

according to Regulation UK SI 2019/758 and UK SI 2020/1577 as amended

Revision Date 22-Sep-2023

Revision Number 7

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

1.1. Product identifier

Product Description: Cat No. : Synonyms CAS No Molecular Formula	N,N-Dimethylmethyleneiminium iodide 201010000; 201010100; 201010500 Eschenmoser's salt 33797-51-2 C3 H8 I N
1.2. Relevant identified uses of the	substance or mixture and uses advised against
Recommended Use Uses advised against	Laboratory chemicals. No Information available
1.3. Details of the supplier of the sa	afety data sheet
Company	UK entity/business name Fisher Scientific UK Bishop Meadow Road, Loughborough, Leicestershire LE11 5RG, 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 - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Skin Corrosion/Irritation

Category 2 (H315)

N,N-Dimethylmethyleneiminium iodide

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Category 2 (H319)

Category 3 (H335)

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

2.2. Label elements



Signal Word

Warning

Hazard Statements

H335 - May cause respiratory irritation

H319 - Causes serious eye irritation

H315 - Causes skin irritation

Precautionary Statements

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

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

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

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 - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567
N,N-Dimethylmethyleneammonium iodide	33797-51-2	EEC No. 251-680-2	97	STOT SE 3 (H335) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319)

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Ingestion Clean mouth with water. Get medical attention. Inhalation Remove from exposure, lie down. Remove to fresh air. 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.

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

Water spray. Carbon dioxide (CO₂). Dry chemical. Chemical 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), Hydrogen iodide.

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.

6.2. Environmental precautions

See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Sweep up and shovel into suitable 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

Avoid contact with skin and eyes. Do not breathe dust.

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

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 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

ACR20101

N,N-Dimethylmethyleneiminium iodide

Engineering Measures

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 Nitrile rubber Neoprene Natural rubber PVC	Breakthrough time See manufacturers recommendations	Glove thickness	EU standard EN 374	Glove comments (minimum requirement)			
kin and body prot	tection Wear ap	propriate protective of	ploves and clothing to p	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 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	No protective equipment is needed under normal use conditions.
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
Small scale/Laboratory use	Maintain adequate ventilation

Environmental exposure controls No information available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical State	Powder Solid	
Appearance Odor Odor Threshold Melting Point/Range Softening Point Boiling Point/Range Flammability (liquid) Flammability (solid,gas) Explosion Limits	Beige No information available No data available 219 °C / 426.2 °F No data available No information available Not applicable No information available No data available	Solid
Flash Point Autoignition Temperature Decomposition Temperature pH Viscosity Water Solubility Solubility in other solvents	No information available Not applicable No data available No information available Not applicable No information available No information available	Method - No information available

N,N-Dimethylmethyleneiminium iodide

Partition Coefficient (n-octanol/w	vater)
Vapor Pressure	No information available
Density / Specific Gravity	No data available
Bulk Density	No data available
Vapor Density	Not applicable
Particle characteristics	No data available

Solid

9.2. Other information

Molecular Formula Molecular Weight Evaporation Rate

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity	None known, based on information available
10.2. Chemical stability	Moisture sensitive.
10.3. Possibility of hazardous reacti	ons
Hazardous Polymerization Hazardous Reactions	No information available. No information available.
10.4. Conditions to avoid	Exposure to moist air or water.
10.5. Incompatible materials	Water. Strong oxidizing agents.

C3 H8 I N

Not applicable - Solid

185.01

10.6. Hazardous decomposition products

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

SECTION 11: TOXICOLOGICAL INFORMATION

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

Product Information	No acute toxicity information is available for this product
(a) acute toxicity; Oral Dermal Inhalation	No data available No data available No data available
(b) skin corrosion/irritation;	Category 2
(c) serious eye damage/irritation;	Category 2
(d) respiratory or skin sensitizatior Respiratory Skin	r; No data available 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;	Category 3
Results / Target organs	Respiratory system.
(i) STOT-repeated exposure;	No data available
Target Organs	No information available.
(j) aspiration hazard;	Not applicable Solid
Symptoms / effects,both acute and delayed	No information available.
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.
SE	CTION 12: ECOLOGICAL INFORMATION
12.1. Toxicity Ecotoxicity effects	Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

- **12.2. Persistence and degradability** No information available
- **12.3. Bioaccumulative potential** No information available
- 12.4. Mobility in soilNo information available
- <u>12.5. Results of PBT and vPvB</u> No data available for assessment. <u>assessment</u>
- 12.6. Endocrine disrupting properties

N,N-Dimethylmethyleneiminium iodide

Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors

12.7. Other adverse effects Persistent Organic Pollutant Ozone Depletion Potential

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

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
<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>	
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>	
ΙΑΤΑ	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>	
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

N,N-Dimethylmethyleneiminium iodide

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
N,N-Dimethylmethyleneammoniu m iodide	33797-51-2	251-680-2	-	-	-	Х	-	-	-
Component	CAS No	TSCA	TSCA In notific Active-I	ation -	DSL	NDSL	AICS	NZIoC	PICCS
N,N-Dimethylmethyleneammoniu m iodide	33797-51-2	-	-	-	-	-	-	-	-

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		REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
N,N-Dimethylmethyleneammonium iodide	33797-51-2	-	-	-

Seveso III Directive (2012/18/EC)

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
N,N-Dimethylmethyleneamm onium iodide	33797-51-2	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

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

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Legend

CAS - Chemical Abstracts Service TSCA - United States Toxic Substances Control Act Section 8(b) Inventory EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances PICCS - Philippines Inventory of Existing Chemical Substances ENCS - Japanese Existing and New Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances ENCS - Japanese Existing and New Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances NZIGC - New Zealand Inventory of Chemical Substances WEL - Workplace Exposure Limit ACGIH - American Conference of Governmental Industrial Hygienists DNEL - Derived No Effect Level RFE - Respiratory Protective Equipment LCS0 - Lethal Concentration 50% TWA - Time Weighted Average IARC - International Agency for Research on Cancer Predicted No Effect Ocncentration (PNEC) LD50 - Lethal Dose 50% ECS0 - Stifective Concentration 50% EC50 - Effective Concentration 50% NOEC - No Observed Effect Concerning the International Carriage of Dangerous Goods by Road ICAO/IATA - International Civil Aviation Organization/International Air Transport Association IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound) Key Ilterature references and sources for data btros: (ochan curvens on unifed metricing in the prevention on the prevention on the prevention on the pre		
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical SubstancesDSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances ListPICCS - Philippines Inventory of Chemical SubstancesSubstancesSubstances ListPICCS - Chinese Inventory of Existing Chemical SubstancesENCS - Japanese Existing and New Chemical SubstancesKECL - Korean Existing and Evaluated Chemical SubstancesALCS - Australian Inventory of Chemical SubstancesWEL - Workplace Exposure Limit ACGIH - American Conference of Governmental Industrial Hygienists DNEL - Derived No Effect LevelTWA - Time Weighted Average IARC - International Agency for Research on Cancer Predicted No Effect Concentration (PNEC) LD50 - Lethal Dose 50%PCS - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, ToxicPOW - Partition coefficient Octanol:Water vPvB - very Persistent, very BioaccumulativeADR - 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 EGF - Bioconcentration	CAS - Chemical Abstracts Service	
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PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical SubstancesENCS - Japanese Existing and New Chemical SubstancesWEL - 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, ToxicTWA - Time Weighted Average IARC - International Agency for Research on Cancer Predicted No Effect Concentration 50% EC50 - Lethal Concentration 50% POW - Partition coefficient Octanol:Water vPvB - very Persistent, very BioaccumulativeADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road IMO/IMDG - International Maritime OecD - Organisation for Economic Co-operation and Development BCF - Bioconcentration factorICAO/IATA - International Convention for the Prevention of Pollution from ShipsADR vert literature references and sources for dataAtte - Acute Toxicity Estimate VOC - (Volatile Organic Compound)		
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BCF - Bioconcentration factor VOC - (Volatile Organic Compound) Key literature references and sources for data VOC - (Volatile Organic Compound)	5	•
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TILIDS.//EUTID.EUTIDDA.EU/ITIDTTTALIDTEUTICAIS	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.

Revision Date	22-Sep-2023
Revision Summary	Not applicable.

This safety data sheet complies with Regulation UK SI 2019/758 and UK SI 2020/1577 as amended.

Disclaimer

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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