

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 10.05.2011

Revision: 06.05.2011

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

- **Product identifier**
- **Trade name: Precision Reagent - Chromium**
- **Article number: KR 113**
- **Relevant identified uses of the substance or mixture and uses advised against**
Water Testing Reagent
- **Application of the substance / the preparation** Water Testing Reagent
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Serosep Ltd
Annacotty Business Park
Annacotty
Co.Limerick
IRELAND
- **Further information obtainable from:**
Product safety department.
trussell@serosep.com
- **Emergency telephone number:** During normal opening times: 00353/61/358190

2 Hazards identification

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



GHS02 flame

Flam. Liq. 2 H225 Highly flammable liquid and vapour.



GHS07

Eye Irrit. 2 H319 Causes serious eye irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xi; Irritant

R36: Irritating to eyes.

R67: Vapours may cause drowsiness and dizziness.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

- **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

- **Label elements**

- **Labelling according to EU guidelines:**

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials.

- **Code letter and hazard designation of product:**



Xi Irritant

- **Risk phrases:**

36 Irritating to eyes.

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67 Vapours may cause drowsiness and dizziness.

- **Safety phrases:**

- 2 Keep out of the reach of children.

- 7 Keep container tightly closed.

- 46 If swallowed, seek medical advice immediately and show this container or label.

- 56 Dispose of this material and its container to hazardous or special waste collection point.

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

3 Composition/information on ingredients

- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 67-63-0 EINECS: 200-661-7	propan-2-ol ☒ Xi R36; ☒ F R11 R67 ☒ Flam. Liq. 2, H225; ☒ Eye Irrit. 2, H319; STOT SE 3, H336	15.6%
CAS: 7664-93-9 EINECS: 231-639-5	sulphuric acid ☒ C R35 ☒ Skin Corr. 1A, H314	4.9%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

4 First aid measures

- **Description of first aid measures**

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.

- **After skin contact:** Generally the product does not irritate the skin.

- **After eye contact:**

- Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

- **After swallowing:** If symptoms persist consult doctor.

- **Information for doctor:**

- **Most important symptoms and effects, both acute and delayed**

- No further relevant information available.

- **Indication of any immediate medical attention and special treatment needed**

- No further relevant information available.

5 Firefighting measures

- **Extinguishing media**

- **Suitable extinguishing agents:**

- CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

- **Special hazards arising from the substance or mixture**

- No further relevant information available.

- **Advice for firefighters**

- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**

- Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

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- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.
- **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.

7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.
- **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.
- **Specific end use(s)** No further relevant information available.

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **Control parameters**

Ingredients with limit values that require monitoring at the workplace:	
67-63-0 propan-2-ol	
OEL	Short-term value: 400 ppm Long-term value: 200 ppm Sk
7664-93-9 sulphuric acid	
OEL	1 mg/m ³

- **Additional information:** The lists valid during the making were used as basis.

- **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.
Avoid contact with the eyes.
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.

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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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **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:**



Tightly sealed goggles

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form:

Fluid

Colour:

According to product specification

· **Odour:**

Characteristic

· **Odour threshold:**

Not determined.

· **pH-value:**

Not determined.

· **Change in condition**

Melting point/Melting range:

Undetermined.

Boiling point/Boiling range:

82°C

· **Flash point:**

> 55°C

· **Flammability (solid, gaseous):**

Not applicable.

· **Ignition temperature:**

425°C

· **Decomposition temperature:**

Not determined.

· **Self-igniting:**

Product is not selfigniting.

· **Danger of explosion:**

Product does not present an explosion hazard.

· **Explosion limits:**

Lower:

2.0 Vol %

Upper:

12.0 Vol %

· **Vapour pressure at 20°C:**

43 hPa

· **Density at 20°C:**

1.00739 g/cm³

· **Relative density**

Not determined.

· **Vapour density**

Not determined.

· **Evaporation rate**

Not determined.

· **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

· **Segregation coefficient (n-octanol/water):** Not determined.

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· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	15.6 %
Water:	79.5 %
VOC (EC)	15.60 %
Solids content:	4.9 %
· Other information	No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
Irritant

12 Ecological information

- **Toxicity**
- **Acquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behaviour in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

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13 Disposal considerations

- **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.

14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID class:** 3 Flammable liquids.
- **Danger code (Kemler):** 38
- **UN-Number:** 2924
- **Packaging group:** III
- **Hazard label:** 3+8
- **UN proper shipping name:** 2924 FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL), SULPHURIC ACID)
- **Tunnel restriction code** D/E

- **Maritime transport IMDG:**



- **IMDG Class:** 3
- **UN Number:** 2924
- **Label** 3+8
- **Packaging group:** III
- **EMS Number:** F-E,S-C
- **Marine pollutant:** No
- **Segregation groups** Acids
- **Proper shipping name:** FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL), SULPHURIC ACID)

- **Air transport ICAO-TI and IATA-DGR:**



- **ICAO/IATA Class:** 3
- **UN/ID Number:** 2924
- **Label** 3+8
- **Packaging group:** III
- **Proper shipping name:** FLAMMABLE LIQUID, CORROSIVE, N.O.S. (ISOPROPANOL (ISOPROPYL ALCOHOL), SULPHURIC ACID)

- **UN "Model Regulation":** UN2924, FLAMMABLE LIQUID, CORROSIVE, N.O.S., 3 (8), III
- **Special precautions for user** Warning: Flammable liquids.

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· **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.**15 Regulatory information**· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**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.

· **Relevant phrases**

H225 Highly flammable liquid and vapour.
H314 Causes severe skin burns and eye damage.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

R11 Highly flammable.
R35 Causes severe burns.
R36 Irritating to eyes.
R67 Vapours may cause drowsiness and dizziness.

· **Department issuing MSDS:** Product safety department.· **Contact:** Mr. Russell· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

VOC: Volatile Organic Compounds (USA, EU)