

SAFETY DATA SHEET

according to the Global Harmonized System and US regulation

PERKADOX 14-40B-PD

Version 2	Revision Date 02	2/03/2017	Print Da	ate 10/23/2017	US / Z8
1. PRODUCT	F AND COMPANY I	DENTIFICATIO	N		
Product	name	: PERKAD	OX 14-40B-	PD	
Product	Use Description	: Specific u	use(s):	Cross-linking agent	
Compar	у	525 Wes	t Van Buren IL 60607-382	al Chemicals LLC 23	
Telepho Fax	ne	: +1800828 : +1312544			
E-mail a Emerge	address ncy telephone	: 24 hours: CANUTE	+31 57 06 792 C-CANADA:	zonobel.com 211, CHEMTREC-USA:1-800-424- 1-613-996-6666, 化学事故应急者 应中心+86 532 8388 9090	

2. HAZARDS IDENTIFICATION

Emergency Overview

Appearance	fine powder
Color	off-white
Odor	Faint.

GHS Classification

Flammable solids, Category 1 Organic peroxides, Type G Chronic aquatic toxicity, Category 4

GHS label elements

Hazard pictograms	
Signal Word	: Danger
Hazard Statements	: H228 Flammable solid. H413 May cause long lasting harmful effects to aquatic life.
Precautionary Statements	 Prevention: P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P240 Ground/bond container and receiving equipment.

ion 2 Revision I	0ate 02/03/2017	Print Date 10/23/2017	US
	P273 A P280 A Respo P370 A alcoho Dispo	+ P378 In case of fire: Use dry sand, c ol-resistant foam to extinguish. sal: Dispose of contents/container in accor	lry chemical or
Potential Health Effec	ts		
Inhalation	: Not exp	pected to be irritating.	
Skin	: Not exp	pected to be irritating.	
Eyes	: Not exp	pected to be irritating.	
Ingestion	: Not exp	pected to be irritating.	
Aggravated Medical Condition	: None k	known.	
Symptoms of Overexpo		mptoms and effects are as expected fr wn in section 2. No specific product rel own.	
Carcinogenicity:			
IARC	equal t	redient of this product present at levels o 0.1% is identified as probable, possi carcinogen by IARC.	
OSHA	: No ingi equal t	redient of this product present at levels o 0.1% is identified as a carcinogen or ogen by OSHA.	greater than or potential
NTP	: No con equal t	nponent of this product present at level o 0.1% is identified as a known or anti ogen by NTP.	

Version 2 Revision Date 02/03/2017

3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

Chemical name	CAS-No.	Classification	Concentration [%]
Calcium carbonate	471-34-1		50 - 70
Di(tert-butylperoxyisopropyl)benzene	25155-25-3	Org. Perox. D; H242 Aquatic Chronic 4; H413	39 - 41
Silicon dioxide	7631-86-9		1 - 5

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES	
General advice	: Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance.
Inhalation	: If breathed in, move person into fresh air. If symptoms persist, call a physician.
Skin contact	: Take off contaminated clothing and shoes immediately. Wash the skin immediately with soap and water.
Eye contact	 Rinse with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
Ingestion	 Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.
Notes to physician Symptoms	: The symptoms and effects are as expected from the hazards as shown in section 2. No specific product related symptoms are known.
Treatment	: Treat symptomatically.

Version 2	Revision Date 02/0)3/2017	Print Date 10/23/2017	US / Z8
5. FIRE-FIC	GHTING MEASURES			
	le extinguishing media		water spray, alcohol-resistant foam, dry cher on dioxide.	mical or
Unsuit media	able extinguishing	: High	volume water jet	
fighting	ic hazards during fire g / Specific hazards g from the chemical	Supp Wate firefiç Do n cours	TION: reignition may occur. borts combustion. er spray may be ineffective unless used by e phters. ot allow run-off from fire fighting to enter dra ses. ing may cause decomposition with release o	ins or water
Comb	ustion products		will produce smoke containing hazardous co ucts (see section 10).	mbustion
	al protective equipment -fighters	: In th	e event of fire, wear self-contained breathing	apparatus.
Furthe	r information	Colle	water spray to cool unopened containers. ect contaminated fire extinguishing water sep a not be discharged into drains.	parately. This

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

See also Section 9. Physical and chemical properties: Safety data

6. ACCIDENTAL RELEASE MEA	SURES
Personal precautions	: Ensure adequate ventilation. Remove all sources of ignition.
Environmental precautions	: Prevent product from entering drains. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods for cleaning up / Methods for containment	 Keep wetted with water. Soak up with inert absorbent material and dispose of as hazardous waste. Confinement must be avoided. Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal. Never return spills in original containers for re-use.
Additional advice	: For personal protection see section 8.
7. HANDLING AND STORAGE	
Handling Advice on safe handling	: For personal protection see section 8. Do not smoke.

Version 2	Revision Date 02/0)3/201	7 Print Date 10/23/2017	US / Z8
			ispose of rinse water in accordance with local and nati egulations.	onal
	on protection against explosion	P is K N K a	se explosion protected equipment. rovide appropriate exhaust ventilation at places where formed. eep away from sources of ignition - No smoking. o sparking tools should be used. eep away from reducing agents (e.g. amines), acids, a nd heavy metal compounds (e.g. accelerators, driers, r paps). o not cut or weld on or near this container even when	ılkalies netal
Tempera	ture class		is recommended to use electrical equipment of temper roup T3. However, autoignition can never be excluded.	
	nents for storage ad containers	E th K	o smoking. lectrical installations / working materials must comply w le technological safety standards. eep only in original container. tore away from other materials.	vith
Maximur temperat	n storage ture:	: 3	0 °C (86 °F)	
Other da	ita	: N	o decomposition if stored and applied as directed.	

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Ingredients with workplace control parameters

Ingredients	CAS-No.	Value	Control parameters	Update	Basis	Form of exposure	
Calcium carbonate	471-34-1	PEL	10 mg/m3	2014-11-26	CAL PEL	Total dust	
		PEL	5 mg/m3	2014-11-26	CAL PEL	respirable dustfraction	
	Further information	are c char sphe	 (n): The concentration and percentage of the particulate used for this limit are determined from the fraction passing a size selector with the following characteristics: Aerodynamic Diameter in Micrometers (unit density sphere)				
		TWA	5 mg/m3	2013-10-08	NIOSH REL	Respirable	
	Further information	& oy	urs in nature as as lime ster shells. ium carbonate	estone, chalk, mar	ble, dolomite, ar	agonite, calcite	
		TWÁ	10 mg/m3	2013-10-08	NIOSH REL	total	

Version 2 Revision Date 02/03/2017

Print Date 10/23/2017

	Further information	:	& oy:	urs in nature as as lime ster shells. um carbonate	estone, chalk, ma	rble, dolomite, a	ragonite, calcite
Silicon dioxide	7631-86-9	TWA		20 Million particles per cubic foot	2012-07-01	OSHA Z-3	Dust
	Further information	:		ased on impinger sam of X 35.3 = million part a			
		TWÁ		80 mg/m3 / %SiO2	2012-07-01	OSHA Z-3	Dust
	Further information	:	Silica	a			
		TWÁ		6 mg/m3	2013-10-08	NIOSH REL	
	Further information	:	Silica	1			
		PEL		6 mg/m3	2014-11-26	CAL PEL	

ACGIH: American Conference of Governmental Industrial Hygienists

BEI: Biological Exposure Index

MAC: Maximum Allowable Concentration

NIOSH: National Institute for Occupational Safety and Health

- OEL: OEL: Occupational exposure limit.
- STEL: Short term exposure limit

TWA: Time Weighted Average

Occupational exposure limits of decomposition products

Decomposition products	CAS-No.	Value	Control parameters	Update	Basis	Form of exposure
tert-Butanol	75-65-0, 75- 65-0	TWA	100 ppm	2007-01-01	ACGIH	
	Further information		IS impair: Central Nerv I: Not classifiable as a			
		TWÅ	100 ppm 300 mg/m3	2013-10-08	NIOSH REL	
		ST	150 ppm 450 mg/m3	2013-10-08	NIOSH REL	
		TWA	100 ppm 300 mg/m3	1997-08-04	OSHA Z-1	
	Further information	: (b): The value in mg/m3 i	s approximate.		
		TWÁ	100 ppm 300 mg/m3	1989-01-19	OSHA P0	
		STEL	150 ppm 450 mg/m3	1989-01-19	OSHA P0	
		PEL	100 ppm 300 mg/m3	2014-11-26	CAL PEL	
		STEL	150 ppm 450 mg/m3	2014-11-26	CAL PEL	
Acetone	67-64-1, 67- 64-1	TWA	250 ppm	2015-04-10	ACGIH	
	Further information	UF ey *: BE (s	IS impair: Central Nerv RT irr: Upper Respirato e irr: Eye irritation 2015 Adoption El: Substances for which ee BEI® section) I: Not classifiable as a	ry Tract irritation	jical Exposure Ind	lex or Indices
		STEL	500 ppm	2015-04-10	ACGIH	
	Further information	UF	IS impair: Central Nerv RT irr: Upper Respirato e irr: Eye irritation		irment	

US / Z8

Version 2	Revision Date 02/03/2017

	BEI (se A4	015 Adoption : Substances for whi e BEI® section) : Not classifiable as a	human carcinoger		lex or Indices
	TWA	250 ppm 590 mg/m3	2013-10-08	NIOSH REL	
	TWA	1,000 ppm 2,400 mg/m3	1997-08-04	OSHA Z-1	
Further information	: (b)	: The value in mg/m3	is approximate.		
	TWA	750 ppm 1,800 mg/m3	1989-01-19	OSHA PO	
	STEL	1,000 ppm 2,400 mg/m3	1989-01-19	OSHA P0	
Further information		The acetone STEL do n effect for all other se		cellulose acetate	e fiber industry. It
	STEL	750 ppm 1,780 mg/m3	2014-11-26	CAL PEL	
	С	3,000 ppm	2014-11-26	CAL PEL	
	PEL	500 ppm 1,200 mg/m3	2014-11-26	CAL PEL	
Further information	prir is r	A number of gases a narily as asphyxiants not included for each r gen. (Several of thes	without other advent	erse effects. A co ne limiting factor	ncentration limit is the available

Hazardous substance

Substance name	CAS-No.	Valu	e	Control parameters	Basis	Update
Silicon dioxide	7631-86-9	Immediately Dang or Health Concern		3000 mg/m3	US IDLH	1995-03-01
	Further information	: Immediately	Dangerous to	Life or Health Concen	trations (IDLH)	

Engineering measures

Explosion proof ventilation recommended.

Personal protective equipment

Eye/face protection	:	Tightly fitting safety goggles
Hand protection	:	Glove material: butyl-rubber
	:	Glove material: Neoprene
Skin and body protection	:	Protective suit
Respiratory protection	:	Handle in accordance with good industrial hygiene and safety practice.
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Environmental exposure controls

General advice	: Prevent product from entering drains.
	If the product contaminates rivers and lakes or drains inform
	respective authorities.

Version 2	Revision Date 02/03/2017	Print Date 10/23/2017	US / Z8
9. PHYSICAL	AND CHEMICAL PROPERTIES		

Appearance	
Form	: fine powder
Color	: off-white
Odor	: Faint.
Odor Threshold	: No data available
Safety data	
pH	: neutral
Melting point	: Decomposes before melting.
Boiling point/boiling range	: Decomposes below the boiling point.
Flash point	: Not applicable
Evaporation rate	: Not applicable
Flammability (solid, gas)	: The substance or mixture is a flammable solid with the category 1.
Flammability (liquids)	: Not applicable
Lower explosion limit	: No data available
Upper explosion limit	: No data available
Vapor pressure	: Not applicable
Relative vapor density	: Not applicable
Relative density	: 1.60 at 20 °C
Bulk density	: 510 kg/m3 at 20 °C
Water solubility	: at 20 °C insoluble
Solubility in other solvents	: Soluble in most organic solvents.
Partition coefficient: n- octanol/water	: No data available
Autoignition temperature	: Test method not applicable

Version 2	Revision Date 02/0	3/2	2017	Print Date 10/23/2017		US / Z8
Deco	omposition temperature	:	lowest te may occu transport reaction can be ca SADT. C	Self accelerating decomposition temperat mperature at which self accelerating deco ur with a substance in the packaging as u . A dangerous self-accelerating decompo- and, under certain circumstances, explosi aused by thermal decomposition at and a ontact with incompatible substances can sition below the SADT.	omposition sed in sition ion or fire bove the	on e
	Accelerating omposition temperature DT)	:	80 °C			
Visc	osity, dynamic	:	Not appli	cable		
Visc	osity, kinematic	:	Not appli	cable		
Expl	losive properties	:	Not explo	osive		
Oxic	lizing properties	:	Not class	ified as oxidizing.		
Activ	ve Oxygen Content	:	3.8 %			
Orga	anic peroxides	:	39 - 41 %	, 0		

This material safety datasheet only contains information relating to safety and does not replace any product information or product specification.

10. STABILITY AND REACTIVITY

Conditions to avoid	Heat, flames and sparks.	
Materials to avoid	Contact with the following incompatible materials will result in hazardous decomposition: Acids and bases Iron Copper Reducing agents Heavy metals Rust Do not mix with peroxide accelerators, unless under controlled processing. Use only stainless steel 316, PP, polyethylene or glass-lined equipment. For queries regarding the suitability of other materials please contact the supplier.	
Hazardous decomposition products	Carbon oxides para-Diisopropanolbenzene tert-Butanol Acetone Methane Diacetylbenzene meta-Diisopropanolbenzene	

Version 2	Revision Date 02/0)3/201	7 Print Date 10/23/2017	US / Z8
Therma	al decomposition	lo m tra re ca S.	ADT - (Self accelerating decomposition temperature west temperature at which self accelerating decomp ay occur with a substance in the packaging as used ansport. A dangerous self-accelerating decomposition action and, under certain circumstances, explosion an be caused by thermal decomposition at and abov ADT. Contact with incompatible substances can cau ecomposition below the SADT.	oosition d in on or fire re the
Reactiv	vity	: S	table under normal conditions.	
Chemi	cal stability	: S ¹	table under recommended storage conditions.	
Hazaro	dous reactions	: N	o dangerous reaction known under conditions of no	rmal use.
	ccelerating position temperature)	: 80) °C (176 °F)	

11. TOXICOLOGICAL INFORMATION

PRODUCT	INFORMATION:

Toxicology Assessment Further information	:	No further data available.
Carcinogenicity:		
IARC	:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	:	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
NTP	:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

TOXICOLOGY DATA FOR THE INGREDIENTS:

Test result

Component: Calcium carbor	<u>te</u>	
Acute oral toxicity	: LD50: > 2,000 mg/kg Species: Rat No mortality observed at this d	ose.
Acute inhalation toxicity	: LC50 (Rat): > 3 mg/l Exposure time: 4 h	

ion 2 Revision Date 02/)3/2017	Print Date 10/23/2017 US
	Method: C GLP: yes	sphere: dust/mist ECD Test Guideline 403 vapor concentration
Acute dermal toxicity	: LD50: > 2 Species: F	,000 mg/kg
Skin irritation		skin irritation ECD Test Guideline 404
Eye irritation		Rabbit eye irritation ECD Test Guideline 405
Sensitization		louse ion: Does not cause skin sensitization. ECD Test Guideline 429
Repeated dose toxicity	Exposure NOEL: 1,0	n Route: Oral time: 48 d ()
Germ cell mutagenicity Genotoxicity in vitro	Human lyr Result: ne	
	Ames test Result: ne Method: C	gative ECD Test Guideline 471
	mouse lyn Result: ne	ne mutation study in mammalian cells nphoma cells gative ECD Test Guideline 476
Genotoxicity in vivo	: Result: No	t mutagenic.
Reproductive toxicity/Fertility	Species: F Application General To level): 1,00 Symptoms Method: C GLP: yes	Fertility/early embryonic development Rat n Route: Oral oxicity Parent: NOAEL (No observed adverse effect 00 mg/kg bw/day :: Not observed ECD Test Guideline 422 imal testing did not show any effects on fertility.
Target Organ Systemic		exposure: Inhalation

sion 2 F	Revision Date 02/03	8/2017	Print Date 10/23/2017	US /
Toxicant - Sing	gle exposure	The subs	rgans: Respiratory system tance or mixture is not classified as sp kicant, single exposure.	pecific target
Target Organ Toxicant - Rep exposure		The subs	f exposure: Ingestion tance or mixture is not classified as sp ticant, repeated exposure.	pecific target
Aspiration toxi	city	: No aspira	ation toxicity classification	
Component: I Acute oral toxi	Di(tert-butylpero) city	: LD50: > Species:	2,000 mg/kg	
Acute dermal t	oxicity	: LD50: > Species:	2,000 mg/kg	
Skin irritation			o skin irritation OECD Test Guideline 404	
Eye irritation			o eye irritation OECD Test Guideline 405	
Germ cell muta Genotoxicity ir		: Ames tes Result: n		
Genotoxicity in	n vivo	: Result: N	ot mutagenic.	
Reproductive toxicity/Develo enicity	pment/Teratog	Species: Strain: wi Application Dose: 0, General effect lew Embryo-f level): 30	on Route: Oral 100,300,1000 milligram per kilogram Toxicity Maternal: NOAEL (No observe el): 300 mg/kg body weight etal toxicity.: NOAEL (No observed ac 0 mg/kg body weight OECD Test Guideline 414	
			tance or mixture is not classified as sp cicant, repeated exposure.	pecific target
Aspiration toxi	city	: No aspira	ation toxicity classification	
Component: S Acute oral toxi	<u>Silicon dioxide</u> city	: LD50: > Species:	10,000 mg/kg Rat	

Revision Date 02/0	03/2017	Print Date 10/23/2017	US
INFORMATION			
NFORMATION:			
	unprofess	ional handling or disposal.	
rmation on ecolo	уgy		
o the ozone laye	: 40 CFR F		
	Class I or	Class II ODS as defined by the U.S	S. Clean Air Act
'S:			
av Assessment			
		uct has no known ecotoxicological	effects.
c toxicity	: This prod	uct has no known ecotoxicological	effects.
atic toxicity	: May caus	e long lasting harmful effects to aqu	latic life.
Calcium carbon	ate		
		Dania maria (makaz (* 1)	
n			
	Method:	OECD Test Guideline 203	
tebrates	Method: (DECD Test Guideline 202	
		4 mg/l	
gae	: NOEC: 14	+ mg/i	
	TS: gy Assessment <u>Calcium carbon</u> atic toxicity <u>Di(tert-butylperc</u> c toxicity atic toxicity <u>Calcium carbon</u> effects sh aphnia and other tebrates	NFORMATION: gy Assessment cological : An environ unprofess May caus rmation on ecology to the ozone layer : 40 CFR F Stratosph : This prod Class I or Section 6 FS: gy Assessment : Calcium carbonate atic toxicity : This prod : Di(tert-butylperoxyisopropyl) c toxicity : This prod atic toxicity : May caus : Calcium carbonate atic toxicity : May caus : Calcium carbonate sh : Species: Test Type Method: No toxicit aphnia and other : Exposure Species: Method: C No toxicit	NFORMATION: gy Assessment pological : An environmental hazard cannot be excluded unprofessional handling or disposal. May cause long lasting harmful effects to aque rmation on ecology to the ozone layer : 40 CFR Protection of Environment; Part 82 F Stratospheric Ozone - CAA Section 602 Clas : This product neither contains, nor was manu Class I or Class II ODS as defined by the U.S Section 602 (40 CFR 82, Subpt. A, App.A + I rS: gy Assessment : Calcium carbonate atic toxicity : This product has no known ecotoxicological of : Di(tert-buty/peroxyisopropy/)benzene c toxicity : This product has no known ecotoxicological of atic toxicity : May cause long lasting harmful effects to aque : Calcium carbonate effects sh : Species: Danio rerio (zebra fish) Test Type: semi-static test Method: OECD Test Guideline 203 No toxicity at the limit of solubility. aphnia and other : Exposure time: 48 h Species: Daphnia magna (Water flea) Method: OECD Test Guideline 202 No toxicity at the limit of solubility.

ersion 2	Revision Date 02/0	3/2(017 Print Date 10/23/2017	US
Toxicity to	o bacteria	:	Test Type: Growth inhibition Method: OECD Test Guideline 201 NOEC: 1,000 mg/I Exposure time: 3 h Species: activated sludge Test Type: Respiration inhibition Method: Domestic OECD Guideline 209 Information given is based on data obtained from similar substances.	
Eliminati o Bioaccum	••		ence and degradability) Bioaccumulation is unlikely.	
Biodegrad	lability	:	inorganic	
Compone	ent: Di(tert-butylperc	oxyi	sopropyl)benzene	
Ecotoxici Toxicity to	ty effects o fish	:	LC50: 750 mg/l Exposure time: 96 h	
	o daphnia and other vertebrates	:	EC0: > 1 mg/l Exposure time: 48 h Method: Directive 67/548/EEC, Annex V, C.2. No toxicity at the limit of solubility.	
Toxicity to	o algae	:	EC0: > 1 mg/l Exposure time: 72 h Species: Pseudokirchneriella subcapitata (green algae) Test Type: static test Method: OECD Test Guideline 201 No toxicity at the limit of solubility.	
Toxicity to	o bacteria	:	NOEC: > 1,000 mg/l Exposure time: 0.5 h Species: activated sludge Test Type: Respiration inhibition Method: Domestic OECD Guideline 209	
Eliminati Bioaccum			ence and degradability) Bioaccumulation is not expected.	
Biodegrad			Result: Not readily biodegradable. Method: OECD Test Guideline 301D Not readily biodegradable., Information given is based on obtained from similar substances.	ı data

Version 2	Revision Date 02/0)3/2017	Print Date 10/23/2017	US / Z8
Product		courses Do not o chemica Hazardo	duct should not be allowed to enter drains, s or the soil. contaminate ponds, waterways or ditches w al or used container. ous waste e of contents/container in accordance with I on.	vith
Contaminat	ed packaging	Dispose Do not I Due to t recomm	remaining contents. e of as unused product. burn, or use a cutting torch on, the empty d the high risk of contamination recycling/reco nended. all warnings even after the container is emp	overy is not

14. TRANSPORT INFORMATION

International Regulations

ΙΑΤΑ-	DGR		
UN/ID		:	UN 1325
Prope	r shipping name	:	Flammable solid, organic, n.o.s. (Di(tert-butylperoxyisopropyl)benzene)
Class		:	4.1
Packir	ng group	:	11
Labels		:	4.1
Packir aircraf	ng instruction (cargo t)	:	448
	ng instruction enger aircraft)	:	445
Packir	ng instruction (LQ)	:	Y441
Enviro	nmentally hazardous	:	no
IMDG	-Code		
UN nu	Imber	:	UN 1325
Prope	r shipping name	:	FLAMMABLE SOLID, ORGANIC, N.O.S. (Di(tert-butylperoxyisopropyl)benzene)
Class		:	4.1
Packir	ng group	:	II
Labels	5	:	4.1
EmS (Code	:	F-A, S-G
Marine	e pollutant	:	no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR	
UN/ID/NA number	: UN 1325
Proper shipping name	: Flammable solids, organic, n.o.s.
	: (Di(tert-butylperoxyisopropyl)benzene)
Class	: 4.1
Packing group	: 11
Labels	: 4.1
ERG Code	: 133

Version 2	Revision Date 02/03/2017	Print Date 10/23/2017	US / Z8

Marine pollutant	:	no
Reportable Quantity	:	This product does not contain an environmentally hazardous
		substance per 49 CFR 172.101, Appendix A.

15. REGULATORY INFORMATION

Notification status

DSL	: YES. All components of this product are on the Canadian DSL
AICS	: YES. On the inventory, or in compliance with the inventory
NZIoC	: NO. On the inventory, or in compliance with the inventory
ENCS	: YES. On the inventory, or in compliance with the inventory
ISHL	: YES. On the inventory, or in compliance with the inventory
KECI	: YES. On the inventory, or in compliance with the inventory
PICCS	: YES. On the inventory, or in compliance with the inventory
IECSC	: YES. On the inventory, or in compliance with the inventory
TCSI	: YES. On the inventory, or in compliance with the inventory
TSCA	: YES. All chemical substances in this product are either listed on the
	TSCA Inventory or in compliance with a TSCA Inventory exemption.

For explanation of abbreviations, see section 16.

TSCA list

TSCA 5(a)(2) :	No substances are subject to a Significant New Use Rule.
TSCA 12(b) :	No substances are subject to TSCA 12(b) export notification
	requirements.

EPCRA - Emergency Planning and Community Right-to-Know

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	:	Fire Hazard Reactivity Hazard
SARA 302	:	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
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 subject to disclosure and 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).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

Version 2	Revision Date 02/03/2017	Print Date 10/23/2017	US / Z8
Verenenie	Tte fieldit Bate 62/66/2611	111112410 10/20/2011	00 / 20

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations

Massachusetts Right To Know			
Silicon dioxide	7631-86-9		
Pennsylvania Right To Know			
Calcium carbonate Di(tert-butylperoxyisopropyl)benzene Silicon dioxide	471-34-1 25155-25-3 7631-86-9		

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.

16. OTHER INFORMATION

Full text of H-Statements

H242	:	Heating may cause a fire.		
H413	:	May cause long lasting harmful	effects	to aquatic life.

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; 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; 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; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; 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; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations;

Version 2	Revision Date 02/03/2017	Print Date 10/23/2017

UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Further information

HMIS Classification

: Health Hazard: 1 Flammability: 3 Physical hazards: 0

NFPA Classification

: Health Hazard: 1 Fire Hazard: 3 Reactivity Hazard: 0



Notification status explanation

REACH DSL AICS	1907/2006 (EU) Canadian Domestic Substances List (DSL) Australia Inventory of Chemical Substances (AICS)
NZIOC	New Zealand. Inventory of Chemical Substances
ENCS	Japan. ENCS - Existing and New Chemical Substances Inventory
ISHL	Japan. ISHL - Inventory of Chemical Substances
KECI	Korea. Korean Existing Chemicals Inventory (KECI)
PICCS	Philippines Inventory of Chemicals and Chemical Substances (PICCS)
IECSC	China. Inventory of Existing Chemical Substances in China (IECSC)
TCSI	Taiwan Chemical Substance Inventory
TSCA	United States TSCA Inventory

Further information

Revision Date 02/03/2017

This data sheet contains changes from the previous version in section(s): Hazards identification Physical and chemical properties Transport information

The information in this material safety data sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. The user must determine the appropriate measures that need to be implemented for the use and handling of this product in the c ontext of the user's operations and use of this product. The information contained herein supersedes all previously issued bulletins on the subject matter covered. If the date on this document is more than three years old,call to make certain that this sheet is current. No warranty is made as to the product's merchantability or fitness for any particular purpose, or that any suggested use will not infringe any patent. User must determine for himself, by preliminary tests or otherwise, the suitability of this product for his purposes, including mixing with other products. Nothing contained herein shall be construed as granting or extending any license under any patent.

Version 2

Revision Date 02/03/2017

Print Date 10/23/2017

The information provided in this Material 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.