

Safety data sheet

according to 1907/2006/EC, Article 31 (REACH)

Printing date 30.07.2018

Revision: 08.09.2017

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

- **1.1 Product identifier**
- **Trade name:** Potassium dichromate, secondary standard for volumetric titrations, Titrasure®
- **Article number:** PO0235
- **CAS Number:**
7778-50-9
- **EC number:**
231-906-6
- **Index number:**
024-002-00-6
- **Registration number** 01-2119454792-32-XXXX
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation:** Laboratory reagent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Scharlab, S.L.
C/Gato Pérez, 33. Pol.Ind. Mas d'en Cisa
08181 Sentmenat (Barcelona) SPAIN
Tel: (+34) 93 745 64 00 - FAX: (+34) 93 715 27 65
email: scharlab@scharlab.com
Internet Web Site: www.scharlab.com
- **Regional representation:**
Scharlab, S.L.
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Internet Web Site: www.scharlab.com
- **Further information obtainable from:** technical department
- **1.4 Emergency telephone number:**
Please contact the regional Scharlab distributor/dealer in your country
During normal opening times: Scharlab, S.L. (+34) 93 715 18 11

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS03 flame over circle

Ox. Sol. 2 H272 May intensify fire; oxidiser.



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.
Acute Tox. 2 H330 Fatal if inhaled.

GHS08 health hazard

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Resp. Sens. 1	H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Muta. 1B	H340	May cause genetic defects.
Carc. 1B	H350	May cause cancer.
Repr. 1B	H360FD	May damage fertility. May damage the unborn child.
STOT RE 1	H372	Causes damage to organs through prolonged or repeated exposure.



GHS05 corrosion

Skin Corr. 1B	H314	Causes severe skin burns and eye damage.
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GHS09 environment

Aquatic Acute 1	H400	Very toxic to aquatic life.
Aquatic Chronic 1	H410	Very toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4	H312	Harmful in contact with skin.
Skin Sens. 1	H317	May cause an allergic skin reaction.

• 2.2 Label elements

• Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

• Hazard pictograms



GHS03



GHS05



GHS06



GHS08



GHS09

• Signal word Danger

• Hazard statements

H272 May intensify fire; oxidiser.
 H301 Toxic if swallowed.
 H312 Harmful in contact with skin.
 H330 Fatal 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.
 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.
 H410 Very toxic to aquatic life with long lasting effects.

• Precautionary statements

P221 Take any precaution to avoid mixing with combustibles.
 P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P320 Specific treatment is urgent (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P405 Store locked up.

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

- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
- **CAS No. Description**
7778-50-9 potassium dichromate
- **Identification number(s)**
- **EC number:** 231-906-6
- **Index number:** 024-002-00-6
- **SVHC**
7778-50-9 potassium dichromate

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Remove breathing equipment only after contaminated clothing have been completely removed.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**
Supply fresh air or oxygen; call for doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Do not induce vomiting; call for medical help immediately.
Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture**
No further relevant information available.

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- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:**

7778-50-9 potassium dichromate
WEL Long-term value: 0.05 mg/m³
as Cr; Carc, Sen, BMGV
- **Ingredients with biological limit values:**

7778-50-9 potassium dichromate
BMGV 10 µmol/mol creatinine
Medium: urine
Sampling time: post shift
Parameter: chromium
- **Additional information:** The lists valid during the making were used as basis.

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- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Store protective clothing separately.
Avoid contact with the eyes and skin.
- **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**
Safety glasses



Tightly sealed goggles

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Crystalline
Colour:	Orange
- **Odour:** Odourless
- **Odour threshold:** Not determined.
- **pH-value:** Not applicable.
- **Change in condition**

Melting point/freezing point:	398 °C
Initial boiling point and boiling range:	>500 °C
- **Flash point:** Not applicable.
- **Flammability (solid, gas):** Contact with combustible material may cause fire.
- **Decomposition temperature:** Not determined.

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- **Auto-ignition temperature:** Not determined.
- **Explosive properties:** Product does not present an explosion hazard.
- **Explosion limits:**
 - Lower:** Not determined.
 - Upper:** Not determined.
- **Vapour pressure at 20 °C:** 0 hPa
- **Density at 20 °C:** 2.676 g/cm³
- **Relative density:** Not determined.
- **Vapour density:** Not applicable.
- **Evaporation rate:** Not applicable.
- **Solubility in / Miscibility with water at 20 °C:** 125 g/l
- **Partition coefficient: n-octanol/water:** Not determined.
- **Viscosity:**
 - Dynamic:** Not applicable.
 - Kinematic:** Not applicable.
- **9.2 Other information:** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity:** No further relevant information available.
- **10.2 Chemical stability:**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions:** No dangerous reactions known.
- **10.4 Conditions to avoid:** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
Toxic if swallowed.
Harmful in contact with skin.
Fatal if inhaled.
- **LD/LC50 values relevant for classification:**
Oral LD50 190 mg/kg (mouse)
- **Primary irritant effect:**
- **Skin corrosion/irritation:**
Causes severe skin burns and eye damage.
- **Serious eye damage/irritation:**
Causes severe skin burns and eye damage.
- **Respiratory or skin sensitisation:**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity:**
May cause genetic defects.

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- **Carcinogenicity**
May cause cancer.
- **Reproductive toxicity**
May damage fertility. May damage the unborn child.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure**
Causes damage to organs through prolonged or repeated exposure.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Very toxic for fish
- **Additional ecological information:**
- **General notes:**
Water hazard class 3 (German Regulation) (Assessment by list): extremely hazardous for water
Do not allow product to reach ground water, water course or sewage system, even in small quantities.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
Danger to drinking water if even extremely small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Very toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN-Number**
ADR, IMDG, IATA UN3288
- **14.2 UN proper shipping name**
ADR 3288 TOXIC SOLID, INORGANIC, N.O.S. (potassium dichromate), ENVIRONMENTALLY HAZARDOUS
- **IMDG, IATA** TOXIC SOLID, INORGANIC, N.O.S. (potassium dichromate)

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· **14.3 Transport hazard class(es)**

· **ADR**



· **Class**

6.1 Toxic substances.

· **Label**

6.1

· **IMDG, IATA**



· **Class**

6.1 Toxic substances.

· **Label**

6.1

· **14.4 Packing group**

· **ADR, IMDG, IATA**

II

· **14.5 Environmental hazards:**

Environmentally hazardous substance, solid

· **Marine pollutant:**

No

· **Special marking (ADR):**

Symbol (fish and tree)

· **14.6 Special precautions for user**

Warning: Toxic substances.

· **Stowage Category**

B

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

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)**

500 g

· **Transport category**

2

· **Tunnel restriction code**

D/E

· **UN "Model Regulation":**

UN 3288 TOXIC SOLID, INORGANIC, N.O.S. (POTASSIUM DICHROMATE), 6.1, II, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

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

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** Substance is not listed.

· **Seveso category**

H2 ACUTE TOXIC

P8 OXIDISING LIQUIDS AND SOLIDS

E1 Hazardous to the Aquatic Environment

· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t

· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t

· **LIST OF SUBSTANCES SUBJECT TO AUTHORISATION (ANNEX XIV)**

: Sunset date: 2017-09-21

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 28, 29, 30, 47

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- **National regulations:**
- **Information about limitation of use:**
Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.
- **Other regulations, limitations and prohibitive regulations**
- **Substances of very high concern (SVHC) according to REACH, Article 57**
7778-50-9 potassium dichromate
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Classification according to Regulation (EC) No 1272/2008**
The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.
- **Department issuing SDS:** product safety department
- **Contact:** msds@scharlab.com
- **Abbreviations and acronyms:**
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
ICAO: International Civil Aviation Organisation
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
SVHC: Substances of Very High Concern
vPvB: very Persistent and very Bioaccumulative
Ox. Sol. 2: Oxidizing solids – Category 2
Acute Tox. 3: Acute toxicity – Category 3
Acute Tox. 4: Acute toxicity – Category 4
Acute Tox. 2: Acute toxicity – Category 2
Skin Corr. 1B: Skin corrosion/irritation – Category 1B
Resp. Sens. 1: Respiratory sensitisation – Category 1
Skin Sens. 1: Skin sensitisation – Category 1
Muta. 1B: Germ cell mutagenicity – Category 1B
Carc. 1B: Carcinogenicity – Category 1B
Repr. 1B: Reproductive toxicity – Category 1B
STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1
Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1
Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1