Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

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

Product Identifier
Perihalan Produk: **Carbon conductive cement adhesive**
Product Description: **Carbon conductive cement adhesive**
Cat No. : 41212

Relevant identified uses of the substance or mixture and uses advised against
Recommended Use Laboratory chemicals.
Uses advised against No Information available

Company

Thermo Fisher Scientific Fisher Scientific (M) Sdn Bhd
Hap Seng Business Park, Lot 01-03, 01-04 Aras 1 Unity Square,
No 12, Persiaran Perusahaan, Seksyen 23, 40300 Shah Alam,
Selangor Darul Ehsan, Malaysia.
Main line: +60 3-5525 7888

Supplier

E-mail address Enquiry.my@thermofisher.com

Emergency Telephone Number

Tel: +03-5525 7888
CHEMTREC Malaysia **1-800-815-308** (Malay)
CHEMTREC Malaysia (Kuala Lumpur) **+(60)-327884561** (Malay)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Aspiration Toxicity	Category 1 (H304)
Skin Corrosion/Irritation	Category 2 (H315)
Serious Eye Damage/Eye Irritation	Category 2 (H319)
Specific target organ toxicity - (repeated exposure)	Category 2 (H373)

Label Elements

Signal Word **Danger**

Hazard Statements
H304 - May be fatal if swallowed and enters airways

H315 - Causes skin irritation
H319 - Causes serious eye irritation
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary Statements
Prevention
P264 - Wash face, hands and any exposed skin thoroughly after handling
P280 - Wear protective gloves/protective clothing/eye protection/face protection
Response
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P314 - Get medical advice/attention if you feel unwell
P331 - Do NOT induce vomiting
P332 + P313 - If skin irritation occurs: Get medical advice/attention
P337 + P313 - If eye irritation persists: Get medical advice/attention
P362 + P364 - Take off contaminated clothing and wash it before reuse
Storage
P403 - Store in a well-ventilated place
Disposal
P501 - Dispose of contents/ container to an approved waste disposal plant

Other Hazards
EUH066 - Repeated exposure may cause skin dryness or cracking

Contains a known or suspected endocrine disruptor
Contains a substance on the National Authorities Endocrine Disruptor Lists

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
Proprietary non-hazardous ingredients	N/A	25 - 50
Xylenes (o-, m-, p- isomers)	1330-20-7	10 - 25
Methyl ethyl ketone	78-93-3	10 - 25
Acetone	67-64-1	10 - 25
Propylene glycol monomethyl ether acetate	108-65-6	5 - 10
Ethyl acetate	141-78-6	5 - 10

SECTION 4: FIRST AID MEASURES

Description of 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. Do NOT induce vomiting. Call a physician or poison control center immediately. If vomiting occurs naturally, have victim lean forward.

Inhalation Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if

symptoms occur. Risk of serious damage to the lungs (by aspiration).

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.

Most important symptoms and effects, both acute and delayed

None reasonably foreseeable. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. Symptoms may be delayed.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

Extinguishing media which must not be used for safety reasons

No information available.

Special hazards arising from the substance or mixture

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

Carbon monoxide (CO), Carbon dioxide (CO_2), Thermal decomposition can lead to release of irritating gases and vapors.

Advice for fire-fighters

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

Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation. Use personal protective equipment as required.

Environmental precautions

Do not flush into surface water or sanitary sewer system.

Methods and Material for Containment and Cleaning Up

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

Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

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.

Conditions for Safe Storage, Including any Incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Keep away from heat, sparks and flame.

Specific End Uses
Use in laboratories.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Component	Malaysia	ACGIH TLV	OSHA PEL
Xylenes (o-, m-, p- isomers)		TWA: 20 ppm	(Vacated) TWA: 100 ppm (Vacated) TWA: 435 mg/m³ (Vacated) STEL: 150 ppm (Vacated) STEL: 655 mg/m³ TWA: 100 ppm TWA: 435 mg/m³
Methyl ethyl ketone		TWA: 200 ppm STEL: 300 ppm	(Vacated) TWA: 200 ppm (Vacated) TWA: 590 mg/m³ (Vacated) STEL: 300 ppm (Vacated) STEL: 885 mg/m³ TWA: 200 ppm TWA: 590 mg/m³
Acetone		TWA: 250 ppm STEL: 500 ppm	(Vacated) TWA: 750 ppm (Vacated) TWA: 1800 mg/m³ (Vacated) STEL: 2400 mg/m³ (Vacated) STEL: 1000 ppm TWA: 1000 ppm TWA: 2400 mg/m³
Ethyl acetate		TWA: 400 ppm	(Vacated) TWA: 400 ppm (Vacated) TWA: 1400 mg/m³ TWA: 400 ppm TWA: 1400 mg/m³

Component	European Union	The United Kingdom	Germany
Xylenes (o-, m-, p- isomers)	TWA: 50 ppm (8h) TWA: 221 mg/m³ (8h) STEL: 100 ppm (15min) STEL: 442 mg/m³ (15min) Skin	STEL: 100 ppm 15 min STEL: 441 mg/m³ 15 min TWA: 50 ppm 8 hr TWA: 220 mg/m³ 8 hr Skin	TWA: 50 ppm (8 Stunden). AGW - exposure factor 2 TWA: 220 mg/m³ (8 Stunden). AGW - exposure factor 2 TWA: 50 ppm (8 Stunden). MAK all isomers TWA: 220 mg/m³ (8 Stunden). MAK all isomers Höhepunkt: 100 ppm Höhepunkt: 440 mg/m³ Haut Haut all isomers
Methyl ethyl ketone	TWA: 200 ppm (8h) TWA: 600 mg/m³ (8h) STEL: 300 ppm (15min) STEL: 900 mg/m³ (15min)	STEL: 300 ppm 15 min STEL: 899 mg/m³ 15 min TWA: 200 ppm 8 hr TWA: 600 mg/m³ 8 hr Skin	TWA: 200 ppm (8 Stunden). AGW - exposure factor 1 TWA: 600 mg/m³ (8 Stunden). AGW - exposure factor 1 TWA: 200 ppm (8 Stunden). MAK TWA: 600 mg/m³ (8 Stunden). MAK Höhepunkt: 200 ppm Höhepunkt: 600 mg/m³ Haut
Acetone	TWA: 500 ppm (8h) TWA: 1210 mg/m³ (8h)	TWA: 500 ppm TWA: 1210 mg/m³ STEL: 1500 ppm STEL: 3620 mg/m³	TWA: 500 ppm TWA: 1200 mg/m³

Propylene glycol monomethyl ether acetate	TWA: 50 ppm (8h) TWA: 275 mg/m³ (8h) STEL: 100 ppm (15min) STEL: 550 mg/m³ (15min) Skin	STEL: 100 ppm 15 min STEL: 548 mg/m³ 15 min TWA: 50 ppm 8 hr TWA: 274 mg/m³ 8 hr Skin	TWA: 50 ppm (8 Stunden). AGW - exposure factor 1 TWA: 270 mg/m³ (8 Stunden). AGW - exposure factor 1 TWA: 50 ppm (8 Stunden). MAK TWA: 270 mg/m³ (8 Stunden). MAK Höhepunkt: 50 ppm Höhepunkt: 270 mg/m³
Ethyl acetate	TWA: 734 mg/m³ (8h) TWA: 200 ppm (8h) STEL: 1468 mg/m³ (15min) STEL: 400 ppm (15min)	STEL: 1468 mg/m³ 15 min STEL: 400 ppm 15 min TWA: 734 mg/m³ 8 hr TWA: 200 ppm 8 hr	TWA: 200 ppm (8 Stunden). AGW - exposure factor 2 TWA: 730 mg/m³ (8 Stunden). AGW - exposure factor 2 TWA: 200 ppm (8 Stunden). MAK TWA: 750 mg/m³ (8 Stunden). MAK Höhepunkt: 400 ppm Höhepunkt: 1500 mg/m³

Exposure Controls

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment.

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

Hand Protection Protective gloves

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

Recommended Filter type: low boiling organic solvent Type AX Brown conforming to EN371
To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly
When RPE is used a face piece Fit Test should be conducted

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

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance Black

Physical State Liquid paste Solid

Odor Solvent-like

Odor Threshold No data available

pH	No information available	
Melting Point/Range	No data available	
Softening Point	No data available	
Boiling Point/Range	55 °C / 131 °F	
Flash Point	-19 °C / -2.2 °F	**Method -** No information available
Evaporation Rate	Not applicable	Solid
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	**Lower** 1% **Upper** 13%	
Vapor Pressure	No data available	
Vapor Density	Not applicable	Solid
Specific Gravity / Density	No data available	
Bulk Density	Not applicable	Liquid
Water Solubility	Partially soluble	
Solubility in other solvents	No information available	

Partition Coefficient (n-octanol/water)

Component	**log Pow**
Xylenes (o-, m-, p- isomers)	3.15
Methyl ethyl ketone	0.29
Acetone	-0.24
Propylene glycol monomethyl ether acetate	1.2
Ethyl acetate	0.73

Autoignition Temperature	315 °C / 599 °F	
Decomposition Temperature	No data available	
Viscosity	Not applicable	Solid
Explosive Properties		Vapors may form explosive mixtures with air
Oxidizing Properties	No information available	

SECTION 10: STABILITY AND REACTIVITY

Reactivity

None known, based on information available.

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization	No information available.
Hazardous Reactions	None under normal processing.

Conditions to Avoid

Keep away from open flames, hot surfaces and sources of ignition.

Incompatible Materials

None known.

Hazardous Decomposition Products

Carbon monoxide (CO). Carbon dioxide (CO_2). Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Product Information

(a) acute toxicity;

Oral Based on available data, the classification criteria are not met
Dermal Based on available data, the classification criteria are not met
Inhalation Based on available data, the classification criteria are not met

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Xylenes (o-, m-, p- isomers)	LD50 = 3500 mg/kg (Rat)	LD50 > 4350 mg/kg (Rabbit)	29.08 mg/L [MOE Risk Assessment Vol.1, 2002]
Methyl ethyl ketone	LD50 = 2483 mg/kg (Rat)	LD50 = 5000 mg/kg (Rabbit)	LC50 = 11700 ppm (Rat) 4 h
Acetone	5800 mg/kg (Rat)	> 15800 mg/kg (rabbit) > 7400 mg/kg (rat)	76 mg/l, 4 h, (rat)
Propylene glycol monomethyl ether acetate	LD50 = 8532 mg/kg (Rat)	LD50 > 5 g/kg (Rabbit)	LC50 = 16000 mg/m³ (Rat) 6 h
Ethyl acetate	10,200 mg/kg (Rat)	> 20 mL/kg (Rabbit) > 18000 mg/kg (Rabbit)	58 mg/l (rat; 8 h)

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

Respiratory No data available
Skin No data available

Component	Test method	Test species	Study result
Acetone 67-64-1 (10 - 25)	Guinea Pig Maximisation Test (GPMT)	guinea pig	non-sensitising
Ethyl acetate 141-78-6 (5 - 10)	OECD Test Guideline 406	guinea pig	- non-sensitising

(e) germ cell mutagenicity; No data available

Component	Test method	Test species	Study result
Acetone 67-64-1 (10 - 25)	OECD Test Guideline 471 AMES test ----------	in vivo ----------	negative ----------

	OECD Test Guideline 476 Mammalian Gene cell mutation	in vitro	negative
Ethyl acetate 141-78-6 (5 - 10)	OECD Test Guideline 471 AMES test	in vitro Bacteria	negative
	OECD Test Guideline 473 Chromosomal aberration assay	in vitro Mammalian	negative
	OECD Test Guideline 476 Gene cell mutation	in vitro Mammalian	negative
	OECD Test Guideline 474 Mouse micronucleus assay	in vivo Mammalian	negative

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

Component	Test method	Test species / Duration	Study result
Ethyl acetate 141-78-6 (5 - 10)	OECD Test Guideline 416	Oral mouse 2 Generation	NOAEL = 26400 mg/kg bw/day
	OECD Test Guideline 414	Inhalation Rat	NOAEC = 73300 mg/m³

(h) STOT-single exposure; No data available

Results / Target organs Central nervous system (CNS).

(i) STOT-repeated exposure; Category 2

Target Organs Heart, Liver, Kidney.

(j) aspiration hazard; Category 1

Symptoms / effects,both acute and delayed Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Endocrine Disrupting Properties
Assess endocrine disrupting properties for human health
.
Contains a substance on the National Authorities Endocrine Disruptor Lists

Component	EU National Authorities Endocrine Disruptor Lists - Health
Methyl ethyl ketone 78-93-3 (10 - 25)	List II

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity effects The product contains following substances which are hazardous for the environment.
Contains a substance which is:. Very toxic to aquatic organisms.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Xylenes (o-, m-, p- isomers)	LC50: 30.26 - 40.75 mg/L, 96h static	LC50: = 0.6 mg/L, 48h (Gammarus lacustris)		EC50 = 0.0084 mg/L 24 h

	(Poecilia reticulata) LC50: = 780 mg/L, 96h semi-static (Cyprinus carpio) LC50: 23.53 - 29.97 mg/L, 96h static (Pimephales promelas) LC50: > 780 mg/L, 96h (Cyprinus carpio) LC50: 7.711 - 9.591 mg/L, 96h static (Lepomis macrochirus) LC50: = 19 mg/L, 96h (Lepomis macrochirus) LC50: 13.1 - 16.5 mg/L, 96h flow-through (Lepomis macrochirus) LC50: 13.5 - 17.3 mg/L, 96h (Oncorhynchus mykiss) LC50: 2.661 - 4.093 mg/L, 96h static (Oncorhynchus mykiss) LC50: = 13.4 mg/L, 96h flow-through (Pimephales promelas)	EC50: = 3.82 mg/L, 48h (water flea)		
Methyl ethyl ketone	Lepomis macrochirus: LC50=3,22 g/L 96 h	EC50: = 5091 mg/L, 48h (Daphnia magna) EC50: 4025 - 6440 mg/L, 48h Static (Daphnia magna) EC50: > 520 mg/L, 48h (Daphnia magna)		EC50 = 3403 mg/L 30 min EC50 = 3426 mg/L 5 min
Acetone	Oncorhynchus mykiss: LC50 = 5540 mg/l 96h Alburnus alburnus: LC50 = 11000 mg/l 96h Leuciscus idus: LC50 = 11300 mg/L/48h Salmo gairdneri: LC50 = 6100 mg/L/24h	EC50 = 8800 mg/L/48h EC50 = 12700 mg/L/48h EC50 = 12600 mg/L/48h	NOEC = 430 mg/l (algae; 96 h)	EC50 = 14500 mg/L/15 min
Propylene glycol monomethyl ether acetate	LC50: = 161 mg/L, 96h static (Pimephales promelas)	EC50: > 500 mg/L, 48h (Daphnia magna)		
Ethyl acetate	Fathead minnow: LC50: 230 mg/l/ 96h Gold orfe: LC50: 270 mg/L/48h	EC50 = 717 mg/L/48h	EC50 = 3300 mg/L/48h	EC50 = 1180 mg/L 5 min EC50 = 1500 mg/L 15 min EC50 = 5870 mg/L 15 min EC50 = 7400 mg/L 2 h

Persistence and degradability No information available

Persistence Persistence is unlikely, based on information available.

Component	Degradability
Methyl ethyl ketone 78-93-3 (10 - 25)	98% (28d)
Acetone 67-64-1 (10 - 25)	91 % (28 d) (OECD 301 B)
Ethyl acetate 141-78-6 (5 - 10)	79 % (20 d) (OECD 301 D)

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

Bioaccumulative potential Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Xylenes (o-, m-, p- isomers)	3.15	0.6 - 15 dimensionless
Methyl ethyl ketone	0.29	No data available
Acetone	-0.24	0.69 dimensionless
Propylene glycol monomethyl ether acetate	1.2	No data available
Ethyl acetate	0.73	30 dimensionless

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.

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

Other adverse effects No information available

SECTION 13: DISPOSAL CONSIDERATIONS

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

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

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

UN-No UN1133
Hazard Class 3
Packing Group II
Proper Shipping Name ADHESIVES

Road and Rail Transport

UN-No UN1133
Hazard Class 3
Packing Group II
Proper Shipping Name ADHESIVES

IATA

UN-No UN1133
Hazard Class 3
Packing Group II
Proper Shipping Name ADHESIVES

Special Precautions for User No special precautions required

SECTION 15: REGULATORY INFORMATION

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

International Inventories X = listed

Component	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	IECSC	AICS	KECL
Xylenes (o-, m-, p- isomers)	215-535-7	X	X	X	X	X	X	X	KE-35427
Methyl ethyl ketone	201-159-0	X	X	X	X	X	X	X	KE-24094
Acetone	200-662-2	X	X	X	X	X	X	X	KE-29367
Propylene glycol monomethyl ether acetate	203-603-9	X	X	X	X	X	X	X	KE-23315
Ethyl acetate	205-500-4	X	X	X	X	X	X	X	KE-00047

Component	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Xylenes (o-, m-, p- isomers)				Annex I - Y42
Methyl ethyl ketone				Annex I - Y42
Acetone				Annex I - Y42
Ethyl acetate				Annex I - Y42

National Regulations

Persistent Organic Pollutant This product does not contain any known or suspected substance
Ozone Depletion Potential This product does not contain any known or suspected substance

SECTION 16: OTHER INFORMATION

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
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
RPE - Respiratory Protective Equipment
LC50 - Lethal Concentration 50%
POW - Partition coefficient Octanol:Water

TWA - Time Weighted Average
IARC - International Agency for Research on Cancer
LD50 - Lethal Dose 50%
EC50 - Effective Concentration 50%

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

Prepared By	Health, Safety and Environmental Department
Revision Date	31-Mar-2025
Revision Summary	Not applicable.

In accordance with local and national regulations: Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

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