

POTASSIUM DICHROMATE 0.0167M (0.1N) STANDARDIZED SOLUTION TRACEABLE TO NIST MSDS

CAS-No.: MSDS



MATERIAL SAFETY DATA SHEET (MSDS)

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

1.1. Product identifier

Product form : Mixture
:
Product code : R270A

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

1.2.1. Relevant identified uses

Industrial/Professional use spec : Industrial
For professional use only

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Labogens Fine Chem Industries
1st Floor , Above Bank of India, Guru Vihar , Rahon Road,
Ludhiana Pb. (141007)
+91 9316777775, +91 7707855700
sales@labogens.com - www.Labogens.com

1.4. Emergency telephone number

Emergency number : +91 7707855700 (9:00am - 6:00 pm)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Germ cell mutagenicity, H340
Category 1B
Carcinogenicity, Category H350
1B
Reproductive toxicity, H360FD
Category 1A
Hazardous to the aquatic H411
environment — Chronic
Hazard, Category 2

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

POTASSIUM DICHROMATE 0.0167M (0.1N) STANDARDIZED SOLUTION traceable to NIST

Safety Data Sheet

2.2. Label elements

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

Hazard pictograms (CLP) :



GHS08

GHS09

Signal word (CLP) :

Danger

Hazard statements (CLP) :

H340 - May cause genetic defects.
H350 - May cause cancer.
H360FD - May damage fertility. May damage the unborn child.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements (CLP) :

P201 - Obtain special instructions before use.
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.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % | Classification according to Regulation (EC) No. 1272/2008 [CLP] |
|--|--|----------|--|
| Water | (CAS-No.) 7732-18-5 (EC-No.) 231-791-2 | >= 99 | Not classified |
| 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 | 0.01 - 1 | Acute Tox. 2 (Inhalation), H330 Acute Tox. 3 (Oral), H301 Acute Tox. 4 (Dermal), H312 Aquatic Acute 1, H400 |

Full text of H-statements: see section 16

POTASSIUM DICHROMATE 0.0167M (0.1N) STANDARDIZED SOLUTION traceable to NIST

Safety Data Sheet

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Give oxygen or artificial respiration if necessary. If you feel unwell, seek medical advice.
- First-aid measures after skin contact : Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
- First-aid measures after ingestion : Rinse mouth out with water. If you feel unwell, seek medical advice.

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

- Symptoms/effects : May cause genetic defects. May damage fertility or the unborn child.
- Chronic symptoms : May cause cancer.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : dry chemical powder, alcohol-resistant foam, carbon dioxide (CO₂).
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

No additional information available

5.3. Advice for firefighters

- Protection during firefighting : Do not attempt to take action without suitable protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Emergency procedures : Avoid contact with skin, eyes and clothing.

6.1.2. For emergency responders

- Protective equipment : Use personal protective equipment as required.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Clean contaminated surfaces with an excess of water.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin, eyes and clothing.
- Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Keep container tightly closed.

POTASSIUM DICHROMATE 0.0167M (0.1N) STANDARDIZED SOLUTION traceable to NIST

Safety Data Sheet

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

| | |
|--------------------------|--------------------------------------|
| Hand protection | : Protective gloves |
| Eye protection | : Chemical goggles or safety glasses |
| Skin and body protection | : Wear suitable protective clothing |
| Respiratory protection | : Wear respiratory protection. |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|--|------------------------|
| Physical state | : Liquid |
| Colour | : Orange red solution. |
| Odour | : No data available |
| Odour threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : No data available |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : No data available |
| Relative density | : No data available |
| Density | : 1 g/cm ³ |
| Solubility | : No data available |
| Log Pow | : No data available |

POTASSIUM DICHROMATE 0.0167M (0.1N) STANDARDIZED SOLUTION traceable to NIST

Safety Data Sheet

| | |
|----------------------|---------------------|
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosive properties | : No data available |
| Oxidising properties | : No data available |
| Explosive limits | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Direct sunlight.

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 | : Not classified |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitisation | : Not classified |
| 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 | : Not classified |
| Aspiration hazard | : Not classified |

POTASSIUM DICHROMATE 0.0167M (0.1N) STANDARDIZED SOLUTION traceable to NIST

Safety Data Sheet

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

| Component | |
|----------------------------------|---|
| 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

No additional information available

SECTION 14: Transport information

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

14.1. UN number

| | |
|---------------|------------------|
| UN-No. (ADR) | : Not applicable |
| UN-No. (IMDG) | : Not applicable |
| UN-No. (IATA) | : Not applicable |
| UN-No. (ADN) | : Not applicable |
| UN-No. (RID) | : Not applicable |

14.2. UN proper shipping name

| | |
|-----------------------------|------------------|
| Proper Shipping Name (ADR) | : Not applicable |
| Proper Shipping Name (IMDG) | : Not applicable |
| Proper Shipping Name (IATA) | : Not applicable |
| Proper Shipping Name (ADN) | : Not applicable |
| Proper Shipping Name (RID) | : Not applicable |

POTASSIUM DICHROMATE 0.0167M (0.1N) STANDARDIZED SOLUTION traceable to NIST

Safety Data Sheet

14.3. Transport hazard class(es)

ADR

Transport hazard class(es) (ADR) : Not applicable



IMDG

Transport hazard class(es) (IMDG) : Not applicable



IATA

Transport hazard class(es) (IATA) : Not applicable



ADN

Transport hazard class(es) (ADN) : Not applicable



RID

Transport hazard class(es) (RID) : Not applicable



14.4. Packing group

Packing group (ADR) : Not applicable

Packing group (IMDG) : Not applicable

Packing group (IATA) : Not applicable

Packing group (ADN) : Not applicable

Packing group (RID) : Not applicable

14.5. Environmental hazards

Dangerous for the environment : Yes

Marine pollutant : Yes

Other information : No supplementary information available

POTASSIUM DICHROMATE 0.0167M (0.1N) STANDARDIZED SOLUTION traceable to NIST

Safety Data Sheet

14.6. Special precautions for user

- Overland transport

No data available

- Transport by sea

No data available

- Air transport

No data available

- Inland waterway transport

No data available

- Rail transport

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 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

Contains no REACH substances with Annex XVII restrictions

Contains a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: Potassium dichromate (EC 231-906-6, CAS 7778-50-9)

Contains REACH Annex XIV substances:

| Substance name | Authorisation number | Sunset date | REACH authorisation exemptions |
|--|----------------------|-------------|--------------------------------|
| Potassium dichromate (EC 231-906-6, CAS 7778-50-9) | | 21/09/2017 | |

15.1.2. National regulations

Germany

Reference to AwSV : Water hazard class (WGK) 3, Highly hazardous to water (Classification according to AwSV, Annex 1)

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV : Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

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

POTASSIUM DICHROMATE 0.0167M (0.1N) STANDARDIZED SOLUTION traceable to NIST

Safety Data Sheet

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

Full text of H- and EUH-statements:

| | |
|---------------------------|---|
| Acute Tox. 2 (Inhalation) | Acute toxicity (inhal.), Category 2 |
| Acute Tox. 3 (Oral) | Acute toxicity (oral), Category 3 |
| Acute Tox. 4 (Dermal) | Acute toxicity (dermal), Category 4 |
| Aquatic Acute 1 | Hazardous to the aquatic environment — Acute Hazard, Category 1 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment — Chronic Hazard, Category 2 |
| Carc. 1B | Carcinogenicity, Category 1B |
| Muta. 1B | Germ cell mutagenicity, Category 1B |
| Repr. 1A | Reproductive toxicity, Category 1A |
| H301 | Toxic if swallowed. |
| H312 | Harmful in contact with skin. |
| H330 | Fatal if inhaled. |
| H340 | May cause genetic defects. |
| H350 | May cause cancer. |
| H360FD | May damage fertility. May damage the unborn child. |
| H400 | Very toxic to aquatic life. |
| H411 | Toxic to aquatic life with long lasting effects. |

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.