

MBR® Utility Cement					
Version 4.0		Revision Date 05/31/2024	Print Date 05/31/2024		
SECTION 1. PRODUCT AND CO	OMP	ANY IDENTIFICATION			
Trade name	:	MBR® Utility Cement (Summer Gra (Winter Grade)	ade), MBR® Utility Cement		
Manufacturer or supplier's de	etails	3			
Company	:	Johns Manville			
Address	:	P.O. Box 5108 Denver, CO USA 80217-5108			
Telephone	:	+1-303-978-2000			
Emergency telephone number	:	24-Hour Number: +1-800-424-9300	) (CHEMTREC)		
Company	:	Johns Manville Canada Inc.			
Address	:	5301 42 Avenue			
Telephone	:	Innisfail, AB Canada T4G 1A2 +1-303-978-2000			
Emergency telephone number	:	24-Hour Number: +1-800-424-9300	) (CHEMTREC)		
Recommended use of the chemical and restrictions on use					
Recommended use Restrictions on use Prepared by	:	Adhesives and/or sealants For professional users only. productsafety@jm.com			

# **SECTION 2. HAZARDS IDENTIFICATION**

## GHS classification in accordance with 29 CFR 1910.1200 and the Hazardous Products Regulations

Flammable liquids	:	Category 3
Skin irritation	:	Category 2
Eye irritation	:	Category 2A
Germ cell mutagenicity	:	Category 1B
Carcinogenicity	:	Category 1A
Specific target organ toxicity - single exposure	:	Category 3 (Central nervous system)
Specific target organ toxicity - repeated exposure	:	Category 2
GHS label elements		
Hazard pictograms	:	

: Danger



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Hazard statements	<ul> <li>H226 Flammable liquid and vapour. H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H340 May cause genetic defects. H350 May cause cancer. H373 May cause damage to organs through prolonged or repeated exposure.</li> </ul>			
Precautionary statements	<ul> <li>Prevention:</li> <li>P201 Obtain special instructions before use.</li> <li>P202 Do not handle until all safety precautions have been read and understood.</li> <li>P210 Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.</li> <li>P233 Keep container tightly closed.</li> <li>P240 Ground/bond container and receiving equipment.</li> <li>P241 Use explosion-proof electrical/ ventilating/ lighting equipment.</li> <li>P242 Use only non-sparking tools.</li> <li>P243 Take precautionary measures against static discharge.</li> <li>P260 Do not breathe mist or vapours.</li> <li>P264 Wash skin thoroughly after handling.</li> <li>P271 Use only outdoors or in a well-ventilated area.</li> <li>P280 Wear protective gloves/ protective clothing/ eye protection</li> </ul>			
	<ul> <li>Response:</li> <li>P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.</li> <li>P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.</li> <li>P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</li> <li>P308 + P313 IF exposed or concerned: Get medical advice/ attention.</li> <li>P332 + P313 If skin irritation occurs: Get medical advice/ attention.</li> <li>P337 + P313 If eye irritation persists: Get medical advice/ attention.</li> <li>P362 Take off contaminated clothing and wash before reuse.</li> <li>P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.</li> </ul>			
	<ul> <li>Storage:</li> <li>P403 + P233 Store in a well-ventilated place. Keep container tightly closed.</li> <li>P403 + P235 Store in a well-ventilated place. Keep cool.</li> <li>P405 Store locked up.</li> <li>Disposal:</li> <li>P501 Dispose of contents/container to an approved facility in accordance with local, regional, national and international regulations.</li> </ul>			



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### Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature Mixture

## Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
asphalt	8052-42-4	>= 30 - < 60
naphtha (petroleum), hydrotreated heavy	64742-48-9	>= 10 - < 30
palygorskite	12174-11-7	>= 1 - < 10
crystalline silica	14808-60-7	>= 0.1 - < 1

Actual concentration or concentration range is withheld as a trade secret

# **SECTION 4. FIRST AID MEASURES**

General advice :	Handle in accordance with good industrial hygiene and safety practice. Show this safety data sheet to the doctor in attendance. Move out of dangerous area. Do not leave the victim unattended.
If inhaled :	Remove person to fresh air. If signs/symptoms continue, get medical attention. If breathing is irregular or stopped, administer artificial respiration.
In case of skin contact :	In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cool melted product on skin with plenty of water. Do not remove solidified product. Call a physician if irritation develops or persists. Burns must be treated by a physician. Wash contaminated clothing before reuse.
In case of eye contact :	Rinse immediately with plenty of lukewarm water, also under the eyelids, for at least 15 minutes. If easy to do, remove contact lens, if worn. Keep eye wide open while rinsing. Protect unharmed eye. If eye irritation persists, consult a specialist.
If swallowed :	DO NOT induce vomiting unless directed to do so by a physician or poison control center. Gently wipe or rinse the inside of the mouth with water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician or Poison Control Centre immediately.
Most important symptoms : and effects, both acute and delayed	Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. May cause genetic defects. May cause cancer. May cause damage to organs through prolonged or repeated



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Protection of first-aiders	exposure. If potential for exposure exists references personal protective equipment.	er to Section 8 for specific

# **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media	:	Carbon dioxide (CO2) Foam Dry powder Water spray
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during firefighting	:	Vapours may form explosive mixtures with air. Flash back possible over considerable distance.
Hazardous combustion products	:	carbon oxides Magnesium oxides aluminum oxides Silicon oxides sulfur oxides
Further information Special protective equipment for firefighters	:	Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers. Wear self-contained breathing apparatus for firefighting if necessary.

# SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, : protective equipment and emergency procedures	Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.
Environmental precautions :	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. Do not allow contact with soil, surface or ground water. Do not flush into surface water or sanitary sewer system.
Methods and materials for : containment and cleaning up	Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Non-sparking tools should be used. Keep in suitable, closed containers for disposal.



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# SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. Do not pressurise, cut, weld, braze, solder, drill, or grind on containers.
Advice on safe handling	:	Avoid formation of aerosol. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. For personal protection see section 8.
Conditions for safe storage	:	No smoking. Keep containers tightly closed in a dry, cool and well- ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards. Take measures to prevent the build up of electrostatic charge.
Materials to avoid	:	Keep away from oxidizing agents and strongly acid or alkaline materials.
Recommended storage temperature	:	60 - 80 °F / 16 - 27 °C
Further information on storage stability	:	Keep containers tightly closed in a dry, cool and well- ventilated place. Do not freeze.

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
asphalt	8052-42-4	TWA (Fumes)	5 mg/m3	CA AB OEL
		TWAEV (Fumes)	5 mg/m3	CA QC OEL
		TWA (Fume, inhalable fraction)	0.5 mg/m3 (benzene soluble aerosol)	ACGIH
		C (Fumes)	5 mg/m3	NIOSH REL



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		TWA (Inhalable fume)	0.5 mg/m3 (benzene soluble aerosol)	CA BC OE
naphtha (petroleum), hydrotreated heavy	64742-48-9	TWA	500 ppm 2,000 mg/m3	OSHA
		TWA	525 mg/m3	CA ON OE
crystalline silica	14808-60-7	TWA (Respirable particulates)	0.025 mg/m3	CA AB OE
		TWA (Respirable fraction)	0.1 mg/m3	CA ON OE
		TWAEV (respirable dust)	0.1 mg/m3	CA QC OE
		TWA (Respirable particulate matter)	0.025 mg/m3	ACGIH
		TWA (respirable)	10 mg/m3 / %SiO2+2	OSHA
		TWA (respirable)	250 mppcf / %SiO2+5	OSHA
		TWA (Respirable dust)	0.05 mg/m3	NIOSH RE
		TWA (Respirable)	0.025 mg/m3	CA BC OE
		TWA (Respirable)	0.025 mg/m3 (Silica)	CA BC OE
		TWA (Respirable dust)	0.05 mg/m3	OSHA
Engineering measures			entilation system. lose to floor level.	
Personal protective equipm	ent			
Respiratory protection	maintain vap concentratior unknown, ap Follow OSHA use NIOSH/N by air purifyir hazardous ch supplied resp release, expo	or exposures be as are above rec propriate respira respirator regul ASHA approved ag respirators ag memical is limited pirator if there is osure levels are where air purify	Intilation is recomme low recommended lin ommended limits or tory protection shoul lations (29 CFR 1910 respirators. Protection ainst exposure to an d. Use a positive prese any potential for unc unknown, or any other ring respirators may	mits. Where are d be worn. 0.134) and on provided y ssure air ontrolled er
Hand protection Material	: Protective glo	oves		
Remarks	concerning p	ermeability and	given by the produce break through times, (mechanical strain, c	and of



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Eye protection	: Wear safety glasses with side shi Wear face-shield and protective s problems.				
Skin and body protection	<ul> <li>Wear protective clothing, such as pants.</li> <li>Additional body garments should task being performed (e.g., sleeve disposable suits) to avoid expose Remove and wash contaminated</li> </ul>	be used based upon the elets, apron, gauntlets, d skin surfaces.			
Hygiene measures	<ul> <li>Handle in accordance with good in practice.</li> <li>When using do not eat, drink or si Wash hands before breaks and a Written instructions for handling m place.</li> </ul>	ndustrial hygiene and safety moke. t the end of workday.			

# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance Colour Odour Odour Threshold	<ul> <li>viscous</li> <li>brown, black</li> <li>mild, hydrocarbon-like</li> <li>No data available</li> </ul>
pH Melting point/freezing point Initial boiling point and boiling range	<ul><li>No data available</li><li>No data available</li><li>No data available</li></ul>
Flash point	: 37.8 - 60.0 °C Method: Cleveland open cup
Evaporation rate Flammability (solid, gas)	<ul><li>No data available</li><li>Not applicable</li></ul>
Upper explosion limit Lower explosion limit Vapour pressure Relative vapour density Relative density Water solubility Solubility in other solvents Partition coefficient: n- octanol/water Auto-ignition temperature Thermal decomposition Viscosity	<ul> <li>No data available</li> </ul>
Viscosity, dynamic Viscosity, kinematic	: No data available : > 20.5 mm2/s (40 °C)

# SECTION 10. STABILITY AND REACTIVITY

Reactivity Chemical stability		No dangerous reaction known under conditions of normal use. Stable under normal conditions.
Possibility of hazardous reactions	:	No dangerous reaction known under conditions of normal use. Vapours may form explosive mixture with air.



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Conditions to avoid Incompatible materials	<ul> <li>Heat, flames and sparks.</li> <li>Strong oxidizing agents Strong acids and strong bases</li> </ul>	
Hazardous decomposition products	: Hazardous decomposition produc conditions.	cts formed under fire

# SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity	
Product: Acute dermal toxicity	: Acute toxicity estimate : 3,333 mg/kg Method: Calculation method
<u>Components:</u>	
asphalt: Acute oral toxicity	: LD50 (Rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 401
Acute inhalation toxicity	<ul> <li>LC50 (Rat, male and female): &gt; 0.0944 mg/l Exposure time: 4.5 h Test atmosphere: vapour Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhalation toxicity</li> </ul>
Acute dermal toxicity	: LD50 (Rabbit, male and female): > 2,000 mg/kg Method: OECD Test Guideline 402
naphtha (petroleum), hydrotr Acute oral toxicity	<ul> <li>eated heavy:</li> <li>LD50 (Rat, male and female): &gt; 5,000 mg/kg Method: OECD Test Guideline 401 Remarks: No mortality was observed. Information given is based on data obtained from similar substances.</li> </ul>
Acute inhalation toxicity	<ul> <li>LC50 (Rat, male and female): &gt; 5,610 mg/l Exposure time: 4 h Test atmosphere: vapour Method: OECD Test Guideline 403 Remarks: No mortality was observed. Information given is based on data obtained from similar substances.</li> </ul>
Acute dermal toxicity	<ul> <li>LD50 (Rabbit, male and female): &gt; 2,000 mg/kg Method: OECD Test Guideline 402 Remarks: No mortality was observed. Information given is based on data obtained from similar substances.</li> </ul>
crystalline silica: Acute oral toxicity	: LD50 (Rat): > 22,500 mg/kg
Acute inhalation toxicity	: Assessment: The substance or mixture has no acute



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	inhalation toxicity	
Acute dermal toxicity	: Assessment: The substance or mi toxicity	xture has no acute dermal
Skin corrosion/irritation		
<u>Components:</u> naphtha (petroleum), hydro Result: Skin irritation	otreated heavy:	
Serious eye damage/eye ir	ritation	
Product: Result: irritating		
Germ cell mutagenicity		
Product:		
Germ cell mutagenicity- Assessment	: In vivo tests showed mutagenic ef	fects
IARC	Group 1: Carcinogenic to humans	
	crystalline silica	14808-60-7
	Group 2B: Possibly carcinogenic to h	numans
	palygorskite	12174-11-7
OSHA	No component of this product presenequal to 0.1% is identified as a carcin carcinogen by OSHA (29 CFR 1910 Hazardous Substances).	nogen or potential
NTP	Known to be human carcinogen	
	crystalline silica	14808-60-7
STOT - single exposure		

# <u>Components:</u>

naphtha (petroleum), hydrotreated heavy: Exposure routes: inhalation (vapour) Target Organs: Central nervous system Assessment: May cause drowsiness or dizziness.

# STOT - repeated exposure

# Product:

Assessment: May cause damage to organs through prolonged or repeated exposure.



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# Aspiration toxicity

## **Components:**

naphtha (petroleum), hydrotreated heavy: May be fatal if swallowed and enters airways.

# **SECTION 12. ECOLOGICAL INFORMATION**

# Ecotoxicity

# **Components:**

naphtha (petroleum), hydrotreated heavy:		
Toxicity to fish	<ul> <li>LL50 (Oncorhynchus mykiss (rainbow trout)): 10 mg/l End point: mortality Exposure time: 96 h Test Type: semi-static test Method: OECD Test Guideline 203</li> </ul>	
Toxicity to daphnia and other aquatic invertebrates	<ul> <li>EL50 (Daphnia magna (Water flea)): 4.5 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Method: OECD Test Guideline 202</li> </ul>	
Toxicity to algae/aquatic plants	<ul> <li>NOELR (Pseudokirchneriella subcapitata (algae)): 0.5 mg/l Exposure time: 72 h Test Type: static test Method: OECD Test Guideline 201</li> </ul>	
	EL50 (Pseudokirchneriella subcapitata (algae)): 3.7 mg/l Exposure time: 96 h Test Type: static test Method: OECD Test Guideline 201	
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	<ul> <li>NOELR (Daphnia magna (Water flea)): 2.6 mg/l Exposure time: 21 d Test Type: semi-static test Method: OECD Test Guideline 211</li> </ul>	
crystalline silica:		
Toxicity to fish	: LC50 (Cyprinus carpio (Carp)): > 10,000 mg/l Exposure time: 72 h	
Persistence and degradability	/	
Components:		
naphtha (petroleum), hydrotr	eated heavy:	
Biodegradability	: Result: Inherently biodegradable.	
Bioaccumulative potential		

## Bioaccumulative potential

No data available



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Mobility in soil No data available Other adverse effects		
Product: Ozone-Depletion Potential	<ul> <li>Regulation: 40 CFR Protection of Protection of Stratospheric Ozone Substances Remarks: This product neither co manufactured with a Class I or Cl U.S. Clean Air Act Section 602 (4 B).</li> </ul>	e - CAA Section 602 Class I Intains, nor was lass II ODS as defined by the
Additional ecological information	: Harmful to aquatic life with long la	asting effects.

# SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods		
Waste from residues	:	Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.
		The product should not be allowed to enter drains, water
		courses or the soil.
Contaminated packaging	:	Empty remaining contents.
		Dispose of as unused product.
		Do not re-use empty containers.
		Do not burn, or use a cutting torch on, the empty drum.

# **SECTION 14. TRANSPORT INFORMATION**

# International transport regulations

Land transport

USDOT: Not regulated if shipped in packages less than or equal to 119 gallons (450 liters). TDG: Not regulated if shipped in packages less than or equal to 119 gallons (450 liters).

Sea transport IMDG: UN1999, Tars, liquid, 3, III (40 °C c.c.)

Air transport IATA/ICAO: UN1999, Tars, liquid, 3, III

# **SECTION 15. REGULATORY INFORMATION**

<b>TSCA list</b> TSCA - 5(a) Significant New Use Rule List of Chemicals	:	No substances are subject to a Significant New Use Rule.
U.S. Toxic Substances Control Act (TSCA) Section 12(b) Export Notification (40 CFR 707, Subpart D)	:	No substances are subject to TSCA 12(b) export notification requirements.



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# EPCRA - Emergency Planning and Community Right-to-Know Act

## CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

# SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	Flammable (gases, aerosols, liquids, or solids) Carcinogenicity Skin corrosion or irritation Specific target organ toxicity (single or repeated exposure) Germ cell mutagenicity Serious eye damage or eye irritation
SARA 302	This material does not contain any components with a section 302 EHS TPQ.
SARA 313	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

# **Clean Air Act**

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

# California Prop. 65

**WARNING:** This product can expose you to chemicals including palygorskite, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

# The components of this product are reported in the following inventories: TSCA : On or in compliance with the active portion of the TSCA

	inventory	
DSL	: On the inventory, or in compliance with the inventory	

# **SECTION 16. OTHER INFORMATION**

Further information Revision Date	:	05/31/2024
Full text of other abbreviation	ons	
ACGIH	:	USA. ACGIH Threshold Limit Values (TLV)
CA AB OEL	:	Canada. Alberta, Occupational Health and Safety Code (table 2: OEL)
CA BC OEL	:	Canada. British Columbia OEL



#### MBR<sup>®</sup> Utility Cement Revision Date 05/31/2024 Print Date 05/31/2024 Version 4.0 Ontario Table of Occupational Exposure Limits made under CA ON OEL 5 the Occupational Health and Safety Act. CA QC OEL Québec. Regulation respecting occupational health and safety, Schedule 1, Part 1: Permissible exposure values for airborne contaminants NIOSH REL USA, NIOSH Recommended Exposure Limits : USA. Occupational Exposure Limits (OSHA) - Table Z-1 OSHA Limits for Air Contaminants OSHA USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts ACGIH / TWA 8-hour, time-weighted average CA AB OEL / TWA 8-hour Occupational exposure limit 8-hour time-weighted average CA BC OEL / TWA CA ON OEL / TWA Time-Weighted Average Limit (TWA) Time-weighted average exposure value CA QC OEL / TWAEV NIOSH REL / TWA Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek Ceiling value not be exceeded at any time. NIOSH REL / C ÷ OSHA / TWA : 8-hour time weighted average OSHA / TWA : 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL -Domestic Substances List (Canada): ECx - Concentration associated with x% response: EHS -Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA -National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD -Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS -Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship: RCRA - Resource Conservation and Recovery Act: REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

# 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.