

# Safety Data Sheet

Revision date: 22.02.2023

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

### 1.1 Product identifier

Trade name/designation:	Potassium iodide AnalaR NORMAPUR®
Product No.:	26846
CAS No.:	7681-11-0
Other means of identification:	none

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

Relevant identified uses:	General chemical reagent
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### 1.3 Details of the supplier of the safety data sheet

*Singapore*

#### **VWR Singapore Pte Ltd.**

Street	18 Gul Drive
Postal code/City	Singapore 629468
Telephone	+65 6505 0760
Telefax	+65 6264 3780
E-mail (competent person)	SDS@avantorsciences.com

### 1.4 Emergency phone number

Telephone	+65 (0) 6505 0760 (office hours: 8 am-5 pm)
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## SECTION 2: Hazard identification

### 2.1 Classification of the substance or mixture

Hazard classes and hazard categories	Hazard statements
Specific target organ toxicity (repeated exposure), category 1	H372

### 2.2 Label elements

#### Hazard pictograms



Signal word: Danger

Hazard statements	
H372	Causes damage to organs through prolonged or repeated exposure.

Precautionary statements	
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P264	Wash ... thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P314	Get medical advice/attention if you feel unwell.
P501	Dispose of contents/container to ...

### 2.3 Other hazards

none

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Substance name	Potassium iodide
Molecular formula	KI
Molecular weight	166 g/mol
CAS No.	7681-11-0

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

Do not leave affected person unattended.

#### After inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If unconscious but breathing normally, place in recovery position and seek medical advice. If breathing is irregular or stopped, administer artificial respiration. Seek medical advice immediately.

#### In case of skin contact

Remove contaminated, saturated clothing immediately. Wash with plenty of soap and water. In case of skin irritation, consult a physician. If extensive skin contact: get medical help immediately and kept under medical surveillance (hospitalization).

#### After eye contact:

Rinse immediately carefully and thoroughly with eye-bath or water. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

#### In case of ingestion

Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person or a person with cramps. Let 1 glass of water be drunken in little sips (dilution effect). Do NOT induce vomiting. Immediately call a POISON CENTRE/doctor.

#### Self-protection of the first aider

First aider: Pay attention to self-protection! Wear personal protection equipment (refer to section 8).

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

After inhalation: May cause respiratory irritation. After skin contact: Irritation. After eye contact: Irritation. Inflammation and corneal changes. Acute effects Cardiovascular disorder. Thyroid disorder. Metabolic disorders. Chronic effects: Cardiovascular disorder. Thyroid disorder. Metabolic disorders. Systemic mucosal inflammation and skin damage.

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

After inhalation: Provide fresh air. Treat symptomatically. After skin contact: Wash with plenty of water. If necessary, treat skin irritations with a dermatocorticoid foam. After eye contact: No special information on medical attention and special treatment available. Treat symptomatically. After ingestion: No special information on medical attention and special treatment available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

ABC-powder  
Carbon dioxide (CO<sub>2</sub>).  
Dry sand  
Nitrogen

#### Extinguishing media which must not be used for safety reasons

Full water jet

### 5.2 Special hazards arising from the substance or mixture

Non-combustible solids.

The product itself does not burn.  
Fire may produce irritating, corrosive and/or toxic gases.  
In case of fire may be liberated:  
Hydrogen iodide (HI)

### 5.3 Advice for firefighters

Co-ordinate fire-fighting measures to the fire surroundings.  
In case of fire and/or explosion do not breathe fumes.  
In case of fire: Evacuate area.

### Additional information

no data available

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Wear personal protection equipment (refer to section 8). Avoid contact with eyes. Use a dust mask if there is a lot of dust. Provide adequate ventilation. Remove victim out of the danger area. First Aid, decontamination, treatment of symptoms.

### 6.2 Environmental precautions

Avoid release to the environment.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal. Dispose according to local legislation.

### 6.4 Additional information

Personal protection equipment: see section 8 Disposal information: see section 13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Advices on safe handling  
Avoid dust formation.  
Use extractor hood (laboratory).  
Do not breathe dust.  
Provide adequate ventilation.  
Wear personal protection equipment (refer to section 8).  
Measures to prevent fire, aerosol and dust generation  
Use extractor hood (laboratory).  
If handled uncovered, arrangements with local exhaust ventilation should be used if possible.  
Measures required to protect the environment  
Avoid release to the environment.  
Keep container tightly closed.  
Collect spillage.

## 7.2 Conditions for safe storage, including any incompatibilities

Recommended storage temperature: 15-25°C

Storage class: 10-13

Storage: Keep container tightly closed and in a well-ventilated place. Keep/Store only in original container. Protect from sunlight. Protect from moisture. Suitable container/equipment material: Glass Polyethylene (PE) Unsuitable container/equipment material: Alloy, containing copper Copper.

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

# 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

### 8.2.1 Appropriate engineering controls

no data available

### 8.2.2 Personal protection equipment

no data available

#### *Eye/face protection*

no data available

Recommendation: no data available

#### *Skin protection*

no data available

#### By short-term hand contact

Suitable material:	NBR (Nitrile rubber)
Thickness of the glove material:	0,12 mm
Breakthrough time::	> 480 min
Recommended glove articles:	VWR 112-0998

#### By long-term hand contact

Suitable material:	NBR (Nitrile rubber)
Thickness of the glove material:	0,38 mm
Breakthrough time::	> 480 min
Recommended glove articles:	VWR 112-3717 / 112-1381

#### *Respiratory protection*

no data available

Suitable respiratory protection apparatus:	no data available
Recommendation:	no data available
Suitable material:	no data available
Recommendation:	no data available

*Additional information*

no data available

**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:	solid
Colour:	white
(b) Odour:	no data available
(c) Odour threshold:	no data available

#### Safety relevant basic data

(d) pH:	6.9 (50 g/l; H <sub>2</sub> O; 20 °C)
(e) Melting point/freezing point:	681 °C
(f) Initial boiling point and boiling range:	1330 °C (1013 hPa)
(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) Density:	3.13 g/cm <sup>3</sup> (20 °C)
(n) Solubility(ies)	
Water solubility:	1,430 g/l (20 °C)
(o) Partition coefficient: n-octanol/water:	0.04 (20 °C; calculated)
(p) Auto-ignition temperature:	no data available
(q) Decomposition temperature:	not applicable
(r) Viscosity	
Kinematic viscosity:	no data available
Dynamic viscosity:	no data available
(s) Explosive properties:	not applicable
(t) Oxidising properties:	not applicable
(u) Particle characteristics:	no nanoform

### 9.2 Other information

Bulk density:	no data available
Refraction index:	no data available
Dissociation constant:	no data available
Surface tension:	no data available
Henry's Law Constant:	no data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

Reactive substance.  
Hygroscopic.  
Sensitivity to light (photosensitive).

### 10.2 Chemical stability

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

### 10.3 Possibility of hazardous reactions

Danger of explosion:  
Alkali metals  
Hydrogen peroxide.  
Ammonia (NH<sub>3</sub>)  
Violent reaction with:  
Oxidising agent, strong.  
Reducing agent.  
Water.

### 10.4 Conditions to avoid

Hygroscopic.  
Protect from moisture.

### 10.5 Incompatible materials

No further relevant information available.

### 10.6 Hazardous decomposition products

No decomposition if stored and applied as directed.  
May form hazardous decomposition products when exposed to high temperatures.  
Decomposition products in case of fire: see section 5.

### 10.7 Additional information

no data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute effects

*Acute oral toxicity:*  
LD50: > 2779 mg/kg - Rat - (Merck KGaA)

*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**

Causes damage to organs through prolonged or repeated exposure.

**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

**11.2 Endocrine disrupting properties:**

This substance does not have endocrine disrupting properties with respect to humans.



## SECTION 12: Ecological information

### 12.1 Ecotoxicity

**Fish toxicity:**

LC50: 1540 mg/l (96 h) - Davies, P.H., and J.P. Goettl Jr. 1978. Evaluation of the Potential Impacts of Silver and/or Silver Iodide on Rainbow Trout in Laboratory and high Mountain Lake Environments. Environ.Impacts Artif.Ice Nucleating Agents :149-161

**Daphnia toxicity:**

no data available

**Algae toxicity:**

no data available

**Bacteria toxicity:**

no data available

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water: 0.04 (20 °C; berechnet)

### 12.4 Mobility in soil:

no data available

### 12.5 Results of PBT/vPvB assessment

not applicable

### 12.6 Endocrine disrupting properties

This substance does not have endocrine disrupting properties with respect to the environment.

### 12.7 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

## 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

#### National regulations

- Workplace Safety and Health Act
- Workplace Safety and Health (Permissible Exposure Levels of Toxic Substances) Order
- Environmental Protection and Management Act (EPMA) - Second Schedule, Part 1, Control of Hazardous Substances
- Maritime and Port Authority of Singapore (MPA) - Dangerous Goods, Petroleum and Explosives Regulations

## SECTION 16: Other information

#### 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)  
 DNEL - Derived No Effect Level  
 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  
 KOSHA - Korea Occupational Safety and Health Agency  
 LTV - Long Term Value  
 NIOSH - National Institute for Occupational Safety and Health  
 OSHA - Occupational Safety & Health Administration  
 PBT - Persistent, Bioaccumulative and Toxic  
 PNEC - Predicted No Effect Concentration  
 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

#### Key literature references and sources for data

This Safety Data Sheet has been prepared based on information available for public as TOXNET information, European Chemicals Agency (ECHA) substance dossier, papers from international cancer research institutes (IARC Monographs), U.S. National Toxicology Program data, U.S. Agency for Toxic Substances and Disease Control (ATSDR), PubChem websites and SDS from our raw material manufacturers.

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**Additional information**

Indication of changes

Review and revision of Sections 4, 5, 6, 7 and 10.

If you need an explanation of the change, contact the supplier (SDS@avantorsciences.com).

*The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.*