

Creation Date 22-Sep-2009 Revision Date 22-Aug-2023 Revision Number 7

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

1.1. Product identifier

Product Description: 2-Mercaptoacetamide (in Methanolic Ammonia Solution 10g/100ml approx.)

Cat No.: GK00437DA; GK00437EA; GK00437EB; GK00437ZZ

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

Flammable liquids Category 2 (H225)

Health hazards

Acute oral toxicity

Acute dermal toxicity

Category 3 (H301)

Category 3 (H311)

2-Mercaptoacetamide (in Methanolic Ammonia Solution 10g/100ml approx.)

Category 3 (H331) Category 1 B (H314)

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Skin Corrosion/Irritation
Serious Eye Damage/Eye Irritation

Acute Inhalation Toxicity - Vapors

Category 1 (H318) Category 1 (H370)

Specific target organ toxicity - (single exposure)

Environmental hazards

Chronic aquatic toxicity Category 3 (H412)

Full text of Hazard Statements: see section 16

2.2. Label elements



Signal Word

Danger

Hazard Statements

H225 - Highly flammable liquid and vapor

H301 + H311 + H331 - Toxic if swallowed, in contact with skin or if inhaled

H314 - Causes severe skin burns and eye damage

H370 - Causes damage to organs

H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

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

P301 + P330 + P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

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

P310 - Immediately call a POISON CENTER or doctor/physician

2.3. Other hazards

Stench

Toxic to terrestrial vertebrates

This product does not contain any known or suspected endocrine disruptors

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

Component	CAS No	EC No	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Methyl alcohol	67-56-1	200-659-6	81	Flam. Liq. 2 (H225) Acute Tox. 3 (H301)

2-Mercaptoacetamide (in Methanolic Ammonia Solution 10g/100ml approx.)

				Acute Tox. 3 (H311) Acute Tox. 3 (H331) STOT SE 1 (H370)
Acetamide, 2-mercapto-	758-08-7		10	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) STOT SE 3 (H335)
Ammonia	7664-41-7	EEC No. 231-635-3	9	Flam. Gas 2 (H221) Skin Corr. 1B (H314) Acute Tox. 3 (H331) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411) (EUH071)

Component	Specific concentration limits (SCL's)	M-Factor	Component notes
Methyl alcohol	STOT Single Exp. 1 :: >= 10	-	-
	STOT Single Exp. 2 :: 3 - < 10		
Ammonia	STOT SE 3 : C ≥ 5 %	1	-

Full text of Hazard Statements: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In

the case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required.

Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately.

Inhalation If not breathing, give artificial respiration. Do not use mouth-to-mouth method if victim

ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Remove to fresh

air. Immediate medical attention is required.

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

Causes burns by all exposure routes. Difficulty in breathing. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting: Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting

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

Notes to Physician Treat symptomatically. Symptoms may be delayed.

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SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Water mist may be used to cool closed containers. CO₂, dry chemical, dry sand, 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

The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

Hazardous Combustion Products

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

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. Remove all sources of ignition. Take precautionary measures against static discharges.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

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. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Take precautionary measures against static discharges.

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

2-Mercaptoacetamide (in Methanolic Ammonia Solution 10g/100ml approx.)

re-use. Wash hands before breaks and after work.

7.2. Conditions for safe storage, including any incompatibilities

Flammables area. Corrosives area. Keep away from heat, sparks and flame. Keep containers tightly closed in a dry, cool and well-ventilated place.

Technical Rules for Hazardous Substances (TRGS) 510 Storage Class (LGK) (Germany) Class 3

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

List source(s): **EU** - Commission Directive (EU) 2019/1831 of 24 October 2019 establishing a fifth list of indicative occupational exposure limit values pursuant to Council Directive 98/24/EC and amending Commission Directive 2000/39/EC **UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020. **IRE** - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and Safety Authority

Component	The United Kingdom	European Union	Ireland
Methyl alcohol	WEL - TWA: 200 ppm TWA;	TWA: 200 ppm 8 hr	TWA: 200 ppm 8 hr.
	266 mg/m³ TWA	TWA: 260 mg/m ³ 8 hr	TWA: 260 mg/m ³ 8 hr.
	WEL - STEL: 250 ppm	Skin	STEL: 600 ppm 15 min
	STEL; 333 mg/m ³ STEL		STEL: 780 mg/m ³ 15 min
	_		Skin
Ammonia	STEL: 35 ppm 15 min	TWA: 20 ppm (8h)	TWA: 20 ppm 8 hr.
	STEL: 25 mg/m ³ 15 min	TWA: 14 mg/m ³ (8h)	anhydrous
	TWA: 25 ppm 8 hr	STEL: 50 ppm (15min)	TWA: 14 mg/m ³ 8 hr.
	TWA: 18 mg/m ³ 8 hr	STEL: 36 mg/m ³ (15min)	anhydrous
			STEL: 50 ppm 15 min
			STEL: 36 mg/m ³ 15 min

Biological limit values

List source(s):

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

See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
Methyl alcohol		DNEL = 20mg/kg		DNEL = 20mg/kg
67-56-1 (81)		bw/day		bw/day
Ammonia		DNEL = 6.8mg/kg		DNEL = 6.8mg/kg
7664-41-7 (9)		bw/day		bw/day

Comp	onent	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
1	alcohol 1(81)	DNEL = 130mg/m ³	DNEL = 130mg/m ³	DNEL = 130mg/m ³	DNEL = 130mg/m ³
	nonia 1-7 (9)	DNEL = 36mg/m ³	DNEL = 47.6mg/m ³	DNEL = 14mg/m ³	DNEL = 47.6mg/m ³

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Predicted No Effect Concentration (PNEC)

See values below.

Component	Fresh water	Fresh water	Water Intermittent	Microorganisms in	Soil (Agriculture)
		sediment		sewage treatment	
Methyl alcohol	PNEC = 20.8mg/L	PNEC = 77mg/kg	PNEC = 1540mg/L	PNEC = 100mg/L	PNEC = 100mg/kg
67-56-1 (81)	-	sediment dw	_	-	soil dw
Ammonia	PNEC =		PNEC =		
7664-41-7 (9)	0.0011mg/L		0.0068mg/L		

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
Methyl alcohol 67-56-1 (81)	PNEC = 2.08mg/L	PNEC = 7.7mg/kg sediment dw			
Ammonia 7664-41-7 (9)	PNEC = 0.0011mg/L				

8.2. Exposure controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment. 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
Viton (R)	See manufacturers	-	EN 374	(minimum requirement)
	recommendations			

Skin and body protection Long sleeved 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: low boiling organic solvent Type AX Brown conforming to EN371 or Organic gases and vapours filter Type A Brown conforming to EN14387

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:- Valve filtering: EN405; or; Half mask: EN140; plus filter, EN

141

When RPE is used a face piece Fit Test should be conducted

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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

Physical State Liquid

Appearance Colorless Stench Odor

No data available **Odor Threshold** Melting Point/Range No data available No data available **Softening Point Boiling Point/Range** 64 °C / 147.2 °F

Estimated

Flammability (liquid) Highly flammable On basis of test data

Flammability (solid,gas) Not applicable Liquid

Explosion Limits No data available

Flash Point 12 °C / 53.6 °F Method - No information available

Autoignition Temperature No data available **Decomposition Temperature** No data available pН No information available **Viscosity** No data available Water Solubility No information available Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

log Pow Component Methyl alcohol -0.74

Vapor Pressure No data available **Density / Specific Gravity** No data available

Not applicable **Bulk Density** Liquid **Vapor Density** No data available (Air = 1.0)

Particle characteristics (liquid) Not applicable

9.2. Other information

Not an explosive Vapors may form explosive mixtures with air **Explosive Properties**

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity None known, based on information available

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerization does not occur. **Hazardous Polymerization**

Hazardous Reactions None under normal processing.

10.4. Conditions to avoid

Incompatible products. Excess heat. Keep away from open flames, hot surfaces and

sources of ignition.

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10.5. Incompatible materials

Strong oxidizing agents. Metals. Acids.

10.6. Hazardous decomposition products

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

SECTION 11: TOXICOLOGICAL INFORMATION

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

Product Information

(a) acute toxicity;

OralCategory 3DermalCategory 3InhalationCategory 3

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methyl alcohol	LD50 = 1187 – 2769 mg/kg (Rat)	LD50 = 17100 mg/kg (Rabbit)	LC50 = 128.2 mg/L (Rat) 4 h
Ammonia	LD50 = 350 mg/kg (Rat)	-	$LC50 = 9850 \text{ mg/m}^3 \text{ (Rat) 1 h}$ $LC50 = 13770 \text{ mg/m}^3 \text{ (Rat) 1 h}$
			COO = 13770 mg/m² (Nat) 1 m

(b) skin corrosion/irritation; Category 1 B

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Respiratory SkinNo data available
No data available

Component	Test method	Test species	Study result
Methyl alcohol	OECD Test Guideline 406	guinea pig	non-sensitising
67-56-1 (81)	Guinea Pig Maximisation Test		
	(GPMT)		

(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

(3)					
Component		Test method Test species / Duration		Study result	
	Methyl alcohol	OECD Test Guideline 416	Rat / Inhalation	NOAEC =	
	67-56-1 (81)		2 Generation	1.3 mg/l (air)	

(h) STOT-single exposure; Category 1

Results / Target organs Respiratory system, Optic nerve, Central nervous system (CNS).

(i) STOT-repeated exposure; No data available

No information available. **Target Organs**

No data available (i) aspiration hazard;

Other Adverse Effects The toxicological properties have not been fully investigated.

delayed

Symptoms / effects,both acute and Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Ingestion causes

severe swelling, severe damage to the delicate tissue and danger of perforation. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness,

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nausea and vomiting.

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**

Contains a substance which is:. Very toxic to aquatic organisms. The product contains

following substances which are hazardous for the environment.

Component	Freshwater Fish	Water Flea	Freshwater Algae
Methyl alcohol	Pimephales promelas: LC50 >	EC50 > 10000 mg/L 24h	
	10000 mg/L 96h		
Ammonia	LC50: 0.26 - 4.6 mg/L, 96h	EC50 = 25.4 mg/L, 48h	
	(Lepomis macrochirus)	(Daphnia magna)	
	LC50: = 1.17 mg/L, 96h	NOEC = 0.79 mg/L	
	flow-through (Lepomis	(Daphnia magna)	
	macrochirus)		
	LC50: 0.73 - 2.35 mg/L, 96h		
	(Pimephales promelas)		
	LC50: = 5.9 mg/L, 96h static		
	(Pimephales promelas)		
	LC50: > 1.5 mg/L, 96h (Poecilia		
	reticulata)		
	LC50: = 1.19 mg/L, 96h static		
	(Poecilia reticulata)		
	LC50: = 0.44 mg/L, 96h		
	(Cyprinus carpio)		

Component	Microtox	M-Factor
Methyl alcohol	EC50 = 39000 mg/L 25 min	
	EC50 = 40000 mg/L 15 min	
	EC50 = 43000 mg/L 5 min	
Ammonia	EC50 = 2.0 mg/L 5 min	1

12.2. Persistence and degradability No information available

Persistence Persistence is unlikely, based on information available.

Component	Degradability	
Methyl alcohol	DT50 ~ 17.2d	
67-56-1 (81)	>94% after 20d	

Degradation in sewage treatment plant

Contains substances known to be hazardous to the environment or not degradable in waste

water treatment plants.

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12.3. Bioaccumulative potential Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Methyl alcohol	-0.74	<10 dimensionless

12.4. Mobility in soil

The product contains volatile organic compounds (VOC) which will evaporate easily from all

surfaces Will likely be mobile in the environment due to its volatility. Disperses rapidly in

air

12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Endocrine disrupting

properties

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. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and empty container away from heat and sources of ignition.

European Waste Catalogue (EWC)

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

Other Information

Do not flush to sewer. Waste codes should be assigned by the user based on the application for which the product was used. Can be landfilled or incinerated, when in compliance with local regulations. Do not empty into drains. Large amounts will affect pH and harm aquatic organisms. Do not let this chemical enter the environment.

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

14.1. UN number

UN3286

14.2. UN proper shipping name

Flammable liquid, toxic, corrosive, n.o.s. (2-Mercaptoacetamide (in Methanolic Ammonia Solution 10g/100ml approx.)

Technical Shipping Name

14.3. Transport hazard class(es)
Subsidiary Hazard Class

3

14.4. Packing group

6.1, 8 II

ADR

14.1. UN number UN3286

2-Mercaptoacetamide (in Methanolic Ammonia Solution 10g/100ml approx.)

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14.2. UN proper shipping name Flammable liquid, toxic, corrosive, n.o.s.

Technical Shipping Name (2-Mercaptoacetamide (in Methanolic Ammonia Solution 10g/100ml approx.)

14.3. Transport hazard class(es) 3 **Subsidiary Hazard Class** 6.1, 8 14.4. Packing group Π

IATA

14.1. UN number UN3286

14.2. UN proper shipping name Flammable liquid, toxic, corrosive, n.o.s.

Technical Shipping Name (2-Mercaptoacetamide (in Methanolic Ammonia Solution 10g/100ml approx.)

14.3. Transport hazard class(es) **Subsidiary Hazard Class** 6.1, 8 14.4. Packing group Π

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
Methyl alcohol	67-56-1	200-659-6	-	-	X	Χ	KE-23193	X	Х
Acetamide, 2-mercapto-	758-08-7	-	-	-	-	-	-	-	-
Ammonia	7664-41-7	231-635-3	-	-	X	X	KE-01625	X	Х

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Methyl alcohol	67-56-1	X	ACTIVE	Х	-	X	Х	Х
Acetamide, 2-mercapto-	758-08-7	-	-	-	-	-	-	-
Ammonia	7664-41-7	Х	ACTIVE	Х	-	Х	Х	Х

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

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Methyl alcohol	67-56-1	-	Use restricted. See item 69. (see link for restriction details) Use restricted. See item 75. (see link for restriction details)	-
Acetamide, 2-mercapto-	758-08-7	_	-	_

2-Mercaptoacetamide (in Methanolic Ammonia Solution 10g/100ml approx.)

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Ammonia	7664-41-7	-	Use restricted. See item	-
			75.	
			(see link for restriction	
			details)	

https://echa.europa.eu/substances-restricted-under-reach

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
Methyl alcohol	67-56-1	500 tonne	5000 tonne
Acetamide, 2-mercapto-	758-08-7	Not applicable	Not applicable
Ammonia	7664-41-7	50 tonne	200 tonne

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 .

Take note of Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values

National Regulations

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

WGK Classification

Water endangering class = 2 (self classification)

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Methyl alcohol	WGK 2	Class I: 20 mg/m3 (Massenkonzentration)
Ammonia	WGK2	

Component	France - INRS (Tables of occupational diseases)
Methyl alcohol	Tableaux des maladies professionnelles (TMP) - RG 84

Component	Switzerland - Ordinance on the Reduction of Risk from handling of hazardous substances preparation (SR 814.81)	Switzerland - Ordinance on Incentive Taxes on Volatile Organic Compounds (OVOC)	Switzerland - Ordinance of the Rotterdam Convention on the Prior Informed Consent Procedure
Methyl alcohol	Prohibited and Restricted	Group I	
67-56-1 (81)	Substances		

15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

SECTION 16: OTHER INFORMATION

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

H301 - Toxic if swallowed

H311 - Toxic in contact with skin

H331 - Toxic if inhaled

H314 - Causes severe skin burns and eye damage

H318 - Causes serious eye damage

H370 - Causes damage to organs

H412 - Harmful to aquatic life with long lasting effects

2-Mercaptoacetamide (in Methanolic Ammonia Solution 10g/100ml approx.)

H221 - Flammable gas

H225 - Highly flammable liquid and vapor

H315 - Causes skin irritation

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

H400 - Very toxic to aquatic life

H411 - Toxic to aquatic life with long lasting effects

EUH071 - Corrosive to the respiratory tract

Legend

CAS - Chemical Abstracts Service

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

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

EINECS/ELINCS - European Inventory of Existing Commercial Chemical 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

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)

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals

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

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards On basis of test data **Health Hazards** Calculation method Calculation method **Environmental hazards**

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.

Chemical incident response training.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts.

Creation Date 22-Sep-2009 **Revision Date** 22-Aug-2023

Revision Summary SDS sections updated, 2, 14, 1, 9, 11, 12, 15, 16.

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

Revision Date 22-Aug-2023

COMMISSION REGULATION (EU) 2020/878 amending Annex II to Regulation (EC) No 1907/2006

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End of Safety Data Sheet