



# SAFETY DATA SHEET

Creation Date 12-Mar-2014

Revision Date 15-Dec-2014

Revision Number 3

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identification

**Product Description:** **Sodium iodide**  
**Cat No. :** 419570000; 419570025; 419571000; 419575000  
**Synonyms** Sodium Monoiodide; Sodium Iodine; Anayodin.  
**CAS-No** 7681-82-5  
**EC-No.** 231-679-3  
**Molecular Formula** I Na

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

**Recommended Use** Laboratory chemicals.  
**Uses advised against** No Information available

### 1.3. Details of the supplier of the safety data sheet

**Company** Acros Organics BVBA  
Janssen Pharmaceuticaan 3a  
2440 Geel, Belgium  
**E-mail address** begel.sdsdesk@thermofisher.com

### 1.4. Emergency telephone number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11  
Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99  
**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

#### CLP Classification - Regulation (EC) No 1272/2008

##### Physical hazards

Based on available data, the classification criteria are not met

##### Health hazards

Skin Corrosion/Irritation Category 2  
Serious Eye Damage/Eye Irritation Category 2

##### Environmental hazards

Acute aquatic toxicity Category 1

#### Classification according to EU Directives 67/548/EEC or 1999/45/EC

**Symbol(s)** Xi - Irritant  
N - Dangerous for the environment  
**R-phrases** R50 - Very toxic to aquatic organisms  
R36/38 - Irritating to eyes and skin

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For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16.

## 2.2. Label elements



Signal Word

Warning

### Hazard Statements

- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H400 - Very toxic to aquatic life

### Precautionary Statements

- P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection
- P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
- P273 - Avoid release to the environment

## 2.3. Other hazards

No information available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1. Substances

| Component     | CAS-No    | EC-No.    | Weight % | CLP Classification - Regulation (EC) No 1272/2008                     | DSD Classification - 67/548/EEC |
|---------------|-----------|-----------|----------|---|---------------------------------|
| Sodium iodide | 7681-82-5 | 231-679-3 | >95      | Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)<br>Aquatic Acute 1 (H400) | Xi;R36/38<br>N;R50              |

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16.

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

|                                   |  |
|-----------------------------------|--|
| <b>Eye Contact</b>                | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.                               |
| <b>Skin Contact</b>               | Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.                                      |
| <b>Ingestion</b>                  | Do not induce vomiting. Obtain medical attention.  |
| <b>Inhalation</b>                 | Move to fresh air. Obtain medical attention. Get medical attention if symptoms occur.  |
| <b>Protection of First-aiders</b> | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. |

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

No information available.

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

**Notes to Physician** Treat symptomatically.

## SECTION 5: FIREFIGHTING MEASURES

### 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Substance is nonflammable; use agent most appropriate to extinguish surrounding fire.

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

No information available.

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

Non-combustible, substance itself does not burn but may decompose upon heating to produce corrosive and/or toxic fumes. Do not allow run-off from fire fighting to enter drains or water courses.

#### **Hazardous Combustion Products**

Hydrogen iodide, Sodium oxides.

### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing.

### 6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

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

Sweep up or vacuum up spillage and collect in suitable container for disposal. Avoid dust formation.

### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Wear personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing. Do not breathe dust. Do not ingest.

### 7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep under nitrogen.

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## 7.3. Specific end use(s)

Use in laboratories

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

#### Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

#### Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

**Derived No Effect Level (DNEL)** No information available

| Route of exposure | Acute effects (local) | Acute effects (systemic) | Chronic effects (local) | Chronic effects (systemic) |
|-------------------|-----------------------|--------------------------|-------------------------|----------------------------|
| Oral              |                       |                          |                         |                            |
| Dermal            |                       |                          |                         |                            |
| Inhalation        |                       |                          |                         |                            |

**Predicted No Effect Concentration (PNEC)** No information available.

### 8.2. Exposure controls

#### Engineering Measures

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

#### Personal protective equipment

**Eye Protection** Goggles (European standard - EN 166)

**Hand Protection** Protective gloves

| Glove material | Breakthrough time | Glove thickness | EU standard | Glove comments        |
|----------------|-------------------|-----------------|-------------|-----------------------|
| Natural rubber | See manufacturers | -               | EN 374      | (minimum requirement) |
| Nitrile rubber | recommendations   |                 |             |                       |
| Neoprene       |                   |                 |             |                       |
| PVC            |                   |                 |             |                       |

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**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.  
To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly

**Large scale/emergency use** Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced  
**Recommended Filter type:** Particulates filter conforming to EN 143

**Small scale/Laboratory use** Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.  
**Recommended half mask:-** Particle filtering: EN149:2001  
When RPE is used a face piece Fit Test should be conducted

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

**Environmental exposure controls** Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

|  |                          |  |
|--|--------------------------|--|
| <b>Appearance</b>                              | White                    |  |
| <b>Physical State</b>                          | Powder Solid             |  |
| <b>Odor</b>                                    | Odorless                 |  |
| <b>Odor Threshold</b>                          | No data available        |  |
| <b>pH</b>                                      | 6-9                      | 50 g/l aq.sol                            |
| <b>Melting Point/Range</b>                     | 661 °C / 1221.8 °F       |  |
| <b>Softening Point</b>                         | No data available        |  |
| <b>Boiling Point/Range</b>                     | 1300 °C / 2372 °F        | @ 760 mmHg                               |
| <b>Flash Point</b>                             | Not applicable           | <b>Method -</b> No information available |
| <b>Evaporation Rate</b>                        | Not applicable           | Solid                                    |
| <b>Flammability (solid,gas)</b>                | No information available |  |
| <b>Explosion Limits</b>                        | No data available        |  |
| <b>Vapor Pressure</b>                          | 1.3 mbar @ 767 °C        |  |
| <b>Vapor Density</b>                           | Not applicable           | Solid                                    |
| <b>Specific Gravity / Density</b>              | 3.660                    |  |
| <b>Bulk Density</b>                            | No data available        |  |
| <b>Water Solubility</b>                        | 184 g/100ml (25°C)       |  |
| <b>Solubility in other solvents</b>            | No information available |  |
| <b>Partition Coefficient (n-octanol/water)</b> |                          |  |
| <b>Autoignition Temperature</b>                | Not applicable           |  |
| <b>Decomposition Temperature</b>               | No data available        |  |
| <b>Viscosity</b>                               | Not applicable           | Solid                                    |
| <b>Explosive Properties</b>                    | No information available |  |
| <b>Oxidizing Properties</b>                    | No information available |  |

### 9.2. Other information

ACR41957

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Molecular Formula I Na  
Molecular Weight 149.89

## SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity** None known, based on information available

**10.2. Chemical stability** Hygroscopic: Air sensitive: Light sensitive

### 10.3. Possibility of hazardous reactions

**Hazardous Polymerization** Hazardous polymerization does not occur.  
**Hazardous Reactions** No information available.

### 10.4. Conditions to avoid

Avoid dust formation. Incompatible products. Exposure to air. Exposure to light. Exposure to moisture.

### 10.5. Incompatible materials

Strong oxidizing agents. Strong acids. Powdered metal salts.

### 10.6. Hazardous decomposition products

Hydrogen iodide. Sodium oxides.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Product Information

#### (a) acute toxicity;

**Oral** Based on available data, the classification criteria are not met  
**Dermal** No data available  
**Inhalation** No data available

| Component     | LD50 Oral          | LD50 Dermal | LC50 Inhalation |
|---------------|--------------------|-------------|-----------------|
| Sodium iodide | 4340 mg/kg ( Rat ) |             |                 |

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

#### (d) respiratory or skin sensitization;

**Respiratory** No data available  
**Skin** No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

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|   |   |
|---|---|
| (i) STOT-repeated exposure;               | No data available   |
| Target Organs                             | No information available.   |
| (j) aspiration hazard;                    | Not applicable<br>Solid   |
| Other Adverse Effects                     | The toxicological properties have not been fully investigated. See actual entry in RTECS for complete information |
| Symptoms / effects,both acute and delayed | No information available  |

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### Ecotoxicity effects

Very toxic to aquatic organisms. The product contains following substances which are hazardous for the environment.

### 12.2. Persistence and degradability

#### Persistence

Soluble in water, Persistence is unlikely, based on information available.

#### Degradability

Not relevant for inorganic substances.

#### Degradation in sewage treatment plant

Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

### 12.3. Bioaccumulative potential

Bioaccumulation is unlikely

### 12.4. Mobility in soil

The product is water soluble, and may spread in water systems Will likely be mobile in the environment due to its water solubility. Highly mobile in soils

### 12.5. Results of PBT and vPvB assessment

No data available for assessment.

### 12.6. Other adverse effects

#### Endocrine Disruptor Information

This product does not contain any known or suspected endocrine disruptors

#### Persistent Organic Pollutant

This product does not contain any known or suspected substance

#### Ozone Depletion Potential

This product does not contain any known or suspected substance

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

#### Waste from Residues / Unused Products

Should not be released into the environment. Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

#### Contaminated Packaging

Dispose of this container to hazardous or special waste collection point.

#### European Waste Catalogue (EWC)

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

#### Other Information

Do not dispose of waste into sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not let this chemical enter the environment.

## SECTION 14: TRANSPORT INFORMATION

### IMDG/IMO

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**14.1. UN number** UN3077  
**14.2. UN proper shipping name** Environmentally hazardous substance, solid, n.o.s  
**14.3. Transport hazard class(es)** 9  
**14.4. Packing group** III

## ADR

**14.1. UN number** UN3077  
**14.2. UN proper shipping name** Environmentally hazardous substance, solid, n.o.s  
**14.3. Transport hazard class(es)** 9  
**14.4. Packing group** III

## IATA

**14.1. UN number** UN3077  
**14.2. UN proper shipping name** Environmentally hazardous substance, solid, n.o.s  
**14.3. Transport hazard class(es)** 9  
**14.4. Packing group** III

**14.5. Environmental hazards** Dangerous for the environment  
Product is a marine pollutant according to the criteria set by IMDG/IMO

**14.6. Special precautions for user** No special precautions required

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable, packaged goods

## SECTION 15: REGULATORY INFORMATION

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

**International Inventories** X = listed

| Component     | EINECS    | ELINCS | NLP | TSCA | DSL | NDSL | PICCS | ENCS | IECSC | AICS | KECL |
|---------------|-----------|--------|-----|------|-----|------|-------|------|-------|------|------|
| Sodium iodide | 231-679-3 | -      |     | X    | X   | -    | X     | X    | X     | X    | X    |

### National Regulations

| Component     | Germany - Water Classification (VwVwS) | Germany - TA-Luft Class |
|---------------|--|-------------------------|
| Sodium iodide | WGK 1                                  |                         |

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.

Take note of Dir 94/33/EC on the protection of young people at work

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

### 15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

## SECTION 16: OTHER INFORMATION

### Full text of R-phrases referred to under sections 2 and 3

R50 - Very toxic to aquatic organisms

R36/38 - Irritating to eyes and skin

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## Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H400 - Very toxic to aquatic life

## Legend

**CAS** - Chemical Abstracts Service

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**IECSC** - Chinese Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**WEL** - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

**LC50** - Lethal Concentration 50%

**NOEC** - No Observed Effect Concentration

**PBT** - Persistent, Bioaccumulative, Toxic

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

**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List

**ENCS** - Japanese Existing and New Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**NZIoC** - New Zealand Inventory of Chemicals

**TWA** - Time Weighted Average

**IARC** - International Agency for Research on Cancer

**PNEC** - Predicted No Effect Concentration

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association

**MARPOL** - International Convention for the Prevention of Pollution from Ships

**ATE** - Acute Toxicity Estimate

**VOC** - Volatile Organic Compounds

## **Key literature references and sources for data**

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

## **Training Advice**

Chemical incident response training.

|                         |                   |
|-------------------------|-------------------|
| <b>Creation Date</b>    | 12-Mar-2014       |
| <b>Revision Date</b>    | 15-Dec-2014       |
| <b>Revision Summary</b> | Update to Format. |

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

## **Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of Safety Data Sheet**