

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

Creation Date 22-Sep-2009 Revision Date 21-Sep-2023 Revision Number 11

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

#### 1.1. Product identifier

Product Description: <u>m-Xylylenediamine</u>

Cat No.: 141020000; 141020050; 141021000; 141025000

Synonyms 1,3-Bis(aminomethyl)benzene; MXDA; m-Xylene-alpha, alpha'-diamine

 CAS No
 1477-55-0

 EC No
 216-032-5

 Molecular Formula
 C8 H12 N2

#### 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

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**

#### m-Xylylenediamine Revision Date 21-Sep-2023

Acute oral toxicity Acute Inhalation Toxicity - Vapors Skin Corrosion/Irritation	Category 4 (H302) Category 4 (H332) Category 1 B (H314)
Serious Eye Damage/Eye Irritation Skin Sensitization	Category 1 (H318) Category 1 (H317)
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**

H302 - Harmful if swallowed

H332 - Harmful if inhaled

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H412 - Harmful to aquatic life with long lasting effects

EUH071 - Corrosive to the respiratory tract

## **Precautionary Statements**

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

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

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB)

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
m-Xylenealpha., .alpha.'-diamine	1477-55-0	EEC No. 216-032-5	>95	Acute Tox. 4 (H302)

m-Xylylenediamine	Revision Date 21-Sep-2023

	Acute Tox. 4 (H332) Skin Corr. 1B (H314) Skin Sens. 1 (H317)
	Eye Dam. 1 (H318)
	Aquatic Chronic 3 (H412) EUH071

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.

Immediate medical attention is required.

**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. May cause allergic skin reaction. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing: Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible

perforation of stomach or esophagus should be investigated

## 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 (CO<sub>2</sub>), Dry chemical, Alcohol resistant foam, CO<sub>2</sub>, 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

#### m-Xylylenediamine

Revision Date 21-Sep-2023

Thermal decomposition can lead to release of irritating gases and vapors. The product causes burns of eyes, skin and mucous membranes.

#### **Hazardous Combustion Products**

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).

#### 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.

#### 6.2. Environmental precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

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

Keep in suitable, closed containers for disposal. Soak up with inert absorbent material.

#### 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.

#### **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

Corrosives area. Keep containers tightly closed in a dry, cool and well-ventilated place.

**Technical Rules for Hazardous Substances (TRGS) 510** Class 8A Storage Class (LGK) (Germany)

#### 7.3. Specific end use(s)

Use in laboratories

Revision Date 21-Sep-2023

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1. Control parameters

#### **Exposure limits**

List source(s): Safety Authority IRE - 2021 Code of Practice for the Chemical Agents Regulations, Schedule 1. Published by the Health and

 Component
 The United Kingdom
 European Union
 Ireland

 m-Xylene-.alpha., .alpha.'-diamine
 TWA: 0.1 mg/m³ 8 hr.

 STEL: 0.3 mg/m³ 15 min

## **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)

See table for values

Component	Acute effects local (Dermal)	Acute effects systemic (Dermal)	Chronic effects local (Dermal)	Chronic effects systemic (Dermal)
m-Xylenealpha., .alpha.'-diamine 1477-55-0 ( >95 )				DNEL = 0.33mg/kg bw/day DNEL = 1.33mg/kg bw/day

Component	Acute effects local (Inhalation)	Acute effects systemic (Inhalation)	Chronic effects local (Inhalation)	Chronic effects systemic (Inhalation)
	(IIIIIaiatioii)	Systemic (ilinaiation)	(IIIIIaiatioii)	Systemic (initialation)
m-Xylenealpha.,		DNEL = $6.99$ mg/m <sup>3</sup>	$DNEL = 0.2mg/m^3$	$DNEL = 1.2mg/m^3$
.alpha.'-diamine				$DNEL = 2.33 mg/m^3$
1477-55-0 ( >95 )				

## **Predicted No Effect Concentration (PNEC)**

See values below.

Component	Fresh water	Fresh water	Water Intermittent	Microorganisms in	Soil (Agriculture)
		sediment		sewage treatment	
m-Xylenealpha.,	PNEC = 0.094mg/L	PNEC = 12.4mg/kg	PNEC = 0.152mg/L	PNEC = 10mg/L	PNEC = 2.44mg/kg
.alpha.'-diamine	PNEC =	sediment dw	PNEC =	PNEC = 3.1mg/L	soil dw
1477-55-0 (>95)	0.00159mg/L	PNEC = 10.5 mg/kg	0.0159mg/L		PNEC = 2.1mg/kg
		sediment dw			soil dw

Component	Marine water	Marine water sediment	Marine water intermittent	Food chain	Air
m-Xylenealpha.,	PNEC =	PNEC = 1.24mg/kg			
.alpha.'-diamine	0.0094mg/L	sediment dw			
1477-55-0 (>95)	PNEC =	PNEC = 1.05mg/kg			
	0.000159mg/L	sediment dw			

#### 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

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m-Xylylenediamine Revision Date 21-Sep-2023

control hazardous materials at source

Personal protective equipment

**Eye Protection** Wear safety glasses with side shields (or goggles) Goggles (European standard - EN 166)

Hand Protection Protective gloves

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

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: Particulates filter conforming to EN 143 Ammonia and organic

ammonia derivatives filter Type K Green 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

@ 760 mmHg

Liquid

141

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

**Environmental exposure controls** Prevent product from entering drains.

## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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

Physical State Liquid

AppearanceLight yellowOdorSlight AmmoniacalOdor ThresholdNo data availableMelting Point/Range14.1 °C / 57.4 °FSoftening PointNo data availableBoiling Point/Range265 °C / 509 °F

Flammability (liquid) No data available

Flammability (solid,gas) Not applicable Explosion Limits No data available

Flash Point 112 °C / 233.6 °F Method - CC (closed cup)

Autoignition TemperatureNo data availableDecomposition TemperatureNo data available

pH 12 @ 25°C (20 %)

Viscosity No data available

m-Xylylenediamine Revision Date 21-Sep-2023

Water Solubility Soluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

**Component** log Pow m-Xylene-.alpha., .alpha.'-diamine 0.18

Vapor Pressure 23 hPa @ 20 °C

Density / Specific Gravity 1.050

Bulk DensityNot applicableLiquidVapor Density4.70(Air = 1.0)

Particle characteristics Not applicable (liquid)

9.2. Other information

Molecular FormulaC8 H12 N2Molecular Weight136.2Explosive PropertiesNot explosive

Oxidizing Properties Not oxidising (based on the chemical structure of the substance and oxidation states of the

constituent elements)

## **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 PolymerizationNo information available.Hazardous ReactionsNone under normal processing.

10.4. Conditions to avoid

Exposure to moisture.

10.5. Incompatible materials

Acids. Acid anhydrides. Acid chlorides. Chloroformates.

10.6. Hazardous decomposition products

Nitrogen oxides (NOx). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## **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** Based on available data, the classification criteria are not met

Inhalation Category 4

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
m-Xylenealpha., .alpha.'-diamine	LD50 = 660 mg/kg ( Rat )	LD50 = 2 g/kg ( Rabbit )	LC50 = 1.38 mg/L (Rat) 4 h LC50 = 1.16 mg/L (Rat) 4 h

m-Xylylenediamine Revision Date 21-Sep-2023

Category 1 B

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

(b) skin corrosion/irritation;

Respiratory No data available

Skin Category 1

May cause sensitization by skin contact

(e) germ cell mutagenicity; No data available

No data available (f) carcinogenicity;

There are no known carcinogenic chemicals in this product

No data available (g) reproductive toxicity;

No data available (h) STOT-single exposure;

No data available (i) STOT-repeated exposure;

None known. **Target Organs** 

(j) aspiration hazard; No data available

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

delayed

Symptoms / effects,both acute and Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated.

#### 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** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not empty into drains. Do not flush into surface water or sanitary sewer

system. The product contains following substances which are hazardous for the environment. Contains a substance which is:. Harmful to aquatic organisms.

Component	Freshwater Fish	Water Flea	Freshwater Algae
m-Xylenealpha., .alpha.'-diamine	LC50: = 87.6 mg/L, 96h semi-static (Oryzias latipes)	EC50: 16 mg/L/48h	

m-Xylylenediamine

**12.2. Persistence and degradability** Not readily biodegradable

Persistence Persistence is unlikely.

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

**treatment plant** water treatment plants.

12.3. Bioaccumulative potential Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
m-Xylenealpha., .alpha.'-diamine	0.18	No data available

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

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent

Revision Date 21-Sep-2023

and very bioaccumulative (vPvB).

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.

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. Do not empty into drains. Large amounts will affect pH and harm aquatic organisms. Do not let this chemical enter the environment.

Solutions with high pH-value must be neutralized before discharge.

## **SECTION 14: TRANSPORT INFORMATION**

#### IMDG/IMO

<u>14.1. UN number</u> UN2735

**14.2. UN proper shipping name** AMINES, LIQUID, CORROSIVE, N.O.S.

Technical Shipping Name (M-XYLYLENEDIAMINE)

14.3. Transport hazard class(es) 8
14.4. Packing group II

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# m-Xylylenediamine

#### ADR

**14.1. UN number** UN2735

**14.2. UN proper shipping name** AMINES, LIQUID, CORROSIVE, N.O.S.

Technical Shipping Name (M-XYLYLENEDIAMINE)

14.3. Transport hazard class(es) 8 14.4. Packing group II

#### IATA

**14.1. UN number** UN2735

14.2. UN proper shipping name AMINES, LIQUID, CORROSIVE, N.O.S.

Technical Shipping Name (M-XYLYLENEDIAMINE)

14.3. Transport hazard class(es) 8 14.4. Packing group II

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**

China, X = listed, Australia, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

m-Xylenealpha., .alpha.'-diamine  1477-55-0  216-032-5  -	ne 1477-55-0 216-032-5 -	nealpha., .alpha.'-diamine

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
m-Xylenealpha., .alpha.'-diamine	1477-55-0	Х	ACTIVE	X	-	X	X	X

**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)
m-Xylenealpha., .alpha.'-diamine	1477-55-0	-	-	-

#### 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
m-Xylenealpha., .alpha.'-diamine	1477-55-0	Not applicable	Not applicable

ACR14102

Revision Date 21-Sep-2023

m-Xylylenediamine

Revision Date 21-Sep-2023

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** 

See table for values

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
m-Xylenealpha.,	WGK2	
.alpha.'-diamine		

	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
m-Xylenealpha., .alpha.'-diamine 1477-55-0 ( >95 )		Prohibited and Restricted Substances		

## 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

H332 - Harmful if inhaled

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H412 - Harmful 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) Inventory

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances Substances List

PICCS - Philippines Inventory of Chemicals and Chemical Substances **ENCS** - Japanese Existing and New Chemical Substances **IECSC** - Chinese Inventory of Existing Chemical Substances

AICS - Australian Inventory of Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances NZIoC - New Zealand Inventory of Chemicals

#### m-Xylylenediamine

Revision Date 21-Sep-2023

TWA - Time Weighted Average

EC50 - Effective Concentration 50%

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

LD50 - Lethal Dose 50%

Transport Association

ATE - Acute Toxicity Estimate VOC - (Volatile Organic Compound)

IARC - International Agency for Research on Cancer Predicted No Effect Concentration (PNEC)

ICAO/IATA - International Civil Aviation Organization/International Air

MARPOL - International Convention for the Prevention of Pollution from

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

Key literature references and sources for data

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.

Ships

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.

22-Sep-2009 **Creation Date Revision Date** 21-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**

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**