## PTC



Version 11.0	Revision Date: 11/03/2020		DS Number: 18051-00018	Date of last issue: 05/06/2020 Date of first issue: 05/18/2015				
SECTIO	SECTION 1. IDENTIFICATION							
Product name		:	PTC					
SDS	SDS-Identcode		308G					
Mar	ufacturer or supplier's	deta	ails					
Company name of supplier Address			Bestolife Corporation 2126 Vanco Drive Irving TX 75061,					
Telephone				855-243-9164/972-865-8961				
Tele	Telefax : 214-631-3047							
Emergency telephone		:	CHEMTREC U.S.: 800-424-9300, International 703-527-3887 (24-hours/7 days)					
E-m	ail address	:	www.bestolife.co	m				
Rec	ommended use of the o	cher	nical and restriction	ons on use				
Rec	ommended use	:	: Industrial use Thread Compound (Pipe Dope) and Jacking grease for use Offshore industries Mining, (without offshore industries)					
Res	trictions on use	:	<ul> <li>Do not use on oxygen lines or in oxygen enriched atmospheres.</li> </ul>					

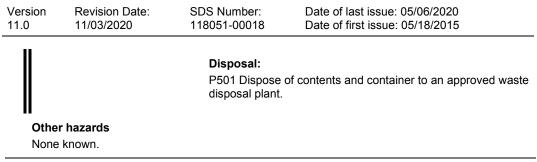
### SECTION 2. HAZARDS IDENTIFICATION

# GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitization	:	Category 1
GHS label elements Hazard pictograms	:	
Signal Word	:	Warning
Hazard Statements	:	H317 May cause an allergic skin reaction.
Precautionary Statements	:	<b>Prevention:</b> P261 Avoid breathing dust, fume, gas, mist, vapors or spray. P272 Contaminated work clothing must not be allowed out of the workplace. P280 Wear protective gloves.
		<b>Response:</b> P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P333 + P313 If skin irritation or rash occurs: Get medical atten- tion. P363 Wash contaminated clothing before reuse.

## РТС





### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical name	CAS-No.	Concentration (% w/w)
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	>= 50 - < 70
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	>= 30 - < 50
Graphite	7782-42-5	>= 10 - < 20
Dilithium azelate	38900-29-7	>= 5 - < 10
Tris[bis(2- ethylhexyl)dithiocarbamato-S,S'] antimony	15991-76-1	>= 1 - < 5
Talc	14807-96-6	>= 1 - < 5
Antimony, dialkyl dithiocarbamate	15890-25-2	>= 1 - < 5
2,5-Bis(octyldithio)-1,3,4-thiadiazole	13539-13-4	>= 0.1 - < 1
Benzenesulphonic acid, propenated, calcium salts, overbased	68610-84-4	>= 0.1 - < 1
Quartz	14808-60-7	>= 0.1 - < 1

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 soap and plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.
In case of eye contact	:	Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.
If swallowed	:	If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.
Most important symptoms and effects, both acute and	:	May cause an allergic skin reaction.



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delayed Protection of first-aiders Notes to physician		:	<ul> <li>First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).</li> <li>Treat symptomatically and supportively.</li> </ul>			
SEC	TION 5	. FIRE-FIGHTING MEA	<b>\</b> SU	RES		
	Suitable extinguishing media		:	Water spray Alcohol-resistant Carbon dioxide (C Dry chemical		
	Unsuita media	ble extinguishing	:	None known.		
	Specific hazards during fire fighting		:	Exposure to combustion products may be a hazard to health.		
	Hazardous combustion prod- ucts		:	Carbon oxides Metal oxides Fluorine compour Nitrogen oxides (I Sulfur oxides		
	Specific ods	c extinguishing meth-	<ul> <li>Use extinguishing measures that are appropriate to loc cumstances and the surrounding environment.</li> <li>Use water spray to cool unopened containers.</li> <li>Remove undamaged containers from fire area if it is sa so.</li> <li>Evacuate area.</li> </ul>		he surrounding environment. o cool unopened containers.	
	Special for fire-	protective equipment fighters	:		e, wear self-contained breathing apparatus. ective equipment.	

### SECTION 6. ACCIDENTAL RELEASE MEASURES

	Personal precautions, protec- tive equipment and emer- gency procedures	:	Use personal protective equipment. Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).
	Environmental precautions	:	Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.
Β	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. Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

### SECTION 7. HANDLING AND STORAGE

Technical measures	:	See Engineering measures under EXPOSURE
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Advid	ce on safe handling	: For outdoor u Do not get or Avoid breathi Do not swallo Avoid contac Handle in acc practice, bas assessment	n skin or clothing. ng dust, fume, gas, mist, vapors or spray. w.
Conc	litions for safe storage		erly labeled containers. rdance with the particular national regulations.
Mate	rials to avoid		with the following product types:

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	TWA (Mist)	5 mg/m³	OSHA Z-1
		TWA (Mist)	5 mg/m³	NIOSH REL
		ST (Mist)	10 mg/m <sup>3</sup>	NIOSH REL
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	TWA (Mist)	5 mg/m³	OSHA Z-1
		TWA (Inhal- able particu- late matter)	5 mg/m³	ACGIH
		TWA (Mist)	5 mg/m³	NIOSH REL
		ST (Mist)	10 mg/m <sup>3</sup>	NIOSH REL
Graphite	7782-42-5	TWA (Res- pirable)	2.5 mg/m³	NIOSH REL
		TWA (Res- pirable par- ticulate mat- ter)	2 mg/m³	ACGIH
		TWA (Dust)	15 Million particles per cubic foot	OSHA Z-3
Tris[bis(2- ethylhexyl)dithiocarbamato- S,S'] antimony	15991-76-1	TWA	0.5 mg/m³ (antimony)	OSHA Z-1
		TWA	0.5 mg/m³ (antimony)	ACGIH
		TWA	0.5 mg/m <sup>3</sup> (antimony)	NIOSH REL
Talc	14807-96-6	TWA (Dust)	20 Million particles per cubic foot	OSHA Z-3

### Ingredients with workplace control parameters



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			TWA (Res- pirable)	2 mg/m³	NIOSH REL
			TWA (Res- pirable par- ticulate mat- ter)	2 mg/m <sup>3</sup>	ACGIH
	nony, dialkyl carbamate	15890-25-2	TWA	0.5 mg/m <sup>3</sup> (antimony)	OSHA Z-1
			TWA	0.5 mg/m <sup>3</sup> (antimony)	ACGIH
			TWA	0.5 mg/m <sup>3</sup> (antimony)	NIOSH REL
Quar	tz	14808-60-7	TWA (Res- pirable dust)	0.05 mg/m <sup>3</sup>	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 <sup>3</sup> (Silica)	NIOSH REL
			PEL (respir- able)	0.05 mg/m <sup>3</sup>	OSHA CARC

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

II

Quartz

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 - inhalable particles.
Personal protective equipment	
Respiratory protection :	General and local exhaust ventilation is recommended to 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



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Hand protection		adequate prof				
Ma	iterial	: Chemical-resi	stant gloves			
Remarks		on the concer time is not de For special ap resistance to gloves with th	Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.			
Eye p	rotection		Wear the following personal protective equipment: Safety glasses			
Skin and body protection		: Select approp resistance da potential. Skin contact r	riate protective clothing based on chemical ta and an assessment of the local exposure nust be avoided by using impervious protective			
Hygiene measures		: If exposure to eye flushing s working place When using d Contaminated workplace.	es, aprons, boots, etc). chemical is likely during typical use, provide ystems and safety showers close to the o not eat, drink or smoke. I work clothing should not be allowed out of the inated clothing before re-use.			

### 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
Initial boiling point and boiling range	:	No data available
Flash point	:	>= 392 °F / >= 200 °C
		Method: ASTM D 92, Cleveland open cup Distillates (petroleum), hydrotreated heavy naphthenic
Evaporation rate	:	Not applicable
Flammability (solid, gas)	:	Not classified as a flammability hazard
Upper explosion limit / Upper	:	No data available

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	flamma	bility limit			
		explosion limit / Lower bility limit	:	No data available	2
	Vapor p	pressure	:	Not applicable	
	Relative	e vapor density	:	Not applicable	
	Relative	e density	:	1.1	
	Density	,	:	No data available	2
	Solubili Wat	ty(ies) er solubility	:	negligible	
	Partitio octanol	n coefficient: n-	:	Not applicable	
		hition temperature	:	No data available	2
	Decom	position temperature	:	No data available	2
	Viscosi Visc	ty cosity, dynamic	:	No data available	9
	Visc	osity, kinematic	:	Not applicable	
	Flow tir	ne	:	No data available	9
	Explosi	ve properties	:	Not explosive	
	Oxidiziı	ng properties	:	The substance o	r mixture is not classified as oxidizing.
	Molecu	lar weight	:	No data available	9
	Particle	size	:	No data available	2

### SECTION 10. STABILITY AND REACTIVITY

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



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#### SECTION 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

Skin contact Ingestion Eye contact

### Acute toxicity

Not classified based on available information.

#### Product:

Acute oral toxicity	:	Acute toxicity estimate: > 5,000 mg/kg
		Method: Calculation method

### **Components:**

I	Distillates (petroleum), hydrol	tre	eated heavy paraffinic:
	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
	Distillates (petroleum), hydrol	tre	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
I	Graphite:		
1	Acute oral toxicity		LD50 (Rat): > 2,000 mg/kg



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		OECD Test Guideline 423 ent: The substance or mixture has no acute oral tox
inhalation toxicity	Exposure Test atm	at): > 2 mg/l e time: 4 h osphere: dust/mist OECD Test Guideline 403
ium azelate:		
oral toxicity	Method:	at): > 300 - 2,000 mg/kg OECD Test Guideline 420 : Based on data from similar materials
dermal toxicity	Method:	at): > 2,000 mg/kg OECD Test Guideline 402 : Based on data from similar materials
ois(2-ethylhexyl)dith	ocarbamato-S,	S'] antimony:
oral toxicity		at): > 5,000 mg/kg : Based on data from similar materials
e dermal toxicity		abbit): > 5,000 mg/kg : Based on data from similar materials
oral toxicity		at): > 5,000 mg/kg : Based on data from similar materials
nony, dialkyl dithioc	arbamate:	
oral toxicity	: LD50 (Ra	at): > 5,000 mg/kg
e dermal toxicity	: LD50 (Ra	abbit): > 5,000 mg/kg
is(octyldithio)-1,3,4-	hiadiazole:	
oral toxicity		at): > 5,000 mg/kg OECD Test Guideline 401
inhalation toxicity	Exposure Test atm	at): 3.08 mg/l e time: 4 h osphere: dust/mist OECD Test Guideline 403
dermal toxicity	Method:	abbit): > 2,000 mg/kg OECD Test Guideline 402 ent: The substance or mixture has no acute derma
	inhalation toxicity ium azelate: oral toxicity oral toxicity oral toxicity oral toxicity oral toxicity oral toxicity oral toxicity oral toxicity ionny, dialkyl dithioca oral toxicity is(octyldithio)-1,3,4-1 oral toxicity inhalation toxicity	11/03/2020118051-000inhalation toxicityKethod: Assessmicityinhalation toxicityLC50 (Ra Exposure Test atmediatesoral toxicityLD50 (Ra Method: Wethod: Wet



ersion .0	Revision Date: 11/03/2020	SDS Nu 118051-	
			nod: OECD Test Guideline 401 narks: Based on data from similar materials
Acute	inhalation toxicity	Expo Test Meth	0 (Rat): > 1.9 mg/l osure time: 4 h : atmosphere: dust/mist nod: OECD Test Guideline 403 narks: Based on data from similar materials
Acute	dermal toxicity	Meth	0 (Rat): > 5,000 mg/kg nod: OECD Test Guideline 402 narks: Based on data from similar materials
Quart	z:		
UL '	oral toxicity	: LD50	0 (Rat): > 5,000 mg/kg
	corrosion/irritation assified based on ava	ailable inform	nation.
Comp	oonents:		
II	atos (notroloum) h	alucture stool	
Distil	ales (pelloleum), m	arotreated	heavy paraffinic:
Distil Speci		: Rabi	heavy paraffinic: bit
Speci Resul Rema	es t	: Rabl : No s : Base	bit skin irritation ed on data from similar materials
Speci Resul Rema Distill Speci Resul	es t rks l <b>ates (petroleum), h</b> y es t	: Rabl : No s : Base /drotreated : Rabl : No s	bit skin irritation ed on data from similar materials heavy naphthenic:
Specia Resul Rema Distill Specia Resul Rema	es t rks l <b>ates (petroleum), h</b> y es t rks	: Rabl : No s : Base /drotreated : Rabl : No s	bit skin irritation ed on data from similar materials <b>heavy naphthenic:</b> bit skin irritation
Specia Resul Rema Distill Specia Resul Rema	es t rks l <b>ates (petroleum), hy</b> es t rks <b>nite:</b>	: Rabl : No s : Base /drotreated : Rabl : No s : Base	bit skin irritation ed on data from similar materials <b>heavy naphthenic:</b> bit skin irritation ed on data from similar materials
Specia Resul Rema Distill Specia Resul Rema	es t rks <b>lates (petroleum), hy</b> es t rks <b>nite:</b> es	: Rabl : No s : Base /drotreated : Rabl : No s : Base : Rabl	bit skin irritation ed on data from similar materials <b>heavy naphthenic:</b> bit skin irritation ed on data from similar materials
Specia Resul Rema Distill Specia Resul Rema Grapt	es t rks <b>lates (petroleum), hy</b> es t rks <b>hite:</b> es od	: Rabl : No s : Base /drotreated : Rabl : No s : Base : Rabl : OEC	bit skin irritation ed on data from similar materials <b>heavy naphthenic:</b> bit skin irritation ed on data from similar materials bit
Specia Resul Rema Distill Specia Resul Rema Graph Specia Metho Resul	es t rks <b>lates (petroleum), hy</b> es t rks <b>hite:</b> es od	: Rabl : No s : Base /drotreated : Rabl : No s : Base : Rabl : OEC	bit skin irritation ed on data from similar materials <b>heavy naphthenic:</b> bit skin irritation ed on data from similar materials bit CD Test Guideline 404
Specia Resul Rema Distill Specia Resul Rema Specia Metho Resul Dilith	es t rks <b>lates (petroleum), hy</b> es t t rks <b>hite:</b> es od t t <b>ium azelate:</b> es	: Rabi : No s : Base /drotreated : Rabi : No s : Base : Rabi : OEC : No s	bit skin irritation ed on data from similar materials <b>heavy naphthenic:</b> bit skin irritation ed on data from similar materials bit CD Test Guideline 404 skin irritation
Specia Resul Rema Distill Specia Resul Rema Specia Metho Resul Dilith	es t irks l <b>ates (petroleum), hy</b> es t t rks <b>hite:</b> es od t t <b>ium azelate:</b> es od	: Rabi : No s : Base /drotreated : Rabi : No s : Base : Rabi : OEC : No s : recol : OEC	bit skin irritation ed on data from similar materials <b>heavy naphthenic:</b> bit skin irritation ed on data from similar materials bit CD Test Guideline 404 skin irritation nstructed human epidermis (RhE) CD Test Guideline 439
Specia Resul Rema Distill Specia Resul Rema Specia Metho Resul Dilith Specia Metho Resul	es t rks <b>lates (petroleum), hy</b> es t t rks <b>hite:</b> es od t t <b>ium azelate:</b> es od rks	: Rabi : No s : Base /drotreated : Rabi : No s : Base : Rabi : OEC : No s : recol : OEC	bit skin irritation ed on data from similar materials <b>heavy naphthenic:</b> bit skin irritation ed on data from similar materials bit CD Test Guideline 404 skin irritation
Specia Resul Rema Distill Specia Resul Rema Specia Metho Resul Dilith	es t rks <b>lates (petroleum), hy</b> es t t rks <b>hite:</b> es od t t <b>ium azelate:</b> es od rks	: Rabi : No s : Base /drotreated : Rabi : No s : Base : Rabi : OEC : No s : recol : OEC : Base	bit skin irritation ed on data from similar materials <b>heavy naphthenic:</b> bit skin irritation ed on data from similar materials bit CD Test Guideline 404 skin irritation nstructed human epidermis (RhE) CD Test Guideline 439
Specia Resul Rema Distill Specia Resul Rema Specia Metho Resul Dilith Specia Metho Resul	es t rks <b>lates (petroleum), hy</b> es t t rks <b>hite:</b> es od t t <b>ium azelate:</b> es od rks	: Rabi : No s : Base /drotreated : Rabi : No s : Base : Rabi : OEC : No s : recol : OEC : Base	bit skin irritation ed on data from similar materials heavy naphthenic: bit skin irritation ed on data from similar materials bit CD Test Guideline 404 skin irritation enstructed human epidermis (RhE) CD Test Guideline 439 ed on data from similar materials
Specia Resul Rema Distill Specia Resul Rema Specia Metho Resul Dilith Specia Metho Resul	es t rks <b>lates (petroleum), hy</b> es t rks <b>nite:</b> es od t t <b>ium azelate:</b> es od rks t	: Rabi : No s : Base /drotreated : Rabi : No s : Base : Rabi : OEC : No s : recol : OEC : Base : No s	bit skin irritation ed on data from similar materials heavy naphthenic: bit skin irritation ed on data from similar materials bit CD Test Guideline 404 skin irritation instructed human epidermis (RhE) CD Test Guideline 439 ed on data from similar materials skin irritation
Specia Resul Rema Distill Specia Resul Rema Specia Metho Resul Dilith Specia Metho Resul Resul Completion Resul	es t rks <b>lates (petroleum), hy</b> es t rks <b>nite:</b> es od t t <b>ium azelate:</b> es od rks t	: Rabi : No s : Base /drotreated : Rabi : No s : Rabi : OEC : No s : reco : OEC : Base : No s : Rabi : No s	bit skin irritation ed on data from similar materials heavy naphthenic: bit skin irritation ed on data from similar materials bit CD Test Guideline 404 skin irritation enstructed human epidermis (RhE) CD Test Guideline 439 ed on data from similar materials skin irritation
Specia Resul Rema Distill Specia Resul Rema Specia Metho Resul Dilith Specia Metho Resul Resul Completion Resul	es t rks lates (petroleum), hy es t rks nite: es od t ium azelate: es od rks t es t is(octyldithio)-1,3,4- es	: Rabi : No s : Base /drotreated : Rabi : No s : Rabi : OEC : No s : reco : OEC : Base : No s : Rabi : No s	bit skin irritation ed on data from similar materials heavy naphthenic: bit skin irritation ed on data from similar materials bit CD Test Guideline 404 skin irritation nstructed human epidermis (RhE) CD Test Guideline 439 ed on data from similar materials skin irritation bit skin irritation :



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Resu	lt	: Skin irritati	on
Benz	enesulphonic acid,	propenated, calci	um salts, overbased:
Speci	es	: Rabbit	
Resu	lt	: No skin irri	tation
Rema	arks	: Based on o	data from similar materials
Serio	us eye damage/eye	irritation	
Not c	lassified based on ava	ailable information.	
Com	ponents:		
	lates (petroleum), h	-	/ paraffinic:
Speci		: Rabbit	
Resu		: No eye irrit	
Metho			t Guideline 405
Rema	IKS	. Based on c	lata from similar materials
Distil	lates (petroleum), h	-	/ naphthenic:
Speci		: Rabbit	
Resu		: No eye irrit	ation
Rema	arks	: Based on o	data from similar materials
Grap	hite:		
Speci	es	: Rabbit	
Resu		: No eye irrit	
Metho	bd	: OECD Tes	t Guideline 405
Dilith	ium azelate:		
Speci	es	: Rabbit	
Resu	lt	: No eye irrit	ation
Metho	bd	: OECD Tes	t Guideline 405
Talc:			
Speci	es	: Rabbit	
Resu		: No eye irrit	ation
2.5-B	is(octyldithio)-1,3,4-	thiadiazole:	
Speci		: Rabbit	
Resu		: No eye irrit	ation
Metho		: OECD Tes	t Guideline 405
Benz	enesulphonic acid.	propenated. calci	um salts, overbased:
Speci		: Rabbit	
Resu		: No eye irrit	ation
Metho	•		t Guideline 405
	arks		data from similar materials

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#### Respiratory or skin sensitization

#### Skin sensitization

May cause an allergic skin reaction.

#### **Respiratory sensitization**

Not classified based on available information.

#### **Components:**

### Distillates (petroleum), hydrotreated heavy paraffinic:

Test Type	:	Buehler Test
Routes of exposure	:	Skin contact
Species	:	Guinea pig
Species Method	:	OECD Test Guideline 406
Result	:	negative
Remarks	:	Based on data from similar materials

#### Distillates (petroleum), hydrotreated heavy naphthenic:

Test Type
Routes of exposure
Species
Result
Remarks

:	Buehler Test
:	Skin contact
:	Guinea pig
:	negative
:	Based on data from similar materials

### Graphite:

Test Type Routes of exposure Species Result

: Local lymph node assay (LLNA) : Skin contact : Mouse : negative

### Dilithium azelate:

: Local lymph node assay (LLNA) Test Type Routes of exposure : Skin contact Species : Mouse Method : OECD Test Guideline 429 Result : negative Remarks : Based on data from similar materials

#### Talc:

Routes of exposure Species Result	: Skin contact
Species	: Humans
Result	: negative

## 2,5-Bis(octyldithio)-1,3,4-thiadiazole:

Test Type Routes of exposure Species Method Result		Buehler Test Skin contact Guinea pig OECD Test Guideline 406 positive
Assessment	:	Probability or evidence of high s

Probability or evidence of high skin sensitization rate in



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II		humar	าร	
Benz	enesulphonic acid,	propenated, o	alcium salts,	overbased:
Test				patch test (HRIPT)
	es of exposure		ontact	
Resu Rema		: positiv : Based		similar materials
Assessment		: Proba	bility or evidend	e of skin sensitization in humans
Germ	cell mutagenicity			
	lassified based on a	ailable informa	ition.	
<u>Com</u>	ponents:			
	lates (petroleum), I	ydrotreated h	eavy paraffini	c:
Geno	toxicity in vitro	Metho	ype: Bacterial i d: OECD Test :: negative	reverse mutation assay (AMES) Guideline 471
Geno	toxicity in vivo	cytoge Specie Applic	enetic assay) es: Mouse	an erythrocyte micronucleus test (in vivo traperitoneal injection Guideline 474
			:: negative rks: Based on o	data from similar materials
Distil	lates (petroleum), I	ydrotreated h	eavy naphthe	nic:
Geno	toxicity in vitro		d: OECD Test	reverse mutation assay (AMES) Guideline 471
			:: negative	
Geno	toxicity in vivo	Result : Test T cytoge	-	an erythrocyte micronucleus test (in vivo
Geno	toxicity in vivo	Result : Test T cytoge Specie Applic Metho Result	ype: Mammalia enetic assay) es: Mouse ation Route: In d: OECD Test :: negative	traperitoneal injection Guideline 474
Geno	toxicity in vivo	Result : Test T cytoge Specie Applic Metho Result	ype: Mammalia enetic assay) es: Mouse ation Route: In d: OECD Test :: negative	traperitoneal injection
Geno Grap		Result : Test T cytoge Specie Applic Metho Result	ype: Mammalia enetic assay) es: Mouse ation Route: In d: OECD Test :: negative	Guideline 474
Grap		: Test T cytoge Specie Applic Metho Result Rema	ype: Mammalia enetic assay) es: Mouse ation Route: In d: OECD Test :: negative rks: Based on o	traperitoneal injection Guideline 474 data from similar materials reverse mutation assay (AMES)
Grap	hite:	E Test T cytoge Specie Applic Metho Result Rema	ype: Mammalia enetic assay) es: Mouse ation Route: In d: OECD Test :: negative rks: Based on o ype: Bacterial n d: OECD Test :: negative	traperitoneal injection Guideline 474 data from similar materials reverse mutation assay (AMES) Guideline 471 ammalian cell gene mutation test



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		Result: negative	9
Dilith	nium azelate:		
Geno	otoxicity in vitro		erial reverse mutation assay (AMES) Test Guideline 471 e
		Method: OECD Result: negative	
		Remarks: Based	d on data from similar materials
			omosome aberration test in vitro Test Guideline 473
		0	, d on data from similar materials
	otoxicity in vitro		damage and repair, unscheduled DNA syn- alian cells (in vitro)
Geno	otoxicity in vivo	: Test Type: Chro Species: Rat Application Rou Result: negative	
∦		-	
	nony, dialkyl dithiod		
Geno	otoxicity in vitro	: Test Type: Bact Result: negative	erial reverse mutation assay (AMES)
Geno	toxicity in vivo	: Test Type: Mam cytogenetic ass Species: Mouse	
		Application Rou	te: Intraperitoneal injection Test Guideline 474
Шары	sis(octyldithio)-1,3,4	thindianala	
	otoxicity in vitro		erial reverse mutation assay (AMES)
	,		Test Guideline 471
		Method: OECD Result: negative	ro mammalian cell gene mutation test Test Guideline 476 d on data from similar materials
		Method: OECD Result: negative	
11		Remarks: Based	d on data from similar materials



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IJ			
	enesulphonic acid, p		
Geno	toxicity in vitro		terial reverse mutation assay (AMES) ) Test Guideline 471 e
			ed on data from similar materials
		Method: OECD Result: negativ	
		Remarks: Base	ed on data from similar materials
			omosome aberration test in vitro PTest Guideline 473 e
			ed on data from similar materials
Geno	toxicity in vivo	: Test Type: Mai cytogenetic as Species: Mous	
		Application Ro	ute: Ingestion
		Result: negativ	) Test Guideline 474 e
		Remarks: Base	ed on data from similar materials
	i <b>nogenicity</b> lassified based on ava	ilable information.	
	lassified based on ava	ilable information.	
Not cl <u>Prod</u> u	lassified based on ava <u>uct:</u> nogenicity - Assess-	: Petroleum disti based on DMS	llates have been classified as not carcinogeni O extract content < 3% (Regulation (EC) nex VI, Part 3, Note L).
Not cl <u>Produ</u> Carcin ment	lassified based on ava <u>uct:</u> nogenicity - Assess-	: Petroleum disti based on DMS	O extract content < 3% (Regulation (EC)
Not cl Produ Carciu ment	lassified based on ava uct: nogenicity - Assess- ponents:	: Petroleum disti based on DMS 1272/2008, An	O extract content < 3% (Regulation (EC) nex VI, Part 3, Note L).
Not cl Produ Carciu ment	lassified based on ava uct: nogenicity - Assess- ponents: lates (petroleum), hy	: Petroleum disti based on DMS 1272/2008, An	O extract content < 3% (Regulation (EC) nex VI, Part 3, Note L).
Not cl Produ Carcii ment Com Distil Speci Applid	lassified based on ava uct: nogenicity - Assess- ponents: lates (petroleum), hy ies cation Route	: Petroleum disti based on DMS 1272/2008, An drotreated heavy pa	nex VI, Part 3, Note L).
Not cl Produ Carcii ment Com Distil Speci Applic Expos	lassified based on ava <u>uct:</u> nogenicity - Assess- <u>ponents:</u> lates (petroleum), hy ies cation Route sure time	<ul> <li>Petroleum disti based on DMS 1272/2008, An</li> <li>drotreated heavy par</li> <li>Mouse</li> <li>Skin contact</li> <li>78 weeks</li> </ul>	O extract content < 3% (Regulation (EC) nex VI, Part 3, Note L). raffinic:
Not cl Produ Carcii ment Com Distil Speci Applic Expos Metho	lassified based on ava <u>uct:</u> nogenicity - Assess- <u>ponents:</u> lates (petroleum), hy ies cation Route sure time od	<ul> <li>Petroleum disti based on DMS 1272/2008, An</li> <li>drotreated heavy pa</li> <li>Mouse</li> <li>Skin contact</li> <li>78 weeks</li> <li>OECD Test Gu</li> </ul>	O extract content < 3% (Regulation (EC) nex VI, Part 3, Note L). raffinic:
Not cl Produ Carcii ment Com Distil Speci Applia Expos Metho Resul	lassified based on ava uct: nogenicity - Assess- ponents: lates (petroleum), hy ies cation Route sure time od lt	<ul> <li>Petroleum distibased on DMS 1272/2008, An</li> <li>drotreated heavy paints</li> <li>Mouse</li> <li>Skin contact</li> <li>78 weeks</li> <li>OECD Test Guitage</li> <li>negative</li> </ul>	O extract content < 3% (Regulation (EC) nex VI, Part 3, Note L). raffinic: ideline 451
Not cl Produ Carcii ment Com Distil Speci Applic Expos Metho	lassified based on ava uct: nogenicity - Assess- ponents: lates (petroleum), hy ies cation Route sure time od lt	<ul> <li>Petroleum distibased on DMS 1272/2008, An</li> <li>drotreated heavy paints</li> <li>Mouse</li> <li>Skin contact</li> <li>78 weeks</li> <li>OECD Test Guitage</li> <li>negative</li> </ul>	O extract content < 3% (Regulation (EC) nex VI, Part 3, Note L). raffinic:
Not cl Produ Carcin ment Comu Distil Speci Applic Expos Metho Resul Rema	lassified based on ava uct: nogenicity - Assess- ponents: lates (petroleum), hy ies cation Route sure time od lt arks lates (petroleum), hy	<ul> <li>Petroleum distibased on DMS 1272/2008, An</li> <li>drotreated heavy pat</li> <li>Mouse</li> <li>Skin contact</li> <li>78 weeks</li> <li>OECD Test Gu</li> <li>negative</li> <li>Based on data</li> </ul>	O extract content < 3% (Regulation (EC) nex VI, Part 3, Note L). raffinic: ideline 451 from similar materials
Not cl Produ Carcin ment Comu Distil Speci Applic Expos Metho Resul Rema Distil Speci	lassified based on ava <u>uct:</u> nogenicity - Assess- ponents: lates (petroleum), hy ies cation Route sure time od It arks lates (petroleum), hy ies	<ul> <li>Petroleum distibased on DMS 1272/2008, An</li> <li>drotreated heavy pa</li> <li>Mouse</li> <li>Skin contact</li> <li>78 weeks</li> <li>OECD Test Gu</li> <li>negative</li> <li>Based on data</li> <li>drotreated heavy na</li> <li>Mouse</li> </ul>	O extract content < 3% (Regulation (EC) nex VI, Part 3, Note L). raffinic: ideline 451 from similar materials
Not cl Produ Carcin ment Comu Distil Speci Applic Resul Rema Distil Speci Applic Resul Rema	lassified based on ava <u>uct:</u> nogenicity - Assess- <u>ponents:</u> lates (petroleum), hy ies cation Route sure time od lt arks lates (petroleum), hy ies cation Route	<ul> <li>Petroleum distibased on DMS 1272/2008, An</li> <li>drotreated heavy pa</li> <li>Mouse</li> <li>Skin contact</li> <li>78 weeks</li> <li>OECD Test Gu</li> <li>negative</li> <li>Based on data</li> <li>drotreated heavy na</li> <li>Mouse</li> <li>Skin contact</li> </ul>	O extract content < 3% (Regulation (EC) nex VI, Part 3, Note L). raffinic: ideline 451 from similar materials
Not cl Produ Carcin ment Comu Distil Speci Applic Resul Rema Distil Speci Applic Resul Rema	lassified based on ava <u>uct:</u> nogenicity - Assess- ponents: lates (petroleum), hy ies cation Route sure time od It arks lates (petroleum), hy ies cation Route sure time	<ul> <li>Petroleum distibased on DMS 1272/2008, An</li> <li>drotreated heavy pat</li> <li>Mouse</li> <li>Skin contact</li> <li>78 weeks</li> <li>OECD Test Gu</li> <li>negative</li> <li>Based on data</li> <li>drotreated heavy nat</li> <li>Mouse</li> <li>Skin contact</li> <li>Skin contact</li> </ul>	O extract content < 3% (Regulation (EC) nex VI, Part 3, Note L). raffinic: ideline 451 from similar materials phthenic:
Not cl Produ Carcin ment Comu Distil Speci Applic Resul Rema Distil Speci Applic Resul Rema	lassified based on ava <u>uct:</u> nogenicity - Assess- ponents: lates (petroleum), hy ies cation Route sure time od lt arks lates (petroleum), hy ies cation Route sure time od	<ul> <li>Petroleum distibased on DMS 1272/2008, An</li> <li>drotreated heavy pa</li> <li>Mouse</li> <li>Skin contact</li> <li>78 weeks</li> <li>OECD Test Gu</li> <li>negative</li> <li>Based on data</li> <li>drotreated heavy na</li> <li>Mouse</li> <li>Skin contact</li> </ul>	O extract content < 3% (Regulation (EC) nex VI, Part 3, Note L). raffinic: ideline 451 from similar materials phthenic:
Not cl Produ Carcii ment Comj Distil Speci Applia Resul Resul Resul Speci Applia Resul Resul Resul Resul	lassified based on ava <u>uct:</u> nogenicity - Assess- ponents: lates (petroleum), hy ies cation Route sure time od lt arks lates (petroleum), hy ies cation Route sure time od	<ul> <li>Petroleum distibased on DMS 1272/2008, An</li> <li>drotreated heavy pat</li> <li>Mouse</li> <li>Skin contact</li> <li>78 weeks</li> <li>OECD Test Gu</li> <li>negative</li> <li>Based on data</li> <li>drotreated heavy nat</li> <li>Mouse</li> <li>Skin contact</li> <li>78 weeks</li> <li>OECD Test Gu</li> </ul>	O extract content < 3% (Regulation (EC) nex VI, Part 3, Note L). raffinic: ideline 451 from similar materials phthenic:
Not cl Produ Carcin ment Comu Distil Speci Applic Resul Rema Distil Speci Applic Resul Rema	lassified based on ava <u>uct:</u> nogenicity - Assess- ponents: lates (petroleum), hy ies cation Route sure time od lt arks lates (petroleum), hy ies cation Route sure time od lt sure time od lt	<ul> <li>Petroleum distibased on DMS 1272/2008, An</li> <li>drotreated heavy pat</li> <li>Mouse</li> <li>Skin contact</li> <li>78 weeks</li> <li>OECD Test Gu</li> <li>negative</li> <li>Based on data</li> <li>drotreated heavy nat</li> <li>Mouse</li> <li>Skin contact</li> <li>78 weeks</li> <li>OECD Test Gu</li> </ul>	O extract content < 3% (Regulation (EC) nex VI, Part 3, Note L). raffinic: ideline 451 from similar materials phthenic:



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	ation Route ure time	: inhalation (dust : 2 Years : negative	/mist/fume)
Quart: Specie Applic Result Remai	es ation Route		/mist/fume) ce(s) are inextricably bound in the product and t contribute to a dust inhalation hazard.
Carcin ment	ogenicity - Assess-	: Positive eviden tion)	ce from human epidemiological studies (inhala-
IARC	Group 1: Ca Quartz (Silica dust,	rcinogenic to humans crystalline)	14808-60-7
OSHA	OSHA spec Quartz (crystalline s	fically regulated carci silica)	nogen 14808-60-7
NTP	Quartz	e human carcinogen talline (Respirable Siz	14808-60-7 re))
Not cla	ductive toxicity assified based on avai onents:	lable information.	
Effects	<b>ates (petroleum), hy</b> s on fertility s on fetal developmen	: Test Type: Rep test Species: Rat Application Rou Result: negativ Remarks: Base t : Test Type: Eml Species: Rat	roduction/Developmental toxicity screening ute: Ingestion
Graph	ite:	Method: OECD Result: negativ	Test Guideline 414
- UL '	s on fertility	reproduction/de Species: Rat Application Rot	nbined repeated dose toxicity study with the evelopmental toxicity screening test ute: Ingestion Test Guideline 422



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П			Result: negative	
Effect	s on fetal development	:		
Dilithi	um azelate:			
Effects	s on fertility	:	test Species: Rat Application Route Result: negative	duction/Developmental toxicity screening : Skin contact on data from similar materials
Effects	s on fetal development	:	test Species: Rat Application Route Result: negative	duction/Developmental toxicity screening : Skin contact on data from similar materials
Talc:				
Effects	s on fetal development	:	Test Type: Embry Species: Rat Application Route Result: negative	o-fetal development : Ingestion
Antim	ony, dialkyl dithiocark	bam	ate:	
	s on fertility	:	Test Type: Comb	ned repeated dose toxicity study with the elopmental toxicity screening test : Ingestion
Effects	s on fetal development	:		ned repeated dose toxicity study with the elopmental toxicity screening test : Ingestion
2,5-Bi	s(octyldithio)-1,3,4-thi	adia	azole:	
	s on fertility	:	Test Type: Combi	
Effects	s on fetal development	:	Test Type: Comb	ned repeated dose toxicity study with the



## PTC

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		Species: Rat Application Rou	Test Guideline 422
Benze	enesulphonic acid, p	propenated, calcium s	alts, overbased:
Effect	s on fertility	Species: Rat Application Rou Method: OECD Result: negative	Test Guideline 415

### STOT-single exposure

Not classified based on available information.

### STOT-repeated exposure

Not classified based on available information.

### Components:

### Quartz:

Routes of exposure	:	inhalation (dust/mist/fume)
Target Organs	:	Lungs
Assessment	:	Shown to produce significant health effects in animals at con- centrations of 0.02 mg/l/6h/d or less.

### **Repeated dose toxicity**

### Components:

Distillates (petroleum), hydro	otre	eated heavy paraffinic:
Species NOAEL	÷	Rabbit 1,000 mg/kg
Application Route		Skin contact
Exposure time Method		4 Weeks OECD Test Guideline 410
Remarks		Based on data from similar materials
Species	:	Rat
NOAEL Application Route		> 980 mg/m³ inhalation (dust/mist/fume)
Exposure time	:	
Distillates (petroleum), hydro	otre	eated heavy naphthenic:
Species	:	Rat
NOAEL	:	> 0.98 mg/l
Application Route	:	· · · · · · · · · · · · · · · · · · ·
Exposure time		28 Days
Remarks	·	Based on data from similar materials

## PTC



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Dilit	nium azelate:		
Spec		: Rat	
NOA		: 1,089.75 mg/kg	1
-	cation Route	: Skin contact	3
	sure time	: 28 Days	
Rem			from similar materials
Antir	nony, dialkyl dithioc	arbamate:	
Spec	ies	: Rat	
NOA		: >= 1,000 mg/kg	2
Appli	cation Route	: Ingestion	,
	sure time	: 54 Days	
2,5-E	Bis(octyldithio)-1,3,4-	thiadiazole:	
Spec	ies	: Rat	
NOA		: 330 mg/kg	
Appli	cation Route	: Ingestion	
	sure time	: 54 Days	
Meth		: OECD Test Gu	ideline 422
Spec NOA Appli Expo Meth Rema	ies EL cation Route sure time od arks		
Spec		: Rat	
NOA		: > 600 mg/kg	
A	cation Route	: Skin contact : 28 Days	
	curo timo		
Expo	sure time	,	idalina 110
Expo Meth	od	: OECD Test Gu	
Expo	od arks	: OECD Test Gu	ideline 410 from similar materials
Expo Meth Rema	od arks <b>tz:</b>	: OECD Test Gu : Based on data	
Expo Meth Rema	od arks <b>tz:</b> ies	: OECD Test Gu : Based on data : Humans	
Expo Meth Rema Quar Spec LOAR	od arks <b>tz:</b> ies	: OECD Test Gu : Based on data	from similar materials
Expo Meth Rema Quar Spec LOAR	od arks <b>tz:</b> ies EL cation Route	: OECD Test Gu : Based on data : Humans : 0.053 mg/m³ : inhalation (dus	from similar materials

### Aspiration toxicity

Not classified based on available information.

## PTC



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### SECTION 12. ECOLOGICAL INFORMATION

### Ecotoxicity

### Components:

Distillates (petroleum), hydrotreated heavy paraffinic:						
Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 Remarks: Based on data from similar materials				
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 Remarks: Based on data from similar materials				
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: Based on data from similar materials				
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)	:	NOEC (Daphnia magna (Water flea)): 10 mg/l Exposure time: 21 d Method: OECD Test Guideline 211 Remarks: Based on data from similar materials				
Toxicity to microorganisms	:	NOEC: > 1.93 mg/l Exposure time: 10 min Method: DIN 38 412 Part 8 Remarks: Based on data from similar materials				
Distillates (petroleum), hydro	otre	eated heavy naphthenic:				
Toxicity to fish	:	LC50 (Pimephales promelas (fathead minnow)): > 100 mg/l Exposure time: 96 h Method: OECD Test Guideline 203 Remarks: Based on data from similar materials				
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 10,000 mg/l Exposure time: 48 h Remarks: Based on data from similar materials				
Toxicity to algae/aquatic plants	:	EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Method: OECD Test Guideline 201 Remarks: Based on data from similar materials				
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)	:	NOEC (Daphnia magna (Water flea)): 10 mg/l Exposure time: 21 d Remarks: Based on data from similar materials				
Toxicity to microorganisms	:	NOEC: > 1.93 mg/l				
	20 / 29					



:		Exposure time: 10 min Remarks: Based on data from similar materials
<b>c</b> . 1		
o fish	:	LL50 (Danio rerio (zebra fish)): > 100 mg/l Exposure time: 96 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 203
o daphnia and other overtebrates	:	EL50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 202
o algae/aquatic	:	EL50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 201
		NOELR (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Test substance: Water Accommodated Fraction Method: OECD Test Guideline 201
o microorganisms	:	EC50: > 1,012.5 mg/l Exposure time: 3 h Method: OECD Test Guideline 209
azelate:		
o fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): > 10 - 100 mg/ Exposure time: 96 h Method: OECD Test Guideline 203 Remarks: Based on data from similar materials
o daphnia and other overtebrates	:	EC50 (Daphnia magna (Water flea)): > 10 - 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202 Remarks: Based on data from similar materials
o algae/aquatic	:	NOEC (Pseudokirchneriella subcapitata (green algae)): > 1 mg/l Exposure time: 72 h Remarks: Based on data from similar materials
		ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l Exposure time: 72 h Remarks: Based on data from similar materials
	o algae/aquatic o microorganisms o microorganisms azelate: o fish o daphnia and other overtebrates o algae/aquatic	o algae/aquatic : o microorganisms : azelate: o fish : o daphnia and other : vertebrates



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aquat ic toxi	ic invertebrates (Chron- city)			21 d Test Guideline 211 I on data from similar materials
Ecoto	oxicology Assessment			
	ic aquatic toxicity			uatic organisms, may cause long-term adver uatic environment.
Talc:				
UL.	ty to fish	:	LC50 (Brachyda Exposure time: 1	nio rerio (zebrafish)): > 100,000 mg/l 24 h
Antim	nony, dialkyl dithiocarb	am	ate:	
	ic invertebrates (Chron-		Exposure time:	magna (Water flea)): 0.02 mg/l 21 d Test Guideline 211
Ecoto	oxicology Assessment			
	ic aquatic toxicity	:		uatic organisms, may cause long-term adver uatic environment.
П 2,5-В	is(octyldithio)-1,3,4-thi	adia	azole:	
Toxici	ty to fish	:	Exposure time: Test substance:	chus mykiss (rainbow trout)): > 100 mg/l 96 h Water Accommodated Fraction Test Guideline 203
	ty to daphnia and other ic invertebrates	:	Exposure time: Test substance:	magna (Water flea)): 45 mg/l 48 h Water Accommodated Fraction Test Guideline 202
Toxici plants	ty to algae/aquatic	:	mg/l Exposure time: Test substance:	rchneriella subcapitata (green algae)): > 100 72 h Water Accommodated Fraction Test Guideline 201
			mg/l Exposure time: Test substance:	okirchneriella subcapitata (green algae)): > 1 72 h Water Accommodated Fraction Test Guideline 201
Toxici	ty to microorganisms	:		



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Toxic	ity to fish	:	Exposure time: 90 Test substance: V Method: OECD T	s promelas (fathead minnow)): > 100 mg/l 3 h Vater Accommodated Fraction est Guideline 203 on data from similar materials
	ity to daphnia and other ic invertebrates	:	Exposure time: 48 Test substance: V	agna (Water flea)): > 100 mg/l 3 h Vater Accommodated Fraction on data from similar materials
Toxici plants	ity to algae/aquatic	:	mg/l Exposure time: 72 Test substance: V	chneriella subcapitata (green algae)): > 100 2 h Vater Accommodated Fraction on data from similar materials
			mg/l Exposure time: 72 Test substance: \	kirchneriella subcapitata (green algae)): 100 2 h Vater Accommodated Fraction on data from similar materials
Toxic	ity to microorganisms	:		
Quart	tz:			
	oxicology Assessment			
	aquatic toxicity	÷	· · · · <b>,</b> · · · ·	-
Chror	nic aquatic toxicity	:	No toxicity at the	limit of solubility.
Persi	stence and degradabi	lity		
Com	oonents:			
	lates (petroleum), hyd	rotr		
Biode	gradability	:	Result: Not readil Biodegradation: Exposure time: 20 Method: OECD T	31 %
Distil	lates (petroleum), hyd	rotr	eated heavy naph	thenic:
	gradability		Result: Not readil Biodegradation: 2 Exposure time: 2	y biodegradable. 2 - 4 %
	<b>ium azelate:</b> gradability	:	Result: Readily b	odegradable.
			23/29	



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Tris[b	is(2-ethylhexyl)dith	iocarbamato-S,S'] an	timony:
Biodeg	gradability		adily biodegradable. ed on data from similar materials
Antim	ony, dialkyl dithioc	arbamate:	
Biodeg	gradability	: Result: Not rea Biodegradatior Exposure time	
2,5-Bi	s(octyldithio)-1,3,4-	thiadiazole:	
Biodeg	gradability	Biodegradatior Exposure time	
	e <b>nesulphonic acid,</b>   gradability	Method: OECE	<b>salts, overbased:</b> adily biodegradable. ) Test Guideline 301D ed on data from similar materials
Bioac <sup>,</sup>	cumulative potentia	al	
<u>Comp</u>	onents:		
Dilithi	um azelate:		
Partitic octanc		: log Pow: -3.53	
	s(octyldithio)-1,3,4-		
	on coefficient: n- bl/water		) Test Guideline 117
Benze	enesulphonic acid,	propenated, calcium	salts, overbased:
	on coefficient: n- bl/water	: log Pow: > 4 Remarks: Expe	ert judgment
	ity in soil		
	ta available		
	adverse effects ta available		

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#### SECTION 13. DISPOSAL CONSIDERATIONS

### **Disposal methods**

Waste from residues Contaminated packaging	<ul> <li>Dispose of in accordance with local regulations.</li> <li>Empty containers should be taken to an approved waste handling site for recycling or disposal.</li> <li>Empty containers retain residue and can be dangerous.</li> <li>Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death.</li> <li>If not otherwise specified: Dispose of as unused product.</li> </ul>
	If not otherwise specified: Dispose of as unused product.

### **SECTION 14. TRANSPORT INFORMATION**

### International Regulations

UNRTDG		
UN number	:	UN 3077
Proper shipping name	-	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
		N.O.S.
		(Tris[bis(2-ethylhexyl)dithiocarbamato-S,S'] antimony, Anti-
Class		mony, dialkyl dithiocarbamate) 9
Packing group	:	9 11
Labels	:	9
Labels	•	9
IATA-DGR		
UN/ID No.	:	UN 3077
Proper shipping name	:	Environmentally hazardous substance, solid, n.o.s. (Tris[bis(2-ethylhexyl)dithiocarbamato-S,S'] antimony, Anti-
		mony, dialkyl dithiocarbamate)
Class	:	9
Packing group	:	III
Labels	:	Miscellaneous
Packing instruction (cargo aircraft)	:	956
Packing instruction (passen-	:	956
ger aircraft)		
Environmentally hazardous	:	yes
IMDG-Code		
UN number	:	UN 3077
Proper shipping name	÷	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,
		N.O.S.
		(Tris[bis(2-ethylhexyl)dithiocarbamato-S,S'] antimony, Anti-
		mony, dialkyl dithiocarbamate)
Class	:	9
Packing group	:	III
Labels	:	9
EmS Code	:	F-A, S-F
Marine pollutant	:	yes

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

Not applicable for product as supplied.

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Domestic regulation				
49 CFR				
UN/ID/N	IA number	:	UN 3077	
Proper s	shipping name	:	,	azardous substance, solid, n.o.s. exyl)dithiocarbamato-S,S'] antimony, Anti- ocarbamate)
Class		:	9	
Packing	group	:	III	
Labels		:	CLASS 9	
ERG Co	ode	:	171	
Marine	pollutant	:	yes(Tris[bis(2-eth) Antimony, dialkyl	ylhexyl)dithiocarbamato-S,S'] antimony, dithiocarbamate)
Remark	S	:	liters., Shipment b however it may be	y to containers over 119 gallons or 450 by ground under DOT is non-regulated; e shipped per the applicable hazard cilitate multi-modal transport involving ICAO

#### Special precautions for user

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

#### **SECTION 15. REGULATORY INFORMATION**

#### **CERCLA Reportable Quantity**

Graphite

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 311/3	312 Hazards	: Respiratory or skin sensitization		
SARA 313	:	: The following components are subject to reporting level established by SARA Title III, Section 313:		
		Tris[bis(2- ethylhex- yl)dithiocarbamat o-S,S'] antimony	15991-76-1	>= 1 - < 5 %
		Antimony, dialkyl dithiocarbamate	15890-25-2	>= 1 - < 5 %
US State Re	egulations			
Pennsylvar	ia Right To Know			
	istillates (petroleum), istillates (petroleum),			64742-54-7 64742-52-5

7782-42-5



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	Dilithium azelate Polytetrafluoroeth Water Tris[bis(2-ethylhe Talc Antimony, dialkyl	exyl)dithiocarbamato-S	.S'] antimony	68815-49-6 38900-29-7 9002-84-0 7732-18-5 15991-76-1 14807-96-6 15890-25-2 s 68649-42-3			
WARN				tz, which is/are known to w.P65Warnings.ca.gov.			
Califo	rnia List of Hazardo	us Substances					
Califo	Distillates (petrolo Distillates (petrolo Graphite Tris[bis(2-ethylhe Talc Antimony, dialkyl rnia Permissible Exp Distillates (petrolo Distillates (petrolo Graphite Tris[bis(2-ethylhe Talc	64742-54-7 64742-52-5 7782-42-5 15991-76-1 14807-96-6					
	Antimony, dialkyl			15890-25-2			
Califo	rnia Regulated Carc Quartz	inogens		14808-60-7			
The in	The ingredients of this product are reported in the following inventories:						
DSL		: All components	of this product are	on the Canadian DSL			
TSCA		TSCA Inventory exemption.	or are in compliant	duct are either listed on the ce with a TSCA Inventory			
AICS		: All ingredients I	isted or exempt.				

### **SECTION 16. OTHER INFORMATION**

Further information

OSHA Z-1 / TWA

OSHA Z-3 / TWA



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NFPA 704:			HMIS® IV:					
Flammability				HEALTH	/ 2			
				FLAMMABILITY	1			
	Health 2 0		Instability	PHYSICAL HAZARD	0			
	Special hazard			HMIS® ratings are based on scale, with 0 representing min ards or risks, and 4 represent cant hazards or risks. The "*" a chronic hazard, while the "/ the absence of a chronic hazard	nimal haz- ting signifi- ' represents " represents			
Full text of other abbreviations								
ACGIH : NIOSH REL : OSHA CARC : OSHA Z-1 :		:	USA. ACGIH Threshold Limit Values (TLV) USA. NIOSH Recommended Exposure Limits OSHA Specifically Regulated Chemicals/Carcinogens					
		÷	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-					
			its for Air Con					
C	OSHA Z-3	:	USA. Occupa eral Dusts	tional Exposure Limits (OSHA	) - Table Z-3 M	in-		
Α	CGIH / TWA	:		veighted average				
NIOSH REL / TWA : NIOSH REL / ST :		:	Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday					
		:						
OSHA CARC / PEL :		:	Permissible exposure limit (PEL)					

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-

: 8-hour time weighted average

: 8-hour time weighted average



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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

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

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 specific 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.

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