

Creation Date 15-Jan-2007

Revision Date 25-Aug-2023

Revision Number 4

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

1.1. Product identifier

Product Description: Cat No. : CAS No Molecular Formula <u>4-lodopyridine</u> <u>MO00014DA; MO00014EA; MO00014EB; MO00014FL; MO00014ZZ</u> 15854-87-2 C5 H4 I N

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

UK entity/business name

Thermo Fisher Scientific (Heysham), Shore Road, Port of Heysham Industrial Park, Heysham, Lancashire, LA3 2XY United Kingdom

EU entity/business name

Thermo Fisher Scientific Janssen Pharmaceuticalaan 3a 2440 Geel, Belgium

E-mail address

begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information **US** call: 001-800-227-6701 / **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

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Acute oral toxicity

Acute dermal toxicity Acute Inhalation Toxicity - Dusts and Mists Skin Corrosion/Irritation Serious Eye Damage/Eye Irritation Specific target organ toxicity - (single exposure)

Environmental hazards

Based on available data, the classification criteria are not met

Full text of Hazard Statements: see section 16



Signal Word

Warning

Hazard Statements

H319 - Causes serious eye irritation

- H315 Causes skin irritation
- H335 May cause respiratory irritation
- H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled

Precautionary Statements

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P332 + P313 - If skin irritation occurs: Get medical advice/attention

P337 + P313 - If eye irritation persists: Get medical advice/attention

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

2.3. Other hazards

This product does not contain any known or suspected endocrine disruptors

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

| Component | CAS No | EC No | Weight % | CLP Classification - Regulation (EC) No 1272/2008 |
|----------------|------------|-------|----------|---|
| 4-lodopyridine | 15854-87-2 | | >95 | STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H302) Acute Tox. 4 (H312) |

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Category 4 (H302) Category 4 (H312) Category 4 (H332) Category 2 (H315) Category 2 (H319) Category 3 (H335)

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| | | Acute Tox. 4 (H332) |
|--|--|---------------------|
| | | |

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

| General Advice | If symptoms persist, call a physician. |
|------------------------------------|--|
| Eye Contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. |
| Skin Contact | Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. |
| Ingestion | Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur. |
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. |
| Self-Protection of the First Aider | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. |
| 1.2 Most important symptoms and | offects, both courts and delayed |

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

None reasonably foreseeable.

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

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Combustion Products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO₂).

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

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

6.2. Environmental precautions

Should not be released into the environment.

6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

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/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. To maintain product quality: Store in freezer. Store under an inert atmosphere.

Technical Rules for Hazardous Substances (TRGS) 510 Class 11 Storage Class (LGK) (Germany)

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

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regulatory bodies

Derived No Effect Level (DNEL) / Derived Minimum Effect Level (DMEL)

No information available

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 ProtectionGoggles (European standard - EN 166)

Hand Protection Protective gloves

| Glove material Nitrile rubber Neoprene Natural rubber PVC | Breakthrough time See manufacturers recommendations | Glove thickness - | EU standard EN 374 | Glove comments (minimum requirement) |
|---|---|----------------------|-----------------------|---|
| Skin and body prote | ection Long sle | eved clothing. | | |

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 compatability, 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 |
| Environmental exposure controls | No information available. |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| Physical State | Solid | |
|--|---|-----------------------------------|
| Appearance Odor Odor Threshold Melting Point/Range Softening Point Boiling Point/Range Flammability (liquid) Flammability (solid,gas) Explosion Limits | Off-white No information available No data available 92 - 96 °C / 197.6 - 204.8 °F No data available No information available No information available No information available No data available | Solid |
| Flash Point Autoignition Temperature Decomposition Temperature pH Viscosity | No information available No data available No data available No information available Not applicable | Method - No information available |
| Water Solubility Solubility in other solvents Partition Coefficient (n-octanol/wat | Slightly soluble No information available er) | |
| Component 4-lodopyridine Vapor Pressure Density / Specific Gravity Bulk Density Vapor Density Particle characteristics | log Pow 2,032 No information available No data available No data available Not applicable No data available | Solid |
| 9.2. Other information | | |
| Meleculer Fermule | | |

Molecular FormulaC5 H4 I NMolecular Weight204.99Evaporation RateNot applicable - Solid

SECTION 10: STABILITY AND REACTIVITY

| 10.1. | Reactivity |
|-------|------------|
| | |

None known, based on information available

10.2. Chemical stability

Light sensitive.

10.3. Possibility of hazardous reactions

| Hazardous Polymerization Hazardous Reactions | No information available. None under normal processing. |
|---|--|
| 10.4. Conditions to avoid | Incompatible products. Exposure to light. |
| 10.5. Incompatible materials | Strong oxidizing agents. Strong bases. Strong acids. |

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10.6. Hazardous decomposition products

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Product Information (a) acute toxicity; Oral Category 4 Dermal Category 4 Inhalation Category 4 (b) skin corrosion/irritation; Category 2 (c) serious eye damage/irritation; Category 2 (d) respiratory or skin sensitization; No data available Respiratory Skin No data available No data available (e) germ cell mutagenicity; (f) carcinogenicity; No data available There are no known carcinogenic chemicals in this product (g) reproductive toxicity; No data available (h) STOT-single exposure; Category 3 Respiratory system. **Results / Target organs** No data available (i) STOT-repeated exposure; **Target Organs** No information available. Not applicable (j) aspiration hazard; Solid **Other Adverse Effects** The toxicological properties have not been fully investigated. Symptoms / effects, both acute and No information available. delayed

11.2. Information on other hazards

| Endocrine | Disrupting | Properties |
|-----------|------------|------------|
|-----------|------------|------------|

Assess endocrine disrupting properties for human health. This product does not contain any known or suspected endocrine disruptors.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity **Ecotoxicity effects**

Do not empty into drains.

12.2. Persistence and degradability No information available

12.3. Bioaccumulative potential No information available

| Component | log Pow | Bioconcentration factor (BCF) |
|---|--|-------------------------------|
| 4-lodopyridine | 2,032 | No data available |
| <u>12.4. Mobility in soil</u> | No information available | |
| 12.5. Results of PBT and vPvB assessment | No data available for assessment. | |
| <u>12.6. Endocrine disrupting</u> properties Endocrine Disruptor Information | This product does not contain any known or se | uspected endocrine disruptors |
| <u>12.7. Other adverse effects</u> Persistent Organic Pollutant Ozone Depletion Potential | This product does not contain any known or se This product does not contain any known or se | • |

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

| Waste from Residues/Unused Products | 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 Catalog, Waste Codes are not product specific, but application specific. |
| Other Information | Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. |

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

Not regulated

14.1. UN number 14.2. UN proper shipping name 14.3. Transport hazard class(es) 14.4. Packing group

| ADR | Not regulated |
|---|----------------------------------|
| <u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> <u>14.4. Packing group</u> | |
| IATA | Not regulated |
| <u>14.1. UN number</u> <u>14.2. UN proper shipping name</u> <u>14.3. Transport hazard class(es)</u> 14.4. Packing group | |
| 14.5. Environmental hazards | No hazards identified |
| 14.6. Special precautions for user | No special precautions required. |
| 14.7. Maritime transport in bulk according to IMO instruments | Not applicable, packaged goods |

SECTION 15: REGULATORY INFORMATION

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

International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

| Component | CAS No | EINECS | ELINCS | NLP | IECSC | TCSI | KECL | ENCS | ISHL |
|----------------|------------|--------|--------------------------------|-----|-------|------|------|-------|-------|
| 4-lodopyridine | 15854-87-2 | - | - | - | - | Х | - | - | - |
| | | | | | | | | | |
| Component | CAS No | TSCA | TSCA In notific Active-I | | DSL | NDSL | AICS | NZIoC | PICCS |
| 4-lodopyridine | 15854-87-2 | - | - | | - | - | - | - | - |

Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Authorisation/Restrictions according to EU REACH

Not applicable

| Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | 5 | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|----------------|------------|---|---|---|
| 4-lodopyridine | 15854-87-2 | - | - | - |

| Component | CAS No | Seveso III Directive (2012/18/EC) - | Seveso III Directive (2012/18/EC) - |
|----------------|------------|--|---|
| | | Qualifying Quantities for Major Accident | Qualifying Quantities for Safety Report |
| | | Notification | Requirements |
| 4-lodopyridine | 15854-87-2 | Not applicable | Not applicable |

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

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Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)? Not applicable

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 .

National Regulations

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

WGK Classification

Water endangering class = 3 (self classification)

15.2. Chemical safety assessment

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

SECTION 16: OTHER INFORMATION

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

H302 - Harmful if swallowed

H312 - Harmful in contact with skin

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H332 - Harmful if inhaled

H335 - May cause respiratory irritation

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 | TSCA - United States Toxic Substances Control Act Section 8(b) Inventory al DSL/NDSL - 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 |
|--|--|
| 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 | TWA - Time Weighted Average IARC - International Agency for Research on Cancer Predicted No Effect Concentration (PNEC) LD50 - Lethal Dose 50% EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative |
| 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 Key literature references and sources for data | 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 Compound) |

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https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

| Creation Date | 15-Jan-2007 |
|------------------|--|
| Revision Date | 25-Aug-2023 |
| Revision Summary | SDS sections updated, 1, 2, 9, 11, 12, 15, 16. |

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006. COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006

Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

End of Safety Data Sheet