
MATERIAL SAFETY DATA SHEET

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

1.1 Product identifiers

Product name: Potassium Ferrocyanide 2% (w/v) in aqueous solution
Reag. Ph. Eur. 1069801
Product code: REA1404
CAS No: Not applicable
INDEX No. Not applicable
REACH No: Not applicable
Other means of identification: no data available
Brand: Solmedia Ltd

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

General chemical reagent

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Solmedia Ltd.
- Address of Supplier: Unit 2, Vernon Drive
Battlefield Enterprise Park
Shrewsbury
SY1 3TF
UK
- Telephone: 0844 80 80 900
- Email: labsupplies@solmedialtd.com

1.4 Emergency telephone number

Emergency Phone # +44 (0)844 80 80 900

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [CLP].

2.2 Label elements

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

According to EC directives or the corresponding national regulations the product does not have to be labelled.

Other hazards Not applicable

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

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

Substance Name	Concentration	Product Identifier	Hazard Classes and Hazard Categories
Potassium hexacyanoferrate (II) trihydrate	1 – 5%	CAS No.: 14459-95-1 EC No.: 237-722-2 REACH No.: Not yet communicated down the supply chain	Aquatic Chronic 2 - H411

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

Skin contact: After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

Eye contact: In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion: If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

Inhalation: Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. In case of respiratory tract irritation, consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

4.4 Self-protection of the first aider

First aider: Pay attention to self-protection!

4.5 Information to physician

No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

Extinguishing media which must not be used for safety reasons

No restriction

5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: Pyrolysis products, toxic

5.3 Advice for firefighters

DO NOT fight fire when fire reaches explosives. Special protective equipment for firefighters
Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information

Do not allow run-off from fire-fighting to enter drains or water courses.
Do not inhale explosion and combustion gases.
Use water spray jet to protect personnel and to cool endangered containers.
In case of fire: Evacuate area

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

In case of major fire and large quantities: Remove persons to safety.

6.2 Environmental precautions

Discharge into the environment must be avoided.

6.3 Methods and materials for containment and cleaning up

Spilled product must never be returned to the original container for recycling. Collect in closed and suitable containers for disposal.

6.4 Reference to other sections

Clear spills immediately

SECTION 7: Handling and storage

7.1 Precautions for safe handling

All work processes must always be designed so that the following is as low as possible:
Inhalation skin contact Eye contact Use extractor hood (laboratory). If handled uncovered, arrangements with local exhaust ventilation have to be used. If local exhaust ventilation is not possible or not sufficient, the entire working area must be ventilated by technical means.

7.2 Conditions for safe storage, including any incompatibilities

Recommended storage temperature: no data available
Storage class: no data available
Keep container tightly closed and in a well-ventilated place. Keep/Store only in original container.

7.3 Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Does not contain substances above concentration limits fixing an occupational exposure limit

8.2 Exposure controls

Engineering measures: Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Personal protection equipment: Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn.

Respiratory protection: Respiratory protection necessary at: aerosol or mist formation
Suitable respiratory protection apparatus: Full-/half-/quarter-face masks (DIN EN 136/140)

Suitable material: ABEK2P3

Hand protection: When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Recommended glove articles DIN-/EN-Norms: DIN EN 374 In the case of wanting to use the gloves again, clean them before taking off and air them well.

By short-term hand contact

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,12 mm

Breakthrough time (maximum wearing time): > 480 min

By long-term hand contact

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,12 mm
Breakthrough time (maximum wearing time): > 480 min

Eye protection: Eye glasses with side protection DIN-/EN-Norms: DIN EN 166

Additional Information: Wash hands before breaks and after work. Avoid contact with skin and eyes. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously

8.2.3 Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

(a) Appearance Physical state: liquid Colour: no data available
(b) Odour: no data available
(c) Odour threshold: no data available

Safety relevant basic data

(d) pH: no data available
(e) Melting point/freezing point: no data available
(f) Initial boiling point and boiling range: no data available
(g) Flash point: no data available
(h) Evaporation rate: no data available
(i) Flammability (solid, gas): not applicable
(j) Flammability or explosive limits

Lower explosion limit: no data available

Upper explosion limit: no data available

(k) Vapour pressure: no data available
(l) Vapour density: no data available
(m) Relative density: no data available
(n) Solubility(ies) Water solubility (g/L): no data available
Soluble (g/L) in Ethanol: no data available
(o) Partition coefficient: n-octanol/water: no data available
(p) Auto-ignition temperature: no data available
(q) Decomposition temperature: no data available

(r) Viscosity

Kinematic viscosity: no data available

Dynamic viscosity: no data available

(s) Explosive properties: not applicable

(t) Oxidising properties: not applicable

9.2 Other safety information

Bulk density: not applicable

Refraction index: no data available

Dissociation constant: no data available

Surface tension: no data available

Henry constant: no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature)

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

No data available

10.7 Additional information

No data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity:

Potassium hexacyanoferrate (II) trihydrate - LD50: > 3613 mg/kg - Rat - (IUCLID)

Acute dermal toxicity:

no data available

Acute inhalation toxicity:

no data available

Irritant and corrosive effects

Primary irritation to the skin:

not applicable

Irritation to eyes:

not applicable

Irritation to respiratory tract:

Not applicable

Respiratory or skin sensitisation

In case of skin contact: not sensitising

After inhalation: not sensitising

STOT-single exposure

not applicable

STOT-repeated exposure

not applicable

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No indication of human carcinogenicity.

Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

Reproductive toxicity

No indications of human reproductive toxicity exist.

Aspiration hazard

not applicable

Other adverse effects]

no data available

Additional information

no data available

SECTION 12: Ecological information

12.1 Toxicity

Fish toxicity:

Potassium hexacyanoferrate (II) trihydrate - LC50: 226 mg/l (96 h) - Thurston, R.V., and T.A. Heming 1984. Acute Toxicity of Iron Cyanides and Thiocyanate to Trout. In: EPA-600/9-86/024, R.C.Ryans (Ed.), Proc.of USA-USSR Symp., Jul.30-Aug.1, 1984, Borok, Jaroslavl Oblast, U.S.EPA, Athens, GA :55-71

Daphnia toxicity:

Potassium hexacyanoferrate (II) trihydrate - LC50: 64 mg/l (48 h) - Lee, D.R. 1976. Development of an Invertebrate Bioassay to Screen Petroleum Refinery Effluents Discharged into Freshwater. Ph.D.Thesis, Virginia Polytechnic Inst.and State Univ., Blacksburg, VA :108 p.

Algae toxicity:

No data available

Bacteria toxicity:

No data available

12.2 Persistence and degradability

Not applicable

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: no data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Appropriate disposal / Product

Dispose according to local legislation. Consult the appropriate local waste disposal expert about waste disposal.

Waste code product: no data available

Appropriate disposal / Package

Dispose according to local legislation. Handle contaminated packages in the same way as the substance itself.

Additional information

No data available

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

SECTION 14: Transport information

Land transport (ADR/RID)

No dangerous good in sense of this transport regulation.

Sea transport (IMDG)

No dangerous good in sense of this transport regulation.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

Air transport (ICAO-TI / IATA-DGR)

No dangerous good in sense of this transport regulation.

SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

SECTION 16: Other information

EU legislation

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a 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 (Text with EEA relevance) - 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 (Text with EEA relevance) - Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Text with EEA relevance) - Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

National regulations

No data available

Water hazard class (WGK):

No data available

15.2 Chemical Safety Assessment

No data available

Abbreviations and acronyms

ACGIH - American Conference of Governmental Industrial Hygienists

ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road

AGS - Committee on Hazardous Substances (Ausschuss für Gefahrstoffe)

CLP - Regulation on Classification, Labelling and Packaging of Substances and Mixtures

DFG - German Research Foundation (Deutsche Forschungsgemeinschaft) Gestis - Information system on hazardous substances of the German Social Accident Insurance (Gefahrstoffinformationssystem der Deutschen Gesetzlichen Unfallversicherung)

IATA-DGR - International Air Transport Association-Dangerous Goods Regulations

ICAO-TI - International Civil Aviation Organization-Technical Instructions

IMDG - International Maritime Code for Dangerous Goods

LTV - Long Term Value

NIOSH - National Institute for Occupational Safety and Health

OSHA - Occupational Safety & Health Administration

PBT - Persistent, Bioaccumulative and Toxic

RID - Regulation concerning the International Carriage of Dangerous Goods by Rail

STV - Short Term Value

SVHC - Substances of Very High Concern

vPvB - very Persistent, very Bioaccumulative

Additional information

Indication of changes:

General update

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Solmedia Ltd shall not be held liable for any damage resulting from handling or from contact with the above product.