This SDS packet was issued with item: 078408577

The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).

078249030

The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).

078072765



Zeranol Formulation

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SECI	TION 1	. IDENTIFICATION							
F	Product name		:	: Zeranol Formulation					
r	Manuf	acturer or supplier's	deta	ils					
(Compa	any name of supplier	:	Merck & Co., Inc					
ļ	Addres	S	:	2000 Galloping Hill Road Kenilworth - New Jersey - USA 1685					
٦	Teleph	one	:	908-740-4000					
٦	Telefax	ĸ	:	908-735-1496					
E	Emerg	ency telephone	:	1-908-423-6000					
E	E-mail	address	:	EHSDATASTEW	ARD@merck.com				
		nmended use of the o mended use	: then						
SECT	TION 2	2. HAZARDS IDENTIF	ICA.	ΓΙΟΝ					
		lassification in accor	dan	ce with 29 CFR 19	910.1200				
(Carcin	ogenicity	:	Category 2					
F	Reproc	ductive toxicity	:	Category 1B					
5	Specific target organ systemic toxicity - repeated exposure		:	Category 1 (Endo	ocrine system, Liver)				
(GHS la	abel elements							
ł	Hazaro	l pictograms	:						
5	Signal	Word	:	Danger					
ł	Hazaro	I Statements	:	H351 Suspected H360FD May dar H372 Causes dar	stible dust concentrations in air. of causing cancer. nage fertility. May damage the unborn child. mage to organs (Endocrine system, Liver) d or repeated exposure.				

Precautionary Statements : Prevention:

P201 Obtain special instructions before use.



ersion 1	Revision Date: 05/02/2017	SDS Number: 682073-00003	Date of last issue: 10/20/2016 Date of first issue: 05/19/2016
		and understoo P260 Do not b P264 Wash sk P270 Do not ea	reathe dust. in thoroughly after handling. at, drink or smoke when using this product. otective gloves/ protective clothing/ eye protection/
		Response: P308 + P313 II attention.	F exposed or concerned: Get medical advice/
		Storage: P405 Store loc	ked up.
		Disposal: P501 Dispose posal plant.	of contents/ container to an approved waste dis-
Othe	r hazards		
		can lead to mechanica e mechanical irritation	

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)
zeranol	26538-44-3	>= 70 -< 90
Boric acid	10043-35-3	>= 10 -< 20
Magnesium stearate	557-04-0	>= 10 -< 20

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.
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	: If in eyes, rinse well with water. Get medical attention if irritation develops and persists.



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If swallowed		:	: If swallowed, DO NOT induce vomiting. Get medical attention. Rinse mouth thoroughly with water.	
and ef	Most important symptoms and effects, both acute and delayed		 Contact with dust can cause mechanical irritation or dryi the skin. Dust contact with the eyes can lead to mechanical irritat Suspected of causing cancer. May damage fertility. May damage the unborn child. Causes damage to organs through prolonged or repeate exposure. 	
Protec	tion of first-aiders	:	and use the recor	ers should pay attention to self-protection, mmended personal protective equipment al for exposure exists.
Notes	to physician	:	Treat symptomati	cally and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during fire fighting	:	Do not use a solid water stream as it may scatter and spread fire. Exposure to combustion products may be a hazard to health.
Hazardous combustion prod- ucts	:	Carbon oxides Boron oxides Metal oxides
Specific extinguishing meth- ods	:	Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment. Use water spray to cool unopened containers. Remove undamaged containers from fire area if it is safe to do so. Evacuate area.
Special protective equipment for fire-fighters	:	In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.
Environmental precautions	:	Discharge into the environment must be avoided.



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		ls and materials for ment and cleaning up	:	Prevent further le Retain and dispose Local authorities as cannot be contain Sweep up or vacu container for disp Avoid dispersal of with compressed Dust deposits sho surfaces, as these released into the Local or national disposal of this m employed in the of determine which in Sections 13 and	um up spillage and collect in suitable osal. f dust in the air (i.e., clearing dust surfaces
					I I

SECTION 7. HANDLING AND STORAGE

Technical measures :	Static electricity may accumulate and ignite suspended dust causing an explosion. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.
Local/Total ventilation :	Use with local exhaust ventilation.
Advice on safe handling :	Do not get on skin or clothing. Do not breathe dust. Do not swallow. Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice. Keep container tightly closed. Minimize dust generation and accumulation. Keep container closed when not in use. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. 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. Store in accordance with the particular national regulations.
Materials to avoid :	Do not store with the following product types: Strong oxidizing agents Organic peroxides Explosives Gases



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Hand protection Material

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
zeranol	26538-44-3	TWA	2 µg/m3 (OEB 4)	Merck
		Wipe limit	20 µg/100 cm²	Merck
Boric acid	10043-35-3	TWA (Inhal- able fraction)	2 mg/m³ (Borate)	ACGIH
		STEL (Inhal- able fraction)	6 mg/m³ (Borate)	ACGIH
Magnesium stearate	557-04-0	TWA	10 mg/m ³	ACGIH

Engineering measures Containment technologies suitable for controlling compounds are required to control at source and to prevent migration of the compound to uncontrolled areas (e.g., vacuum conveying from a closed system, packout head with inflatable seal from stationary container, ventilated enclosure, etc.). All engineering controls should be implemented by facility design and operated in accordance with GMP principles to protect products, workers, and the environment. Essentially no open handling permitted. Use closed processing systems or containment technologies. Personal protective equipment Respiratory protection General and local exhaust ventilation is recommended to 5 maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn.

Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.
Chemical-resistant gloves

	-
Remarks	: Consider double gloving.
Eye protection	 Wear safety glasses with side shields or goggles. If the work environment or activity involves dusty conditions, mists or aerosols, wear the appropriate goggles. Wear a faceshield or other full face protection if there is a potential for direct contact to the face with dusts, mists, or aerosols.



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Skin a	and body protection	task being perfo disposable suits	garments should be used based upon the prmed (e.g., sleevelets, apron, gauntlets, b) to avoid exposed skin surfaces. e degowning techniques to remove potentially
Hygiene measures		located close to When using do Wash contamina The effective op engineering con appropriate deg	flushing systems and safety showers are the working place. not eat, drink or smoke. ated clothing before re-use. peration of a facility should include review of trols, proper personal protective equipment, owning and decontamination procedures, ne monitoring, medical surveillance and the rative controls.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	powder
Color	:	yellow
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	:	Not applicable
Evaporation rate	:	No data available
Flammability (solid, gas)	:	May form combustible dust concentrations in air.
Flammability (liquids)	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Density	:	No data available



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S	Solubilit Wate	y(ies) er solubility	:	insoluble	
•	Partition coefficient: n- octanol/water		:	No data available	9
A	Autoign	ition temperature	:	No data available	9
C	Decomposition temperature		:	No data available	9
V	/iscosit Visco	y osity, kinematic	:	No data available	9
E	Explosiv	ve properties	:	Not explosive	
C	Oxidizin	g properties	:	The substance o	r mixture is not classified as oxidizing.
Ν	Molecul	ar weight	:	No data available	9
C	Dust de	flagration index (Kst)	:	180 m.b_/s	
Ν	Minimur	n ignition energy	:	5 - 10 mJ	
F	Particle	size	:	No data available	9

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	Not classified as a reactivity hazard.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reac- tions	:	Dust can form an explosive mixture in air. Can react with strong oxidizing agents.
Conditions to avoid	:	None known.
Incompatible materials	:	Oxidizing agents
Hazardous decomposition products	:	No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation Skin contact Ingestion Eye contact

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity

: Acute toxicity estimate: > 5,000 mg/kg



rsion	Revision Date: 05/02/2017)S Number: 2073-00003	Date of last issue: 10/20/2016 Date of first issue: 05/19/2016
			Method: Calcu	lation method
Ingre	dients:			
zeran	ol:			
Acute	oral toxicity	:	LD50 (Rat): >	5,000 mg/kg
Acute	inhalation toxicity	:	Remarks: No d	lata available
Acute	dermal toxicity	:	Remarks: No d	lata available
Boric	acid:			
Acute	oral toxicity	:	LD50 (Rat): 3,5	500 - 4,100 mg/kg
Acute	inhalation toxicity	:		: 4 h
Acute	dermal toxicity	:	LD50 (Rabbit): Assessment: T toxicity	> 2,000 mg/kg he substance or mixture has no acute dermal
Magn	esium stearate:			
Acute	oral toxicity	:	LD50 (Rat): >2 Assessment: T icity	2,500 mg/kg he substance or mixture has no acute oral tox-
Skin	corrosion/irritation			
Not cl	assified based on ava	ailable	information.	
Ingre	dients:			
zeran	ol:			
Rema	arks: No data available	Э		

Boric acid:

Species: Rabbit Result: No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Ingredients:

zeranol: Remarks: No data available



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	Boric a	acid:						
	•	s: Rabbit No eye irritation						
	Respir	atory or skin sensi	itizatio	on				
		ensitization ssified based on ava	ailable	information.				
	Respir	atory sensitization	l					
	Not cla	ssified based on ava	ailable	information.				
	Ingred	<u>ients:</u>						
	zerano							
	Remar	ks: No data availabl	е					
	Boric a	acid:						
	Routes of exposure: Skin contact Species: Guinea pig Method: OECD Test Guideline 406 Result: negative							
	Routes	e sium stearate: of exposure: Skin c negative	contact					
	Germ	cell mutagenicity						
	Not cla	ssified based on av	ailable	information.				
	Ingred	<u>ients:</u>						
	zerano							
	Genoto	oxicity in vitro	:	Test Type: Ba Result: negati	cterial reverse mutation assay (AMES) ve			
			:					
	Genoto	oxicity in vivo	:	Test Type: Cy Species: Mous Cell type: Bon Result: negati	e marrow			
	Boric a	acid:						
		oxicity in vitro	:	Test Type: Ba Result: negati	cterial reverse mutation assay (AMES) ve			
	Genoto	oxicity in vivo	:	Test Type: Ma cytogenetic as	ammalian erythrocyte micronucleus test (in vivo ssay)			



rsion	Revision Date: 05/02/2017	SDS Number: 682073-00003	Date of last issue: 10/20/2016 Date of first issue: 05/19/2016
		Species: Mous Application Ro Result: negativ	ute: Ingestion
	nogenicity ected of causing canc	er.	
Ingre	dients:		
zeran	ol:		
Applic Expos Resul	es: Mouse cation Route: Oral sure time: 2 Years t: positive		
l arge	et Organs: female rep	roductive organs, Pituit	ary gland
Applic Expos	es: Rat cation Route: Oral sure time: 2 Years t: negative		
Applic Expos	es: Dog cation Route: Oral sure time: 2 Years t: negative		
Carcii ment	nogenicity - Assess-	: Limited eviden	ce of carcinogenicity in animal studies
Boric	acid:		
Applic Expose Methor	es: Mouse cation Route: Ingestio sure time: 103 weeks od: OECD Test Guide t: negative		
IARC	;		his product present at levels greater than or dentified as probable, possible or confirmed n by IARC.
OSH	A		this product present at levels greater than or on OSHA's list of regulated carcinogens.
NTP			his product present at levels greater than or dentified as a known or anticipated carcinoger
-	oductive toxicity lamage fertility. May (damage the unborn chi	ild.
Ingre	<u>dients:</u>		
zeran Effect	ol: s on fertility	: Test Type: Thr	ee-generation reproduction toxicity study
Effect	s on fertility	: Test Type: Thr 10 / 17	



Versior 2.1		sion Date: 2/2017		9S Number: 2073-00003	Date of last issue: 10/20/2016 Date of first issue: 05/19/2016
				Species: Rat Application Route Result: No signific	: Oral cant adverse effects were reported
				Species: Rat Application Route General Toxicity F Symptoms: Reduc	1: LOAEL: 3 mg/kg body weight
				Test Type: Fertilit Species: Rat, mal Application Route Fertility: LOAEL: Symptoms: Reduc	es : Oral I.25 mg/kg body weight
Ef	fects on fet	al development	:	Species: Rat Application Route Developmental To Symptoms: Reduc	o-fetal development : Oral oxicity: LOAEL: 2 mg/kg body weight ced number of viable fetuses. hal effects., No teratogenic effects.
				Species: Rabbit Application Route Developmental To	o-fetal development : Oral oxicity: NOAEL: >= 5 mg/kg body weight cant adverse effects were reported
	eproductive ssment	toxicity - As-	:	fertility, based on	adverse effects on sexual function and animal experiments., Clear evidence of n development, based on animal
Вс	oric acid:				
Ef	fects on fer	tility	:	Test Type: Three- Species: Rat Application Route Result: positive	generation reproduction toxicity study : Ingestion
Ef	fects on fet	al development	:	Test Type: Embry Species: Rabbit Application Route Result: positive	o-fetal development : Ingestion
	eproductive ssment	toxicity - As-	:	fertility, based on	adverse effects on sexual function and animal experiments., Clear evidence of n development, based on animal

STOT-single exposure

Not classified based on available information.



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STOT-repeated exposure

Causes damage to organs (Endocrine system, Liver) through prolonged or repeated exposure.

Ingredients:

zeranol:

Target Organs: Endocrine system, Liver Assessment: Causes damage to organs through prolonged or repeated exposure.

Repeated dose toxicity

Ingredients:

zeranol:

Species: Rat NOAEL: 0.175 mg/kg LOAEL: 1.225 mg/kg Application Route: Oral Exposure time: 13 Weeks Target Organs: Liver

Species: Dog NOAEL: 0.25 mg/kg LOAEL: 1.25 mg/kg Application Route: Oral Exposure time: 14 Weeks Target Organs: male reproductive organs

Species: Rat NOAEL: 0.1 mg/kg LOAEL: 0.8 mg/kg Application Route: Oral Exposure time: 26 Weeks Symptoms: Liver disorders

Species: Dog NOAEL: 0.025 mg/kg LOAEL: 2.5 mg/kg Application Route: Oral Exposure time: 29 Weeks Target Organs: Reproductive organs, Bone marrow, Bladder Symptoms: hair loss

Species: Dog, female LOAEL: 15 mg/kg Application Route: Oral Exposure time: 7 y Target Organs: female reproductive organs Symptoms: Changes in the blood count

Species: Monkey, female Application Route: Oral Exposure time: 10 y Target Organs: female reproductive organs



rsion I	Revision Date: 05/02/2017		0S Number: 2073-00003	Date of last issue: 10/20/2016 Date of first issue: 05/19/2016
NOAE LOAE Applic	acid: es: Rat EL: 100 mg/kg L: 334 mg/kg ation Route: Ingestion sure time: 2 y			
Specie NOAE Applic	esium stearate: es: Rat L: 5,000 mg/kg ation Route: Ingestion sure time: 3 Months			
Not cl	ation toxicity assified based on availa			
-	ience with human exp	osı	ire	
zeran	<u>dients:</u>			
Ingest		:	Remarks: May ca	use adverse reproductive effects.
Ecoto <u>Ingree</u>	oxicity dients:			
Boric	acid:			
Toxici	ty to fish	:	LC50 (Oncorhync Exposure time: 96	hus kisutch (coho salmon)): 600 mg/l ን h
	ty to daphnia and other c invertebrates	:	EC50 (Daphnia m Exposure time: 48	agna (Water flea)): 133 mg/l 3 h
Toxici	ty to algae	:	EC50 (Selenastru Exposure time: 72	ım capricornutum (green algae)): 52.4 mg/l 2 h
			NOEC (Selenastr Exposure time: 72	um capricornutum (green algae)): 17.5 mg/l 2 h
Toxici icity)	ty to fish (Chronic tox-	:	NOEC (Pimephale Exposure time: 32	es promelas (fathead minnow)): 11.2 mg/l 2 d
	ty to daphnia and other c invertebrates (Chron- city)	:	NOEC (Chironom Exposure time: 28	us riparius (harlequin fly)): 32 mg/l 3 d
Toxici	ty to microorganisms	:	EC50: > 175 mg/l Exposure time: 3 Method: OECD Te	h



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Persis	stence and degradabi	lity		
Ingree	dients:			
zeran	ol:			
Biode	gradability	:	Result: Not readil Biodegradation: Exposure time: 9	50 %
Magn	esium stearate:			
-	gradability	:	Result: Not biode	gradable.
Bioac	cumulative potential			
Ingree	dients:			
zeran	ol:			
	on coefficient: n- ol/water	:	log Pow: 3.13	
Boric	acid:			
Bioac	cumulation	:		factor (BCF): 0.7 - 1.4
	on coefficient: n- ol/water	:	log Pow: -1.09	
Mobil	ity in soil			
Ingree	dients:			
zeran	ol:			
	oution among environ- al compartments	:	log Koc: 2.95	
	adverse effects ta available			
ECTION	13. DISPOSAL CONSI	DEF	ATIONS	
-	e from residues		Dianasa of it att	ordeneo with least requisiters
vvaste	e irom residues	•	Uspose of in acc	ordance with local regulations.
Conta	minated packaging	:	handling site for r	s should be taken to an approved waste recycling or disposal. pecified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations



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UNRT Not re	DG gulated as a dangero	us good							
IATA- Not re	DGR egulated as a dangero	us good							
	IMDG-Code Not regulated as a dangerous good								
	Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable for product as supplied.								
Dome	Domestic regulation								
	49 CFR Not regulated as a dangerous good								
SECTION	15. REGULATORY IN	NFORMATION							
EPCR	A - Emergency Plan	ning and Community	/ Right-to-Know						
CERC	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	:	Fire Hazard Chronic Health Hazard
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.

US State Regulations

Pennsylvania Right To Know

zeranol	26538-44-3
D-Glucose, 4-ObetaD-galactopyranosyl-, monohydrate	64044-51-5
Magnesium stearate	557-04-0
Boric acid	10043-35-3

California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

California Permissible Exposure Limits for Chemical Contaminants

Magnesium stearate

557-04-0

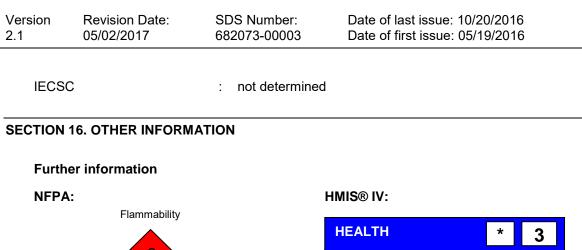
The ingredients of this product are reported in the following inventories:

AICS	:	not determined

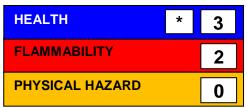
DSL : not determined



Zeranol Formulation







HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH :	USA. ACGIH Threshold Limit Values (TLV)
ACGIH / TWA :	8-hour, time-weighted average
ACGIH / STEL :	Short-term exposure limit

AICS - Australian Inventory of Chemical Substances; 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 sub-



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stance; 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; 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	:	Internal technical data, data from raw material SDSs, OECD
compile the Material Safety		eChem Portal search results and European Chemicals Agen-
Data Sheet		cy, http://echa.europa.eu/

Revision Date : 05/02/2017

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8