

Version 9.0	Revision Date: 11/03/2020		DS Number: 17291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
SECTIO	N 1. IDENTIFICATION			
Proc	duct name	:	2000® NM	
SDS	S-Identcode	:	358G	
Man	ufacturer or supplier's	deta	ails	
	npany name of supplier ress	:	Bestolife Corpora 2126 Vanco Drive Irving TX 75061,	
Telephone		:	855-243-9164/97	2-865-8961
	Telefax		214-631-3047	
Emergency telephone		:	CHEMTREC U.S (24-hours/7 days)	.: 800-424-9300, International 703-527-3887
E-m	ail address	:	www.bestolife.co	m
Rec	ommended use of the o	cher	nical and restriction	ons on use
Rec	ommended use	:	Offshore industrie	d (Pipe Dope) and Jacking grease for use in es offshore industries)
Res	trictions on use	:		ygen lines or in oxygen enriched atmos-

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)					
Eye irritation	:	Category 2A			
Skin sensitization	:	Category 1			
GHS label elements Hazard pictograms	:				
Signal Word	:	Warning			
Hazard Statements	:	H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.			
Precautionary Statements	:	 Prevention: P261 Avoid breathing dust, fume, gas, mist, vapors or spray. P264 Wash skin thoroughly after handling. P272 Contaminated work clothing must not be allowed out of the workplace. P280 Wear protective gloves, eye protection and face protection. 			



Version 9.0	Revision Date: 11/03/2020	SDS Number: 117291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
		P305 + P351 + for several min to do. Continue P333 + P313 I tion. P337 + P313 I	F ON SKIN: Wash with plenty of soap and water. P 9338 IF IN EYES: Rinse cautiously with water nutes. Remove contact lenses, if present and easy e rinsing. f skin irritation or rash occurs: Get medical atten- f eye irritation persists: Get medical attention. ontaminated clothing before reuse.
		of contents and container to an approved waste	
Othe	r hazards		

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	:	Mixture
---------------------	---	---------

Components	
------------	--

•••••••		
Chemical name	CAS-No.	Concentration (% w/w)
Distillates (petroleum), hydrotreated	64742-52-5	>= 30 - < 50
heavy naphthenic		
Graphite	7782-42-5	>= 20 - < 30
Talc	14807-96-6	>= 5 - < 10
Calcium oxide	1305-78-8	>= 1 - < 5
Dolomite	16389-88-1	>= 1 - < 5
12-Hydroxy lithium stearate	7620-77-1	>= 1 - < 5
Quartz	14808-60-7	>= 1 - < 5
Calcium bis(di C8-C10, branched, C9	57855-77-3	>= 1 - < 5
rich, alkylnaphthalenesulphonate)		
Distillates (petroleum), hydrotreated	64742-53-6	>= 1 - < 5
light naphthenic		
Actual concentration is withheld as a t	trado socrat	

Actual concentration is withheld as a trade secret

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 plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.	I
In case of eye contact	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.	ſ



Version 9.0	Revision Date: 11/03/2020	SDS Number: 117291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015		
lf swa	llowed	Get medical at : If swallowed, D	O NOT induce vomiting.		
			tention if symptoms occur. noroughly with water.		
Most important symptoms		: May cause an allergic skin reaction.			
and effects, both acute and delayed		Causes serious eye irritation.			
Prote	ction of first-aiders	and use the re	nders should pay attention to self-protection, commended personal protective equipment ntial for exposure exists (see section 8).		
Notes	to physician	: Treat symptom	natically and supportively.		

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry chemical
Unsuitable extinguishing media	:	None known.
Specific hazards during fire fighting	:	Exposure to combustion products may be a hazard to health.
Hazardous combustion prod- ucts	:	Carbon oxides Fluorine compounds Metal oxides Sulfur 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 (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. 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	:	Sweep up or vacuum up spillage and collect in suitable container for disposal. 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.



Version 9.0	Revision Date: 11/03/2020	SDS Number: 117291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015		
			nd 15 of this SDS provide information regarding national requirements.		
SECTION	7. HANDLING AND S	TORAGE			
Tech	nical measures	•	ng measures under EXPOSURE ERSONAL PROTECTION section.		
Advic	e on safe handling	: For outdoor us Do not get on a Avoid breathin Do not swallow Do not get in e Wash skin tho Handle in acco practice, based assessment	e only skin or clothing. g dust, fume, gas, mist, vapors or spray. v.		
	litions for safe storage rials to avoid	Store in accord Do not store w	Keep in properly labeled containers. Store in accordance with the particular national regulations. Do not store with the following product types: Strong oxidizing agents		

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
Distillates (petroleum),	64742-52-5	TWA (Mist)	5 mg/m³	OSHA Z-1
hydrotreated heavy naphthenic				
		TWA (Inhal-	5 mg/m ³	ACGIH
		able particu-	5	
		late matter)		
		TWA (Mist)	5 mg/m ³	NIOSH REL
		ST (Mist)	10 mg/m ³	NIOSH REL
Graphite	7782-42-5	TWA (Res-	2.5 mg/m ³	NIOSH REL
		pirable)		
		TWA (Res-	2 mg/m ³	ACGIH
		pirable par-	, , , , , , , , , , , , , , , , , , ,	
		ticulate mat-		
		ter)		
		TWA (Dust)	15 Million	OSHA Z-3
			particles per cubic	001//20
			foot	
Talc	14807-96-6	TWA (Dust)	20 Million	OSHA Z-3
			particles per cubic	
			foot	
1	<u> </u>	TWA (Res-	2 mg/m ³	NIOSH REL
		pirable)	2	
			0	
		TWA (Res-	2 mg/m ³	ACGIH
		pirable par-		

Povicion Data:



Data of last issue: 05/06/2020

2000® NM

Varcian

sion	Revision Date:	SDS Number:		t issue: 05/06/2020	
	11/03/2020	117291-00018	Date of firs	t issue: 05/18/2015	
			ticulate mat- ter)		
Calciu	um oxide	1305-78-8	TWA	2 mg/m ³	ACGIH
			TWA	2 mg/m ³	NIOSH REI
			TWA	5 mg/m³	OSHA Z-1
Dolon	nite	16389-88-1	TWA (Res- pirable)	5 mg/m³ (Calcium car- bonate)	NIOSH REI
			TWA (total)	10 mg/m ³ (Calcium car- bonate)	NIOSH REI
12-Hy	droxy lithium stearate	7620-77-1	TWA (Inhal- able particu- late matter)	10 mg/m³	ACGIH
			TWA (Res- pirable par- ticulate mat- ter)	3 mg/m³	ACGIH
Quart	Z	14808-60-7	TWA (Res- pirable dust)	0.05 mg/m ³	OSHA Z-1
			TWA (respir- able)	10 mg/m3 / %SiO2+2	OSHA Z-3
			TWA (respir- able)	250 mppcf / %SiO2+5	OSHA Z-3
			TWA (Res- pirable par- ticulate mat- ter)	0.025 mg/m³ (Silica)	ACGIH
			TWA (Res- pirable dust)	0.05 mg/m ³ (Silica)	NIOSH REI
			PEL (respir- able)	0.05 mg/m ³	OSHA CAF
	ates (petroleum), treated light naphthenic	64742-53-6	TWÁ (Mist)	5 mg/m ³	OSHA Z-1
			TWA (Inhal- able particu- late matter)	5 mg/m³	ACGIH
			TWA (Mist)	5 mg/m³	NIOSH REI
			ST (Mist)	10 mg/m ³	NIOSH REI

SDS Number

These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard.

Quartz

П

Engineering measures

: Minimize workplace exposure concentrations. Dust formation may be relevant in the processing of this product. In addition to substance-specific OELs, general limitations of concentrations of particulates in the air at workplaces have to be considered in workplace risk assessment. Relevant limits include: OSHA PEL for Particulates Not Otherwise Regulated of 15 mg/m3 - total dust, 5 mg/m3 - respirable fraction; and ACGIH TWA for Particles (insoluble or poorly soluble) Not Otherwise Specified of 3 mg/m3 - respirable particles, 10 mg/m3 -



Version 9.0	Revision Date: 11/03/2020	SDS Number: 117291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
		inhalable pa	rticles.
Perse	onal protective equip	ment	
Resp	iratory protection	maintain vap concentratio unknown, ap Follow OSH use NIOSH/ by air purifyi hazardous c supplied res release, exp	local exhaust ventilation is recommended to bor exposures below recommended limits. Where ns are above recommended limits or are opropriate respiratory protection should be worn. A respirator regulations (29 CFR 1910.134) and MSHA approved respirators. Protection provided ng respirators against exposure to any hemical is limited. Use a positive pressure air pirator if there is any potential for uncontrolled osure levels are unknown, or any other e where air purifying respirators may not provide otection.
Hand	protection		
M	aterial	: Chemical-re	sistant gloves
Re	emarks	on the conce time is not d For special a resistance to gloves with t	res to protect hands against chemicals depending entration specific to place of work. Breakthrough etermined for the product. Change gloves often! applications, we recommend clarifying the o chemicals of the aforementioned protective he glove manufacturer. Wash hands before at the end of workday.
Eye p	protection		lowing personal protective equipment:
Skin	and body protection	: Select appro resistance d potential. Skin contact	priate protective clothing based on chemical ata and an assessment of the local exposure must be avoided by using impervious protective ves, aprons, boots, etc).
Hygie	ene measures	: If exposure t eye flushing working plac When using Contaminate workplace.	o chemical is likely during typical use, provide systems and safety showers close to the

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Viscous semi-solid
Color	:	black
Odor	:	Petroleum
Odor Threshold	:	No data available
рН	:	Not applicable (not an aqueous solution)
Melting point/freezing point	:	No data available



/ersion 9.0	Revision Date: 11/03/2020		S Number: 291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
Initial range	boiling point and boiling	:	500 °F / 260 °C Method: ASTM D Distillates (petrol) 2887 eum), hydrotreated heavy naphthenic
Flash	point	:	385 °F / 196 °C	
			Method: Clevelar Distillates (petrol	nd open cup eum), hydrotreated heavy naphthenic
Evapo	oration rate	:	Not applicable	
Flamr	mability (solid, gas)	:	Not classified as	a flammability hazard
	r explosion limit / Upper nability limit	:	No data available	9
	r explosion limit / Lower nability limit	:	No data available	e
Vapo	r pressure	:	Not applicable	
Relati	ve vapor density	:	Not applicable	
Relati	ve density	:	1.2	
Densi	ity	:	No data available	e
	ility(ies) ater solubility	:	negligible	
	ion coefficient: n- ol/water	:	Not applicable	
	gnition temperature	:	No data available	e
Deco	mposition temperature	:	No data available	e
Visco Vis	sity scosity, dynamic	:	No data available	e
Vi	scosity, kinematic	:	> 12.0 mm²/s (10 Distillates (petrol	04 °F / 40 °C) eum), hydrotreated heavy naphthenic
			> 120 cSt (104 °I Distillates (petrol	F / 40 °C) eum), hydrotreated heavy naphthenic
Flow	time	:	No data available	e
Explo	sive properties	:	Not explosive	
Oxidiz	zing properties	:	The substance o	r mixture is not classified as oxidizing.
Moleo	cular weight	:	No data available	e
Partic	le size	:	No data available	e



Version	Revision Date:	SDS Number:	Date of last issue: 05/06/2020
9.0	11/03/2020	117291-00018	Date of first issue: 05/18/2015

SECTION 10. STABILITY AND REACTIVITY

Reactivity Chemical stability Possibility of hazardous reac- tions	:	Not classified as a reactivity hazard. Stable under normal conditions. Can react with strong oxidizing agents.
Conditions to avoid Incompatible materials Hazardous decomposition products	::	Oxidizing agents

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Skin contact Ingestion Eye contact

Acute toxicity

Not classified based on available information.

Components:

	Distillates (petroleum), hydrotr	eated heavy naphthenic:
	Acute oral toxicity :	LD50 (Rat): > 5,000 mg/kg Method: OECD Test Guideline 401 Remarks: Based on data from similar materials
	Acute inhalation toxicity :	LC50 (Rat): > 5.53 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403 Assessment: The substance or mixture has no acute inhala- tion toxicity Remarks: Based on data from similar materials
	Acute dermal toxicity :	LD50 (Rabbit): > 5,000 mg/kg Method: OECD Test Guideline 402 Remarks: Based on data from similar materials
	Graphite:	
	Acute oral toxicity :	LD50 (Rat): > 2,000 mg/kg Method: OECD Test Guideline 423 Assessment: The substance or mixture has no acute oral tox- icity
	Acute inhalation toxicity :	LC50 (Rat): > 2 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: OECD Test Guideline 403
ĺ	Talc:	

SAFETY DATA SHEET



ersion 0	Revision Date: 11/03/2020		OS Number: 7291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
Acute	oral toxicity	:	LD50 (Rat): > 5 Remarks: Base	,000 mg/kg d on data from similar materials
Calci	um oxide:			
Acute	oral toxicity	:	LD50 (Rat): > 2 Method: OECD	,000 mg/kg Test Guideline 425
Acute	inhalation toxicity	:		
Acute	dermal toxicity	:	Assessment: Th toxicity	> 2,500 mg/kg Test Guideline 402 ne substance or mixture has no acute dermal d on data from similar materials
Ü Dolor	nite:			
	oral toxicity	:	Assessment: Thicity	,000 mg/kg Test Guideline 420 ne substance or mixture has no acute oral tox- d on data from similar materials
Acute	inhalation toxicity	:	tion toxicity	4 h
Acute	dermal toxicity	:	Assessment: Th toxicity	,000 mg/kg Test Guideline 402 ne substance or mixture has no acute dermal d on data from similar materials
П12-Ну	droxy lithium stearate	e:		
ш	oral toxicity	:	LD50 (Rat): > 2 Assessment: Th icity	,000 mg/kg ne substance or mixture has no acute oral tox-
Quart	z:			
UL.	oral toxicity	:	LD50 (Rat): > 5	,000 mg/kg
	um his(di C9_C10, hro	nch	d CQ rich alked	naphthalenesulphonate):
	oral toxicity	ncne :	· · ·	
	dermal toxicity		LD50 (Rabbit):	
Acute	uermai loxicity	·		> 5,000 mg/kg



ersion 0	Revision Date: 11/03/2020	SDS Number: 117291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
IJ			
Distill	ates (petroleum), hy	drotreated light naph	thenic:
	oral toxicity	: LD50 (Rat): > 5	
, 10010	oral toxiony		Test Guideline 401
Acute	inhalation toxicity	: LC50 (Rat): > 5	
		Exposure time:	
		Test atmosphe	e: dust/mist Test Guideline 403
			he substance or mixture has no acute inhala
		tion toxicity	
Acute	dermal toxicity	: LD50 (Rabbit):	
		Assessment: T toxicity	ne substance or mixture has no acute derma
11		-	
-	corrosion/irritation assified based on ava	ailable information.	
	oonents:		
II	<u>ionento.</u>		
Distill	ates (petroleum), hy	drotreated heavy na	ohthenic:
Speci		: Rabbit	
Resul		: No skin irritation	
Rema	rks	: Based on data	from similar materials
Graph	nite:		
Specie		: Rabbit	
Metho		: OECD Test Gu	ideline 404
Resul	t	: No skin irritation	1
Talc:			
Specie	es	: Rabbit	
Resul		: No skin irritation	1
Calciu	um oxide:		
Specie		: Rabbit	
Metho	od .	: OECD Test Gu	ideline 404
Resul		: Skin irritation	
Rema	rks	: Based on data	from similar materials
Dolon	nite:		
Specie		: Rabbit	
Metho		: OECD Test Gu	ideline 404
Resul		: No skin irritation	
Rema	rks	: Based on data	from similar materials
12-Hy	droxy lithium steara	ate:	
12-Hy Specie	droxy lithium steara	a te: : Rabbit	



ersion 0	Revision Date: 11/03/2020	SDS Number: 117291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
Rema	rks	: Based on data	from similar materials
Calciu	ım bis(di C8-C10, bı	anched, C9 rich, alky	/Inaphthalenesulphonate):
Specie		: Rabbit	
Result		: Skin irritation	
Rema			from similar materials
Distill	ates (petroleum), hy	drotreated light napl	nthenic:
Specie	es	: Rabbit	
Result		: No skin irritatio	n
Seriou	us eye damage/eye	irritation	
Cause	es serious eye irritatio	n.	
Comp	onents:		
		drotreated heavy na	phthenic:
Specie		: Rabbit	
Result		: No eye irritation	
Rema	rks	: Based on data	from similar materials
Graph	nite:		
Specie	es	: Rabbit	
Result		: No eye irritation	n
Metho		: OECD Test Gu	
Talc:			
Specie	29	: Rabbit	
Result		: No eye irritation	n
Calciu	ım oxide:		
Specie		: Rabbit	
Result		: Irreversible effe	ects on the eve
Metho		: OECD Test Gu	
Dolon	nite:		
Specie		: Rabbit	
Result		: No eye irritation	n
Metho		: OECD Test Gu	
Rema			from similar materials
11			
UL -	droxy lithium steara		
Specie		: Rabbit	_
Result		: No eye irritation	
Rema	IKS	E Based on data	from similar materials
			/Inaphthalenesulphonate):
Specie	es	: Rabbit	
Result			s, reversing within 21 days



Version 9.0	Revision Date: 11/03/2020		DS Number: 7291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
Rema	arks	:	Based on data f	rom similar materials
Disti	llates (petroleum), hy	/drotr	eated light naph	thenic:
Spec			Rabbit	
Resu		:	No eye irritation	
Resp	viratory or skin sensi	tizatio	on	
-	sensitization cause an allergic skin	reactiv	n	
	-	Teacin	511.	
-	iratory sensitization lassified based on ava	ailable	information.	
Com	ponents:			
Disti	llates (petroleum), hy	/drotr	eated heavy nap	hthenic:
Test		:	Buehler Test	
	es of exposure	:	Skin contact	
Spec		:	Guinea pig	
Resu Rema		:	negative Based on data f	rom similar materials
Grap	hite:			
Test		:	Local lymph noo	de assay (LLNA)
	es of exposure	:	Skin contact	
Spec		:	Mouse	
Resu	It	:	negative	
Talc:				
	es of exposure	:	Skin contact	
Spec		:	Humans	
Resu	It	:	negative	
Calci	ium oxide:			
Test	Туре	:		de assay (LLNA)
	es of exposure	:	Skin contact	
Spec		:	Mouse	
Meth Resu		:	OECD Test Gui negative	deline 429
Rema		:		rom similar materials
Dolo	mite:			
Test	Туре	:	Local lymph noo	de assay (LLNA)
Route	es of exposure	:	Skin contact	
Spec		:	Mouse	1. J
Meth		:	OECD Test Gui	deline 429
Resu Rema			negative Based on data f	rom similar materials
Income	2	•		



ersion)	Revision Date: 11/03/2020	SDS Number: 117291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
12-H	ydroxy lithium stea	urato:	
U . '	-		
Test			ode assay (LLNA)
	es of exposure	: Skin contact	
Spec		: Mouse	
Meth		: OECD Test G	uideline 429
Resu	lt	: negative	
Calci	um bis(di C8-C10,	branched, C9 rich, alk	yInaphthalenesulphonate):
Test	Type	: Buehler Test	
	es of exposure	: Skin contact	
Spec		: Guinea pig	
Resu		: positive	
Rema			a from similar materials
Rema		. Daseu on data	
Asse	ssment		evidence of low to moderate skin sensitization
II		rate in human	5
Disti	llates (petroleum),	hydrotreated light nap	ohthenic:
Test	Туре	: Buehler Test	
	es of exposure	: Skin contact	
Spec		: Guinea pig	
Meth		: OECD Test G	uideline 406
Resu Germ	n cell mutagenicity	: negative	
Resu Gern Not c <u>Com</u>	n cell mutagenicity lassified based on a ponents:	vailable information.	
Germ Not c <u>Com</u>	n cell mutagenicity lassified based on a ponents: llates (petroleum),	vailable information. hydrotreated heavy na	-
Germ Not c <u>Com</u>	n cell mutagenicity lassified based on a ponents:	vailable information. hydrotreated heavy na : Test Type: Ba	cterial reverse mutation assay (AMES) D Test Guideline 471
Germ Not c <u>Com</u> Distil	n cell mutagenicity lassified based on a ponents: llates (petroleum),	wailable information. hydrotreated heavy na : Test Type: Ba Method: OEC Result: negati	icterial reverse mutation assay (AMES) D Test Guideline 471 ve ammalian erythrocyte micronucleus test (in vivo
Germ Not c <u>Com</u> Distil	n cell mutagenicity lassified based on a <u>ponents:</u> llates (petroleum), otoxicity in vitro	wailable information. hydrotreated heavy na : Test Type: Ba Method: OEC Result: negati : Test Type: Ma	icterial reverse mutation assay (AMES) D Test Guideline 471 ve ammalian erythrocyte micronucleus test (in vivo ssay)
Germ Not c <u>Com</u> Distil	n cell mutagenicity lassified based on a <u>ponents:</u> llates (petroleum), otoxicity in vitro	wailable information. hydrotreated heavy na : Test Type: Ba Method: OEC Result: negati : Test Type: Ma cytogenetic as Species: Mou	icterial reverse mutation assay (AMES) D Test Guideline 471 ve ammalian erythrocyte micronucleus test (in vivo ssay) se
Germ Not c <u>Com</u> Distil	n cell mutagenicity lassified based on a <u>ponents:</u> llates (petroleum), otoxicity in vitro	 wailable information. hydrotreated heavy na Test Type: Ba Method: OEC Result: negati Test Type: Ma cytogenetic as Species: Mou Application Ro 	icterial reverse mutation assay (AMES) D Test Guideline 471 ve ammalian erythrocyte micronucleus test (in vivo ssay) se pute: Intraperitoneal injection
Germ Not c <u>Com</u> Distil	n cell mutagenicity lassified based on a <u>ponents:</u> llates (petroleum), otoxicity in vitro	Available information. hydrotreated heavy na : Test Type: Ba Method: OEC Result: negati : Test Type: Ma cytogenetic as Species: Mou Application Ro Method: OEC	icterial reverse mutation assay (AMES) D Test Guideline 471 ve ammalian erythrocyte micronucleus test (in vivo ssay) se pute: Intraperitoneal injection D Test Guideline 474
Germ Not c <u>Com</u> Distil	n cell mutagenicity lassified based on a <u>ponents:</u> llates (petroleum), otoxicity in vitro	 wailable information. hydrotreated heavy na : Test Type: Ba Method: OEC Result: negati : Test Type: Ma cytogenetic as Species: Mou Application Ro Method: OEC Result: negati 	Acterial reverse mutation assay (AMES) D Test Guideline 471 ve ammalian erythrocyte micronucleus test (in vivo assay) se bute: Intraperitoneal injection D Test Guideline 474 ve
Germ Not c <u>Com</u> Distil	n cell mutagenicity lassified based on a <u>ponents:</u> llates (petroleum), otoxicity in vitro	 wailable information. hydrotreated heavy na : Test Type: Ba Method: OEC Result: negati : Test Type: Ma cytogenetic as Species: Mou Application Ro Method: OEC Result: negati 	icterial reverse mutation assay (AMES) D Test Guideline 471 ve ammalian erythrocyte micronucleus test (in vivo ssay) se pute: Intraperitoneal injection D Test Guideline 474
Germ Not c <u>Com</u> Distil	n cell mutagenicity lassified based on a <u>ponents:</u> llates (petroleum), otoxicity in vitro	 wailable information. hydrotreated heavy na : Test Type: Ba Method: OEC Result: negati : Test Type: Ma cytogenetic as Species: Mou Application Ro Method: OEC Result: negati 	acterial reverse mutation assay (AMES) D Test Guideline 471 ve ammalian erythrocyte micronucleus test (in vivo assay) se bute: Intraperitoneal injection D Test Guideline 474 ve
Germ Not c Com Distil Genc Genc	n cell mutagenicity lassified based on a <u>ponents:</u> llates (petroleum), otoxicity in vitro	 twailable information. hydrotreated heavy na : Test Type: Ba Method: OEC Result: negati : Test Type: Ma cytogenetic as Species: Mou Application Ro Method: OEC Result: negati Remarks: Bas : Test Type: Ba 	Acterial reverse mutation assay (AMES) D Test Guideline 471 ve ammalian erythrocyte micronucleus test (in vivo assay) se pute: Intraperitoneal injection D Test Guideline 474 ve sed on data from similar materials
Germ Not c Com Distil Genc Genc	n cell mutagenicity lassified based on a <u>ponents:</u> llates (petroleum), otoxicity in vitro otoxicity in vivo	 twailable information. hydrotreated heavy na : Test Type: Ba Method: OEC Result: negati : Test Type: Ma cytogenetic as Species: Mou Application Ro Method: OEC Result: negati Remarks: Bas : Test Type: Ba Method: OEC Result: negati Remarks: Bas : Test Type: Ba Method: OEC Result: negati Test Type: In 	Acterial reverse mutation assay (AMES) D Test Guideline 471 ve ammalian erythrocyte micronucleus test (in vivo assay) se bute: Intraperitoneal injection D Test Guideline 474 ve sed on data from similar materials acterial reverse mutation assay (AMES) D Test Guideline 471 ve vitro mammalian cell gene mutation test D Test Guideline 476



rsion)	Revision Date: 11/03/2020	SDS Number: 117291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
		Method: OEC Result: nega	CD Test Guideline 473 ive
Talc:			
	toxicity in vitro		NA damage and repair, unscheduled DNA syn nmalian cells (in vitro) ive
Geno	toxicity in vivo	Species: Rat	hromosome aberration test in vitro oute: Ingestion ive
	um oxide:		
	toxicity in vitro		acterial reverse mutation assay (AMES) CD Test Guideline 471 ive
		Method: OEC Result: negat	hromosome aberration test in vitro CD Test Guideline 473 ive sed on data from similar materials
		Test Type: In Method: OEC Result: negat	vitro mammalian cell gene mutation test CD Test Guideline 476
Dolor	nite:		
LL.	toxicity in vitro	Method: OEC Result: negat	acterial reverse mutation assay (AMES) CD Test Guideline 471 ive sed on data from similar materials
	um bis(di C8-C10 b	ranched C9 rich al	kylnaphthalenesulphonate):
LL.	toxicity in vitro	: Test Type: B Method: OEC Result: negation	acterial reverse mutation assay (AMES) D Test Guideline 471
		Method: OEC Result: negat	vitro mammalian cell gene mutation test D Test Guideline 476 ive sed on data from similar materials
		Test Type: C	hromosome aberration test in vitro D Test Guideline 473
			sed on data from similar materials
11			



/ersion).0	Revision Date: 11/03/2020		Number: 91-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015			
Genot	oxicity in vitro	Μ		cterial reverse mutation assay (AMES) D Test Guideline 476 ve			
Genotoxicity in vivo		cy Si Ai M	: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay) Species: Mouse Application Route: Intraperitoneal injection Method: OECD Test Guideline 474 Result: negative				
Carcin	nogenicity						
	assified based on ava	ilable info	ormation.				
Produ	<u>ict:</u>						
Carcin ment	nogenicity - Assess-	ba	ased on DM	tillates have been classified as not carcinogenic SO extract content < 3% (Regulation (EC) nnex VI, Part 3, Note L).			
Comp	oonents:						
Distill	ates (petroleum), hy	drotreat	ed heavy na	aphthenic:			
Specie			ouse				
	ation Route		kin contact				
Expos Metho	sure time	-	B weeks	uideline 451			
Result			egative				
Talc:							
Specie	96	· M	ouse				
	ation Route			st/mist/fume)			
	sure time		Years				
Result	t	: ne	egative				
Calciu	um oxide:						
Specie		: R	at				
	ation Route		gestion				
	sure time)4 weeks				
Result Rema			egative ased on data	a from similar materials			
Quart	Z:						
Specie		: H	umans				
	ation Route	: in	halation (du	st/mist/fume)			
Result			ositive				
Rema	rks			nce(s) are inextricably bound in the product and out contribute to a dust inhalation hazard.			
	nogenicity - Assess-						



Version 9.0	Revision Date: 11/03/2020	SDS Number: 117291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
Specie Applic	ation Route sure time	drotreated light nap : Mouse : Skin contact : 78 weeks : negative	hthenic:
IARC	Group 1: Ca Quartz (Silica dust,	rcinogenic to human crystalline)	s 14808-60-7
OSHA	OSHA spec Quartz (crystalline s	ifically regulated carc silica)	inogen 14808-60-7
NTP	Quartz	e human carcinogen talline (Respirable Si	14808-60-7 ze))
Not cla	oductive toxicity assified based on avai	lable information.	
Graph	nite:		
. UL '	s on fertility	reproduction/d Species: Rat Application Ro	D Test Guideline 422
Effects	s on fetal developmen	reproduction/d Species: Rat Application Ro	D Test Guideline 422
u	s on fetal developmen	t : Test Type: Em Species: Rat Application Ro Result: negativ	
	ım oxide:		
LL.	s on fertility	reproduction/d Species: Rat Application Ro Method: OECI Result: negativ	D Test Guideline 422

SAFETY DATA SHEET



ersion 0	Revision Date: 11/03/2020		OS Number: 7291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
Effect	ts on fetal development	:	Species: Mouse Application Rout	yo-fetal development e: Ingestion Fest Guideline 414
	mite:			
Ц. С	ts on fertility	:	reproduction/dev Species: Rat Application Rout Method: OECD Result: negative	bined repeated dose toxicity study with the elopmental toxicity screening test e: Ingestion Fest Guideline 422 on data from similar materials
Effect	ts on fetal development	:	reproduction/dev Species: Rat Application Rout Method: OECD Result: negative	pined repeated dose toxicity study with the elopmental toxicity screening test e: Ingestion Fest Guideline 422 on data from similar materials
	um bis(di C8-C10, bran	che	ed, C9 rich, alkylı	naphthalenesulphonate):
	ts on fertility	:	Test Type: Com reproduction/dev Species: Rat Application Rout Method: OECD Result: negative	pined repeated dose toxicity study with the elopmental toxicity screening test
Effect	ts on fetal development	:	reproduction/dev Species: Rat Application Rout Method: OECD Result: negative	bined repeated dose toxicity study with the elopmental toxicity screening test e: Ingestion Fest Guideline 422 on data from similar materials
Distil	llates (petroleum), hydr	otro	eated light napht	henic:
	ts on fertility	:		oduction/Developmental toxicity screening
Effect	ts on fetal development	:	Test Type: Embr Species: Rat Application Rout Result: negative	yo-fetal development e: Skin contact



Version 9.0	Revision Date: 11/03/2020	SDS Number: 117291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
	-single exposure lassified based on availa	able information	
	oonents:		
11	um oxide:		
4.4.	ssment	: May cause re	spiratory irritation.
	-repeated exposure assified based on availa	able information.	
Com	<u>oonents:</u>		
12-H	/droxy lithium stearate) :	
Route	es of exposure ssment	: Ingestion : No significant	health effects observed in animals at concentra- ng/kg bw or less.
Targe	t z: es of exposure et Organs esment		st/mist/fume) duce significant health effects in animals at con- 0.02 mg/l/6h/d or less.
Repe	ated dose toxicity		
Com	oonents:		
Distil	lates (petroleum), hyd	rotreated heavy na	aphthenic:
Speci		: Rat	
NOAE Applic	L cation Route	: > 0.98 mg/l : inhalation (du	st/mist/fume)
	sure time	: 28 Days	a from similar materials
Calci	um oxide:		
Speci	es	: Rat	
NOAE	EL	: >= 0.399 mg/l	
	cation Route sure time	: inhalation (du : 90 Days	st/mist/tume)
Metho		: OECD Test G	uideline 413
Dolor	nite [.]		
Speci		: Mouse	
NOAE		: 1,300 mg/kg	
	cation Route sure time arks	: Ingestion : 28 Days : Based on data	a from similar materials
	/droxy lithium stearate		
Speci	es	: Rat	

Revision Date:

11/03/2020

SDS Number:

117291-00018



Date of last issue: 05/06/2020 Date of first issue: 05/18/2015

2000® NM

Version

9.0

Quartz: Species LOAEL Application Route Remarks	:	
II	:	Humans 0.053 mg/m ³ inhalation (dust/mist/fume) These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard.
Calcium bis(di C8-C10, bra	nche	ed, C9 rich, alkylnaphthalenesulphonate):
Species NOAEL LOAEL Application Route Exposure time Method	:	Rat 100 mg/kg 300 mg/kg Ingestion 90 Days OECD Test Guideline 408
Distillates (petroleum), hyd	lrotre	eated light naphthenic:
Species NOAEL Application Route Exposure time Method	:	Rabbit 1,000 mg/kg Skin contact 4 Weeks OECD Test Guideline 410
Not classified based on avail	able	
ECTION 12. ECOLOGICAL INF		
Ecotoxicity		
Ecotoxicity <u>Components:</u>	ORM	ΙΑΤΙΟΝ
Ecotoxicity <u>Components:</u>	ORM	ΙΑΤΙΟΝ
Ecotoxicity Components: Distillates (petroleum), hyd Toxicity to fish	FORM Irotre	ATION eated heavy naphthenic: LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203
Ecotoxicity Components: Distillates (petroleum), hyd Toxicity to fish Toxicity to daphnia and other	FORM Irotre	AATION eated heavy naphthenic: LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 Remarks: Based on data from similar materials EC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 48 h

SAFETY DATA SHEET



rsion)	Revision Date: 11/03/2020		9S Number: 7291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
aquatio	c invertebrates (Chron- city)		Exposure time: 21 Remarks: Based	l d on data from similar materials
Toxicit	y to microorganisms	:	NOEC: > 1.93 mg/l Exposure time: 10 min Remarks: Based on data from similar materials	
Graph	ite:			
Toxicit	y to fish	:	Exposure time: 96	Vater Accommodated Fraction
	y to daphnia and other c invertebrates	:	Exposure time: 48	Vater Accommodated Fraction
Toxicit plants	y to algae/aquatic	:	mg/l Exposure time: 72	Vater Accommodated Fraction
			100 mg/l Exposure time: 72	Vater Accommodated Fraction
Toxicit	y to microorganisms	:	EC50: > 1,012.5 r Exposure time: 3 Method: OECD To	h
Talc:				
Toxicit	y to fish	:	LC50 (Brachydan Exposure time: 24	io rerio (zebrafish)): > 100,000 mg/l ł h
	m oxide:			
	y to fish	:	Exposure time: 96 Method: OECD Te	
	y to daphnia and other c invertebrates	:	Exposure time: 96 Method: OECD To	
Toxicit plants	y to algae/aquatic	:	ErC50 (Pseudokir mg/l Exposure time: 72 Method: OECD To	



Version 9.0	Revision Date: 11/03/2020		9S Number: 7291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
			EC10 (Pseudokiro mg/l Exposure time: 72 Method: OECD Te	
	tic invertebrates (Chron-	:	Exposure time: 14	rrangon (shrimp)): > 1 mg/l d on data from similar materials
Toxic	ity to microorganisms	:	EC50: > 100 mg/l Exposure time: 3 l Method: OECD Te Remarks: Based o	
	mite:			
u	ity to fish	:	Exposure time: 96 Method: OECD Te Remarks: No toxic	
	ity to daphnia and other tic invertebrates	:	Exposure time: 48 Method: OECD Te Remarks: No toxic	
Toxic plants	ity to algae/aquatic s	:	Exposure time: 72 Method: OECD Te	
П _{12-Н}	ydroxy lithium stearate			
- -	ity to fish	:	LL50 (Oncorhynch Exposure time: 96 Method: OECD Te	
	ity to daphnia and other tic invertebrates	:	EL50 (Daphnia ma Exposure time: 48 Method: OECD Te	
Toxic plants	ity to algae/aquatic s	:	NOELR (Pseudok 100 mg/l Exposure time: 72 Method: OECD Te	
Quar	tz:			
	oxicology Assessment			
	e aquatic toxicity	:	No toxicity at the I	mit of solubility.



rsion	Revision Date: 11/03/2020		S Number: 7291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
11				
Chron	ic aquatic toxicity	:	No toxicity at t	he limit of solubility.
	•			yInaphthalenesulphonate):
Toxici	ty to fish	:	Exposure time Test substance Method: OECI	s carpio (Carp)): > 100 mg/l : 96 h e: Water Accommodated Fraction D Test Guideline 203 ed on data from similar materials
	ty to daphnia and other ic invertebrates	:	Exposure time Test substance Method: OECI	a magna (Water flea)): > 100 mg/l : 48 h e: Water Accommodated Fraction D Test Guideline 202 ed on data from similar materials
Toxici plants	ty to algae/aquatic	:	mg/l Exposure time Test substance Method: OECI	kirchneriella subcapitata (green algae)): > 1 : 72 h e: Water Accommodated Fraction D Test Guideline 201 ed on data from similar materials
			mg/l Exposure time Test substance Method: OECI	kirchneriella subcapitata (green algae)): > 1 : 72 h e: Water Accommodated Fraction D Test Guideline 201 ed on data from similar materials
	ty to daphnia and other ic invertebrates (Chron- city)	:	Exposure time Test substance	nia magna (Water flea)): 2.2 mg/l : 21 d e: Water Accommodated Fraction D Test Guideline 211
Toxici	ty to microorganisms	:		
Distil	lates (petroleum), hydr	otre	eated light nap	hthenic:
Toxici	ty to fish	:	Exposure time	ales promelas (fathead minnow)): > 100 mg : 96 h e: Water Accommodated Fraction
	ty to daphnia and other ic invertebrates	:	Exposure time	a magna (Water flea)): > 10,000 mg/l : 48 h e: Water Accommodated Fraction
Toxici plants	ty to algae/aquatic	:	100 mg/l Exposure time	dokirchneriella subcapitata (green algae)): > : 72 h e: Water Accommodated Fraction



Version 9.0	Revision Date: 11/03/2020	-	DS Number: 7291-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity) Toxicity to microorganisms			Exposure time: 2 NOEC (Photobac	1 d terium phosphoreum): > 2.17 mg/l
			Exposure time: 4	d
Persi	stence and degradabili	ity		
<u>Com</u>	oonents:			
Distil	lates (petroleum), hydr	otr	eated heavy naph	thenic:
Biode	gradability	:	Result: Not readil Biodegradation: Exposure time: 20 Method: OECD T	2 - 4 %
12-Hy	/droxy lithium stearate	:		
Biode	gradability	:	Result: Readily b Biodegradation: Exposure time: 2 Method: OECD T	78 %
N.				
	•	cho	· · · ·	aphthalenesulphonate):
BIOGE	gradability	:	Result: Not readil Remarks: Based	on data from similar materials
Distil	lates (petroleum), hydr	otr	eated light naphth	nenic:
Biode	gradability	:	Result: Not readil Biodegradation: Exposure time: 2 Method: OECD T	2 - 8 %
Bioad	ccumulative potential			
Com	oonents:			
Calci	um bis(di C8-C10, bran	che	ed, C9 rich, alkyln	aphthalenesulphonate):
Partit	ion coefficient: n-			
	lity in soil			
	ata available			
	r adverse effects ata available			
SECTION	13. DISPOSAL CONSI	DEF	ATIONS	
Dispo	osal methods			

Waste from residues	:	Dispose of in accordance with local regulations.
Contaminated packaging	:	Empty containers should be taken to an approved waste
		handling site for recycling or disposal.



Version	Revision Date:	SDS Number:	Date of last issue: 05/06/2020
9.0	11/03/2020	117291-00018	Date of first issue: 05/18/2015
		Do not pressur expose such co sources of ignit death.	ers retain residue and can be dangerous. ize, cut, weld, braze, solder, drill, grind, or ontainers to heat, flame, sparks, or other ion. They may explode and cause injury and/or e specified: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG Not regulated as a dangerous good

IATA-DGR Not regulated as a dangerous 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.

Domestic regulation

49 CFR

Not regulated as a dangerous good

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 Serious eye damage or eye irritation
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

Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5
Graphite	7782-42-5
Polytetrafluoroethylene	9002-84-0
Talc	14807-96-6
Calcium oxide	1305-78-8
Quartz	14808-60-7
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6

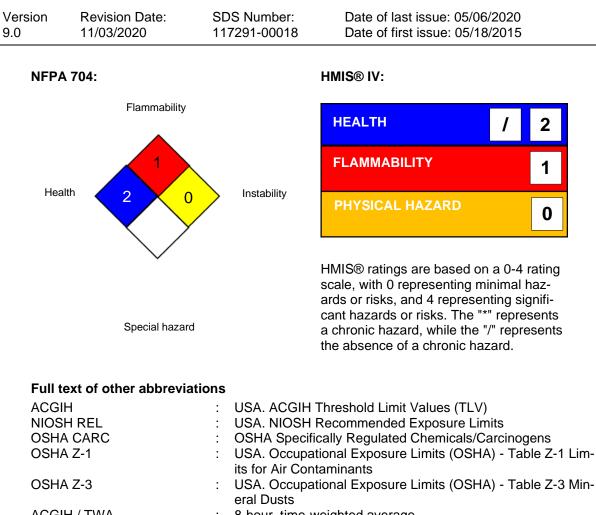


Version 9.0	Revision Date: 11/03/2020	SDS Number: 117291-00018	Date of last issu Date of first issu	
II	Antimony, dialky	l dithiocarbamate		15890-25-2
Califo	ornia Prop. 65			
				tz, which is/are known to vw.P65Warnings.ca.gov.
Califo	ornia List of Hazardo	ous Substances		
	Graphite Talc Calcium oxide	leum), hydrotreated he leum), hydrotreated lig		64742-52-5 7782-42-5 14807-96-6 1305-78-8 64742-53-6
Califo	ornia Permissible Ex	posure Limits for Ch	emical Contaminar	nts
	Distillates (petro Graphite Talc Calcium oxide Quartz	leum), hydrotreated he	avy naphthenic	64742-52-5 7782-42-5 14807-96-6 1305-78-8 14808-60-7 64742-53-6
Califo	ornia Regulated Car	cinogens		
	Quartz			14808-60-7
The i DSL	ngredients of this p	roduct are reported in : All components	-	ntories: on the Canadian DSL
TSCA	A.			duct are either listed on the ce with a TSCA Inventory
AICS			listed or exempt.	

SECTION 16. OTHER INFORMATION

Further information





•		0 I	12	
7	•	X-nour	time_weighted	averade
1		o nour,	time-weighted	average

	. o-nour, line-weighted average	
NIOSH REL / TWA	: Time-weighted average concentration for up to a 10-hour	
	workday during a 40-hour workweek	
NIOSH REL / ST	: STEL - 15-minute TWA exposure that should not be exceeded	d
	at any time during a workday	
OSHA CARC / PEL	: Permissible exposure limit (PEL)	
OSHA Z-1 / TWA	: 8-hour time weighted average	
OSHA Z-3 / 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 Pre-



Version	Revision Date:	SDS Number:	Date of last issue: 05/06/2020
9.0	11/03/2020	117291-00018	Date of first issue: 05/18/2015

vention 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; 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 Data Sheet		eChem Portal search results and European Chemicals Agen- cy, http://echa.europa.eu/

Revision Date : 11/03/2020

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