

according to the OSHA Hazard Communication Standard

Permethrin (5%) Formulation

Version	Revision Date:	SDS Number:	Date of last issue: 09/30/2023
5.0	09/28/2024	1965392-00017	Date of first issue: 09/20/2017

SECTION 1. IDENTIFICATION

Product name	:	Permethrin (5%) Formulation
Manufacturer or supplier's	deta	ails
Company name of supplier Address		Merck & Co., Inc 126 E. Lincoln Avenue Rahway, New Jersey U.S.A. 07065
Telephone Emergency telephone E-mail address	:	908-740-4000 1-908-423-6000 EHSDATASTEWARD@merck.com
Recommended use of the c	her	nical and restrictions on use
Recommended use Restrictions on use	:	Veterinary product Not applicable

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)				
Skin sensitization	:	Category 1		
Aspiration hazard	:	Category 1		
GHS label elements				
Hazard pictograms	:			
Signal Word	:	Danger		
Hazard Statements	:	H304 May be fatal if swallowed and enters airways. H317 May cause an allergic skin reaction.		
Precautionary Statements	:	Prevention: P261 Avoid breathing mist or vapors. P272 Contaminated work clothing must not be allowed out of the workplace. P280 Wear protective gloves.		
		Response: P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER. P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P331 Do NOT induce vomiting. P333 + P313 If skin irritation or rash occurs: Get medical attention. P363 Wash contaminated clothing before reuse. Storage:		



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P405 Store locked up.

Disposal:

P501 Dispose of contents and container to an approved waste disposal plant.

Other hazards

Cutaneous sensations may occur, such as burning or stinging on the face and mucosae. However, these sensations cause no lesions and are of a transitory nature (max. 24 hours).

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Paraffin oils (petroleum), catalytic	64742-71-8	>= 50 - <= 75
dewaxed light		
Permethrin (ISO)	52645-53-1	5

SECTION 4. FIRST AID MEASURES

General advice	:	In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.
If inhaled	:	If inhaled, remove to fresh air. Get medical attention if symptoms occur.
In case of skin contact	:	In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
In case of eye contact	:	Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.
If swallowed	:	If swallowed, DO NOT induce vomiting. If vomiting occurs have person lean forward. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
Most important symptoms and effects, both acute and delayed	:	May be fatal if swallowed and enters airways. May cause an allergic skin reaction. This product contains a pyrethroid. Pyrethroid poisoning should not be confused with carbamate or organophosphate poisoning.
Protection of first-aiders	:	First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).
Notes to physician	:	Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray



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				Alcohol-resistant f Carbon dioxide (C Dry chemical	
	Unsuitable extinguishing media		:	None known.	
	Specific hazards during fire fighting		:	Exposure to comb	oustion products may be a hazard to health.
	Hazardous combustion prod- ucts		:	Chlorine compour Carbon oxides	nds
	Specific extinguishing meth- ods		:	Use extinguishing measures that are appropriate to local cumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe so. Evacuate area.	
		protective equipment fighters	:	In the event of fire Use personal prot	e, wear self-contained breathing apparatus. ective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Use personal protective equipment. Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).
Environmental precautions	:	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent spreading over a wide area (e.g., by containment or oil barriers). Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material. For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.





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SECTION 7. HANDLING AND STORAGE

Technical measures	:	See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.
Local/Total ventilation	:	Use only with adequate ventilation.
Advice on safe handling	:	Do not get on skin or clothing. Avoid breathing mist or vapors. Do not swallow. Avoid contact with eyes.
		Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment Keep container tightly closed.
		Take care to prevent spills, waste and minimize release to the environment.
Conditions for safe storage	:	Keep in properly labeled containers. Store locked up. Keep tightly closed.
Materials to avoid	:	Store in accordance with the particular national regulations. Do not store with the following product types: Strong oxidizing agents Gases

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Permethrin (ISO)	52645-53-1	TWA	80 µg/m3 (OEB 3)	Internal
		Wipe limit	800 µg/100 cm ²	Internal

Engineering measures :	Use appropriate engineering controls and manufacturing technologies to control airborne concentrations (e.g., drip- less quick connections). All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment. Containment technologies suitable for controlling compounds are required to control at source and to prevent migration of the compound to uncontrolled areas (e.g., open-face containment devices). Minimize open handling.

Personal protective equipment

unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided	Respiratory protection	Follow OSHA respirator regulations (29 CFR 1910.134) and
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Hand	protection	hazardous ch supplied resp release, expo	g respirators against exposure to any emical is limited. Use a positive pressure air irator if there is any potential for uncontrolled sure levels are unknown, or any other where air purifying respirators may not provide tection.
Ma	aterial	: Chemical-res	istant gloves
	emarks protection	If the work en mists or aero Wear a faces	ble gloving. glasses with side shields or goggles. vironment or activity involves dusty conditions, sols, wear the appropriate goggles. hield or other full face protection if there is a lirect contact to the face with dusts, mists, or
Skin a	and body protection	: Work uniform Additional bo task being pe disposable su	or laboratory coat. dy garments should be used based upon the rformed (e.g., sleevelets, apron, gauntlets, its) to avoid exposed skin surfaces. ate degowning techniques to remove potentially clothing.
Hygie	ene measures	: If exposure to eye flushing s working place When using o Contaminated workplace. Wash contam The effective engineering o appropriate d industrial hyg	o chemical is likely during typical use, provide systems and safety showers close to the

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Color	:	clear, amber
Odor	:	odorless
Odor Threshold	:	No data available
рН	:	No data available
Melting point/freezing point	:	No data available
Initial boiling point and boiling range	:	No data available
Flash point	:	No data available



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Evap	poration rate	:	No data available	9
Flam	nmability (solid, gas)	:	Not applicable	
Flam	nmability (liquids)	:	No data available	9
	er explosion limit / Upper mability limit	:	No data available	9
	er explosion limit / Lower mability limit	:	No data available	9
Vapo	or pressure	:	< 2 mmHg (77 °F	7 / 25 °C)
Rela	tive vapor density	:	No data available	2
Rela	tive density	:	0.876 (68 °F / 20	°C)
Dens	sity	:	No data available	9
	bility(ies) /ater solubility	:	immiscible	
	tion coefficient: n-	:	Not applicable	
	nol/water ignition temperature	:	No data available	9
Deco	omposition temperature	:	No data available	9
Visco V	osity ïscosity, dynamic	:	39 Pas	
V	iscosity, kinematic	:	No data available	9
Expl	osive properties	:	Not explosive	
Oxid	izing properties	:	The substance o	r mixture is not classified as oxidizing.
Mole	ecular weight	:	No data available	9
	cle characteristics cle size	:	Not applicable	

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reac- tions	:	Can react with strong oxidizing agents.
Conditions to avoid Incompatible materials		None known. Oxidizing agents



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ersion .0	Revision Date: 09/28/2024		0S Number: 65392-00017	Date of last issue: 09/30/2023 Date of first issue: 09/20/2017
Haza produ	rdous decomposition	:	No hazardous	decomposition products are known.
ECTION	11. TOXICOLOGICAL	. INF	ORMATION	
Infor	mation on likely route	s of	exposure	
Inhala	-	0.01		
	contact			
Inges Eye c	contact			
Acute	e toxicity			
Not c	lassified based on avai	lable	information.	
Prod	uct:			
Acute	e oral toxicity	:		stimate: > 5,000 mg/kg
			Method: Calcula	ation method
Acute	inhalation toxicity	:		stimate: 46 mg/l
			Exposure time: Test atmosphered	
			Method: Calcula	
Com	ponents:			
Paraf	fin oils (petroleum), c	ataly	tic dewaxed lig	ht:
Acute	e oral toxicity	:	LD50 (Rat): > 5	
			Method: OECD	Test Guideline 401
Acute	inhalation toxicity	:	LC50 (Rat): > 5	
			Exposure time:	
			Test atmosphered Method: OECD	Test Guideline 403
Acuto	demost texisity		DEQ (Dabbit)	5 000 maller
Acute	e dermal toxicity	•	LD50 (Rabbit): Method: OECD	> 5,000 mg/kg Test Guideline 402
	ethrin (ISO):			
Acute	e oral toxicity		LD50 (Rat): 480) - 554 mg/kg
Acute	inhalation toxicity	:	LC50 (Rat): 2.3	mg/l
			Exposure time:	
			Test atmospher	e: dust/mist
Acute	e dermal toxicity	:	LD50 (Rabbit):	> 2,000 mg/kg
11				
	corrosion/irritation	المالية		
	lassified based on avai	lable	information.	
Com	ponents:			

Paraffin oils (petroleum), catalytic dewaxed light:



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ersion 0	Revision Date: 09/28/2024	SDS Number: 1965392-00017	Date of last issue: 09/30/2023 Date of first issue: 09/20/2017
Spec Resu		: Rabbit : No skin irritatio	n
Perm	nethrin (ISO):		
Spec Resu	cies	: Rabbit : No skin irritatio	n
	ous eye damage/eye classified based on ava		
	ponents:		
	ffin oils (petroleum),	catalytic dewaxed lic	iht:
Spec		: Rabbit	,
Resu		: No eye irritatio	n
Perm	nethrin (ISO):		
Spec	cies	: Rabbit	
Resu	ılt	: No eye irritatio	n
Resp	piratory or skin sensi	tization	
Skin	sensitization		
May	cause an allergic skin	reaction.	
-	piratory sensitization		
	classified based on ava	ailable information.	
<u>Com</u>	ponents:		
	ffin oils (petroleum),		Jht:
	Туре	: Buehler Test	
Spec	es of exposure	: Skin contact	
Meth		: Guinea pig : OECD Test Gu	iideline 406
Resu		: negative	
Perm	nethrin (ISO):		
Test		: Buehler Test	
	es of exposure	: Skin contact	
Spec	cies	: Guinea pig	
Resu	ılt	: positive	
Asse	essment	: Probability or e	evidence of skin sensitization in humans
Gern	n cell mutagenicity		
	classified based on ava	ailable information.	
Com	nononte		

Components:

Paraffin oils (petroleum), catalytic dewaxed light:



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Geno	toxicity in vitro	Result: negativ			
			vitro mammalian cell gene mutation test D Test Guideline 476 ve		
Geno	toxicity in vivo	cytogenetic as Species: Mous Application Ro Method: OECI	Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Intraperitoneal injection Method: OECD Test Guideline 474 Result: negative		
	ethrin (ISO):				
Geno	toxicity in vitro	: Test Type: Ba Result: negativ	cterial reverse mutation assay (AMES) ve		
		Test Type: In Result: negativ	vitro mammalian cell gene mutation test ve		
		Test Type: Ch Result: negativ	romosome aberration test in vitro ve		
			IA damage and repair, unscheduled DNA syn- malian cells (in vitro) ve		
		Test Type: Ch Result: positiv	romosome aberration test in vitro e		
Geno	toxicity in vivo	: Test Type: Ma cytogenetic as Species: Mous Result: negativ	Se		
		Test Type: Ro Species: Mous Result: negativ			
		cytogenetic as Species: Rat	oute: Intraperitoneal injection		
			Itagenicity (in vivo mammalian bone-marrow st, chromosomal analysis)		



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			Species: Mouse Application Route Result: positive	e: Ingestion
	n cell mutagenicity - essment	:	Weight of evidend cell mutagen.	ce does not support classification as a germ
	inogenicity classified based on avail	lable	information.	
Com	ponents:			
Para	ffin oils (petroleum), c	ataly	tic dewaxed light	::
Spec		:	Mouse	
	ication Route	:	Skin contact	
Expo	sure time	:	78 weeks negative	
I Lest		•	negative	
Pern	nethrin (ISO):			
Spec		:	Rat	
Resu	ult	:	negative	
Spec	cies	:	Mouse	
Resu	ılt	:	negative	
IARO				t at levels greater than or equal to 0.1% is onfirmed human carcinogen by IARC.
OSH			this product prese regulated carcino	ent at levels greater than or equal to 0.1% is gens.
NTP				t at levels greater than or equal to 0.1% is carcinogen by NTP.
_				
-	roductive toxicity classified based on avail	labla	information	
		lable	mormation.	
Com	ponents:			
	nethrin (ISO):			
Effec	cts on fertility	:	Test Type: Two- <u>c</u> Species: Rat Application Route Result: negative	generation reproduction toxicity study
Effec	cts on fetal development	t :		ined repeated dose toxicity study with the elopmental toxicity screening test e: Ingestion





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STOT-single exposure

Not classified based on available information.

STOT-repeated exposure

Not classified based on available information.

Repeated dose toxicity

Components:

Paraffin oils (petroleum), catalytic dewaxed light:

Species	: Rat
NOAEL	: >= 2,000 mg/kg
Application Route	: Skin contact
Exposure time	: 90 Days
Species NOAEL Application Route Exposure time Method	: OECD Test Guideline 411
Method	: OECD Test Guideline 411

Permethrin (ISO):

Species NOAEL	:	Rat
NOAEL	:	0.2201 mg/l
Application Route	:	Inhalation
Exposure time	:	90 Days
_		

Species	: Rat
Species NOAEL Application Route	: 175 mg/kg
Application Route	: Ingestion
Exposure time	: 90 Days

Aspiration toxicity

May be fatal if swallowed and enters airways.

Components:

Paraffin oils (petroleum), catalytic dewaxed light:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Paraffin oils (petroleum), catalytic dewaxed light:

Toxicity to fish	:	LL50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EL50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 48 h Test substance: Water Accommodated Fraction





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sion	Revision Date: 09/28/2024		9S Number: 65392-00017	Date of last issue: 09/30/2023 Date of first issue: 09/20/2017
Toxicity to algae/aquatic plants		:	mg/l Exposure time: 7 Test substance: Method: OECD 1	chneriella subcapitata (green algae)): > 10 2 h Water Accommodated Fraction ⁻ est Guideline 201 kirchneriella subcapitata (green algae)): 10
			mg/l Exposure time: 7 Test substance:	
	ty to daphnia and other ic invertebrates (Chron- city)	:	NOELR (Daphnia Exposure time: 2 Test substance:	
Toxici	ty to microorganisms	:	NOEC: > 2.17 m Exposure time: 1	
Perm	ethrin (ISO):			
Toxici	ty to fish	:	LC50 (Lepomis r Exposure time: 9	nacrochirus (Bluegill sunfish)): 0.00079 mg 6 h
	ty to daphnia and other ic invertebrates	:	EC50 (Daphnia r Exposure time: 4	nagna (Water flea)): 0.0001 mg/l 8 h
Toxici plants	ty to algae/aquatic	:	ErC50 (Pseudok mg/l Exposure time: 7	rchneriella subcapitata (green algae)): > 1 2 h
			EC10 (Pseudokin mg/l Exposure time: 7	chneriella subcapitata (green algae)): 0.00 2 h
Toxici icity)	ty to fish (Chronic tox-	:	Exposure time: 3	io (zebra fish)): 0.00041 mg/l 5 d ⁻ est Guideline 210
	ty to daphnia and other ic invertebrates (Chron- city)	:	Exposure time: 2	magna (Water flea)): 0.0047 μg/l 1 d ⁻ est Guideline 211
Toxici	ty to microorganisms	:	EC50: > 1,000 m Exposure time: 3	

Persistence and degradability

Components:

Paraffin oils (petroleum), catalytic dewaxed light:				
Biodegradability	:	Result: Not readily biodegradable. Biodegradation: 31 %		



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			Exposure time: 28 Method: OECD T	8 d est Guideline 301F
Permethrin (IS Biodegradabili	-	:	Result: Not readil Method: OECD T	y biodegradable. est Guideline 301F
Bioaccumulat	ive potential			
Components:				
Permethrin (IS	SO):			
Bioaccumulatio	on	:		s macrochirus (Bluegill sunfish) factor (BCF): 570
Partition coeffi	cient: n-	:	log Pow: 4.67	
Mobility in so	il			
No data availa	ble			
Other adverse No data availa				

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from residues	:	Dispose of in accordance with local regulations. Do not dispose of waste into sewer.
Contaminated packaging	:	Empty containers should be taken to an approved waste handling site for recycling or disposal. If not otherwise specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG UN number Proper shipping name	:	UN 3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Permethrin (ISO))
Class Packing group Labels Environmentally hazardous	:	9 III 9 yes
IATA-DGR UN/ID No. Proper shipping name Class Packing group		UN 3082 Environmentally hazardous substance, liquid, n.o.s. (Permethrin (ISO)) 9 III



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aircraf Packin ger air	ng instruction (cargo t) ng instruction (passen-	:::::::::::::::::::::::::::::::::::::::	Miscellaneous 964 964 yes	
·		:	N.O.S. (Permethrin (ISO)	ALLY HAZARDOUS SUBSTANCE, LIQUID,
Labels EmS C		:	9 III 9 F-A, S-F yes	
-	port in bulk according			OL 73/78 and the IBC Code
Dome	stic regulation			
Proper Class Packin Labels ERG C	/NA number r shipping name ng group Code e pollutant rks		(Permethrin (ISC 9 III CLASS 9 171 yes(Permethrin (I Above applies on liters. Shipment by grou may be shipped p	

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

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 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Respiratory or skin sensitization

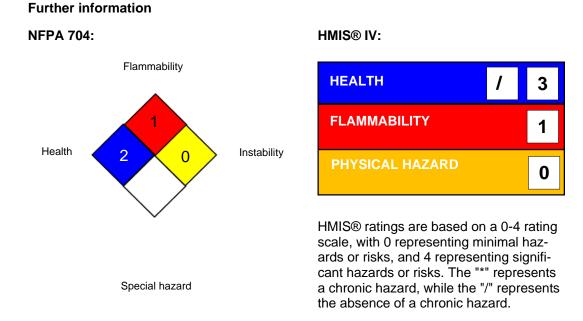


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		Aspiration haza	ard	
SAF	RA 313		components are subject SARA Title III, Sectior	
		Permethrin (IS	O) 52645-53-1	5 %
US	State Regulations			
Pen	nsylvania Right To Kn	ow		
	Paraffin oils (petro Permethrin (ISO)	pleum), catalytic dewa	axed light	64742-71-8 52645-53-1
Cali	fornia List of Hazardou	us Substances		
	Paraffin oils (petro	oleum), catalytic dewa	axed light	64742-71-8
The	ingredients of this pro	oduct are reported ir	the following invent	ories:
AIC	S	: not determined	l	
DSL		: not determined	l	
IEC	SC	: not determined	I	

SECTION 16. OTHER INFORMATION



Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation,



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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

Sources of key data used to compile the Material Safety Data Sheet	:	Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen- cy, http://echa.europa.eu/
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Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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