentration
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
PBT	Persistent Bioaccumulative Toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative

Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 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.

Full text of H- and EUH-statements:	
Acute Tox. 2 (Inhalation)	Acute toxicity (inhal.), Category 2
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Carc. 1B	Carcinogenicity, Category 1B
Muta. 1B	Germ cell mutagenicity, Category 1B
Ox. Sol. 2	Oxidising Solids, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Resp. Sens. 1	Respiratory sensitisation, Category 1
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 1	Specific target organ toxicity — Repeated exposure, Category 1
STOT SE 3	Specific target organ toxicity — Single exposure, Category 3
H272	May intensify fire; oxidiser
H301	Toxic if swallowed
H312	Harmful in contact with skin
H314	Causes severe skin burns and eye damage
H317	May cause an allergic skin reaction
H330	Fatal if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H340	May cause genetic defects
H350	May cause cancer
H360FD	May damage fertility. May damage the unborn child
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

SDS ISOLAB

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product