

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

## **1.1 Product identifier**

Product Name

Synonyms

## · Zincote®

• Anti-Seize; Lubricant; Sealant; Thread Compound

# **1.2** Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s)

• Anti-Seize, Lubricant, Sealant, lubricate & seal tool joint & drill collar threads

## **1.3 Details of the supplier of the safety data sheet**

Manufacturer

• Topco Oilsite Products Ltd.

Bay 7, 3401 - 19th Street N.E. Calgary, Alberta T2E 6S8 Canada www.topcooilsite.com msds@topcooilsite.com

**Telephone (General)** • 403-219-0255

## 1.4 Emergency telephone number

Manufacturer• 403-219-0255Poison & Drug Information Service (AlbertaHealth Services)• 1-800-332-1414

## **Section 2: Hazards Identification**

## EU/EEC

According to: Regulation (EC) No 1272/2008 (CLP)/REACH 1907/2006 [amended by 2015/830]

## 2.1 Classification of the substance or mixture

CLP

• Carcinogenicity 1A - H350i Specific Target Organ Toxicity Repeated Exposure 1 - H372 Hazardous to the aquatic environment Acute 1 - H400 Hazardous to the aquatic environment Chronic 1 - H410

## **2.2 Label Elements**

CLP

DANGER



Hazard statements • H350i - May cause cancer by inhalation.

H372 - Causes damage to organs through prolonged or repeated exposure.

H400 - Very toxic to aquatic life

H410 - Very toxic to aquatic life with long lasting effects

# Precautionary statements

Prevention • P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P260 - Do not breathe dust.

P264 - Wash thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

#### **Response** • P308+P313 - IF exposed or concerned: Get medical advice/attention.

P314 - Get medical advice/attention if you feel unwell.

P391 - Collect spillage.

Storage/Disposal • P405 - Store locked up.

P501 - Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## 2.3 Other Hazards

CLP

• May form combustible dust concentrations in air.

Heating above the melting point releases metallic oxides which may cause metal fume fever by inhalation. The symptoms are shivering, fever, malaise and muscular pain.

According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous.

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## UN GHS Revision 4

According to: UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS): Fourth Revised Edition

## 2.1 Classification of the substance or mixture

 Skin Mild Irritation 3 Carcinogenicity 1A Specific Target Organ Toxicity Repeated Exposure 1 Hazardous to the aquatic environment Acute 1 Hazardous to the aquatic environment Chronic 1

## 2.2 Label elements

**UN GHS** 

## DANGER



Hazard statements	Causes mild skin irritation
	May cause cancer.
	Causes damage to organs through prolonged or repeated exposure.
	Very toxic to aquatic life
	Very toxic to aquatic life with long lasting effects
Precautionary	
statements	
Prevention	Obtain special instructions before use.
	Do not handle until all safety precautions have been read and understood.
	Do not breathe dust.
	Wash thoroughly after handling.
	Do not eat, drink or smoke when using this product.
	Avoid release to the environment.
	Wear protective gloves/protective clothing/eye protection/face protection.
Response	<ul> <li>If skin irritation occurs: Get medical advice/attention.</li> </ul>
	IF exposed or concerned: Get medical advice/attention.
	Get medical advice/attention if you feel unwell.
	Collect spillage.
Storage/Disposal	
otoruge, Disposur	Dispose of content and/or container in accordance with local, regional,
	national, and/or international regulations.
2.3 Other hazards	
UN GHS	May form combustible dust concentrations in air.
	Heating above the melting point releases metallic oxides which may cause
	metal fume fever by inhalation. The symptoms are shivering, fever, malaise
	and muscular pain
	According to the Globally Harmonized System for Classification and Labeling
	(GHS) this product is considered hazardous
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United States (US)	
According to: OSHA 2	9 CFR 1910.1200 HCS

## 2.1 Classification of the substance or mixture

• Carcinogenicity 1A Specific Target Organ Toxicity Repeated Exposure 1 Combustible Dust Hazards Not Otherwise Classified - Health Hazards - Metal fume fever

## 2.2 Label elements

OSHA HCS 2012

## DANGER



Hazard • statements	May cause cancer. Causes damage to organs through prolonged or repeated exposure. May form combustible dust concentrations in air.
Precautionary statements	
Prevention •	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection.
Response •	IF exposed or concerned: Get medical advice/attention. Get medical advice/attention if you feel unwell.
Storage/Disposal •	Store locked up. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.
2.3 Other hazards	
OSHA HCS 2012 •	Heating above the melting point releases metallic oxides which may cause metal fume fever by inhalation. The symptoms are shivering, fever, malaise and muscular pain. Under United States Regulations (29 CFR 1910.1200 - Hazard

Communication Standard), this product is considered hazardous.

## Canada

According to: WHMIS 2015

## 2.1 Classification of the substance or mixture

 WHMIS 2015
 Carcinogenicity 1A Specific Target Organ Toxicity Repeated Exposure 1 Combustible Dusts 1 Health Hazards Not Otherwise Classified 1

## 2.2 Label elements

WHMIS 2015

DANGER



Hazard statements • May cause cancer.

Causes damage to organs through prolonged or repeated exposure. May form combustible dust concentrations in air. Heating above the melting point releases metallic oxides which may cause metal fume fever by inhalation. The symptoms are shivering, fever, malaise and muscular pain.

Precautionary statements	
Prevention	<ul> <li>Obtain special instructions before use.</li> <li>Do not handle until all safety precautions have been read and understood.</li> <li>Do not breathe dust.</li> <li>Wash thoroughly after handling.</li> <li>Do not eat, drink or smoke when using this product.</li> <li>Wear protective gloves/protective clothing/eye protection/face protection.</li> </ul>
Response	<ul> <li>IF exposed or concerned: Get medical advice/attention.</li> <li>Get medical advice/attention if you feel unwell.</li> </ul>
Storage/Disposal	<ul> <li>Store locked up.</li> <li>Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.</li> </ul>
2.3 Other hazards	

# WHMIS 2015 • In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS). <hr size=2 width="100%" align=center>

## Section 3 - Composition/Information on Ingredients

## 3.1 Substances

• Material does not meet the criteria of a substance.

## 3.2 Mixtures

Composition						
Chemical Name	Identifiers	%	LD50/LC50	Classifications According to Regulation/Directive	Comments	
Zinc powder, stabilized	<b>CAS</b> :7440-66- 6 <b>EC</b> <b>Number</b> :231- 175-3	45% TO 65%	NDA	EU CLP: Annex VI, Table 3.1: Aquatic Acute 1, H400; Aquatic Chronic 1, H410 UN GHS Revision 4: Skin Irrit. 3; Aquatic Acute 1; Aquatic Chronic 1 OSHA HCS 2012: Comb. Dust; Hazard Not Otherwise Classified - Health Hazard - Metal fume fever WHMIS 2015: Comb. Dust; Hazard Not Otherwise Classified - Health Hazard - Metal fume fever	NDA	
Crystalline silica	<b>CAS</b> :14808- 60-7 <b>EC</b> <b>Number</b> :238- 878-4	30% TO 55%	NDA	EU CLP: Carc. 1A, H350i; STOT RE 1 (Lungs/Inhl), H372 UN GHS Revision 4: Carc. 1A; STOT RE 1 (Lungs/Inhl) OSHA HCS 2012: Carc. 1A; STOT RE 1 (Lungs/Inhl)	NDA	

				WHMIS 2015: Carc. 1A; STOT RE 1 (Lungs/Inhl)	
Talc	<b>CAS</b> :14807- 96-6 <b>EC</b> <b>Number</b> :238- 877-9	< 5%	NDA	EU CLP: STOT RE 1 (Lungs/Inhl), H372 UN GHS Revision 4: Skin Irrit. 3; STOT RE 1 (Lungs/Inhl) OSHA HCS 2012: STOT RE 1 (Lungs/Inhl) WHMIS 2015: STOT RE 1 (Lungs/Inhl)	NDA
Asphalt	<b>CAS</b> :8052-42- 4 <b>EINECS</b> :232- 490-9	2.1% TO 3.85%	Ingestion/Oral- Rat LD50 • >5000 mg/kg	EU CLP: Carc. 2 (Dermal), H351 UN GHS Revision 4: Carc. 2 (Dermal) OSHA HCS 2012: Carc. 2 (Dermal) WHMIS 2015: Carc. 2 (Dermal)	NDA
Zinc O,O-bis(mixed iso- butyl and pentyl) phosphorodithioate	<b>CAS</b> :68457- 79-4 <b>EINECS</b> :270- 608-0	0.5355% TO 0.98175%	NDA	EU CLP: Not Classified UN GHS Revision 4: Acute Tox. 5 (Orl) OSHA HCS 2012: Not Classified WHMIS 2015: Not Classified	NDA

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See Section 16 for full text of H-statements.

## **Section 4 - First Aid Measures**

## 4.1 Description of first aid measures

Inhalation	<ul> <li>Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing.</li> </ul>
Skin	• In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Get medical attention if symptoms occur.
Eye	<ul> <li>In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. Get medical attention if symptoms occur.</li> </ul>
Ingestion	<ul> <li>Obtain medical attention immediately if ingested.</li> </ul>
4.2 Most in	nportant symptoms and effects, both acute and delayed
	Refer to Section 11 - Toxicological Information.
4.3 Indicat	ion of any immediate medical attention and special treatment needed
Notes to Physician	• All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

## Section 5 - Firefighting Measures

## 5.1 Extinguishing media

Suitable Extinguishing	<ul> <li>In case of fire use media as appropriate for surrounding fire.</li> </ul>
Media	LARGE FIRE: Water spray, fog or regular foam.
	SMALL FIRES: Dry chemical, CO2, water spray or regular foam.
Unsuitable Extinguishing Media	No data available

## 5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards	• Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.
Hazardous Combustion Products	<ul> <li>Hazardous decomposition products formed under fire conditions: Carbon oxides, Zinc oxide.</li> </ul>

## 5.3 Advice for firefighters

• Structural firefighters' protective clothing will only provide limited protection. Wear positive pressure self-contained breathing apparatus (SCBA).

## **Section 6 - Accidental Release Measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions	<ul> <li>Ventilate the area. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Ventilate the area before entry. Use appropriate Personal Protective Equipment (PPE)</li> </ul>				
Emergency Procedures	<ul> <li>Keep unauthorized personnel away. Stay upwind. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).</li> </ul>				
6.2 Environmental	precautions				
	<ul> <li>Avoid run off to waterways and sewers.</li> </ul>				
6.3 Methods and material for containment and cleaning up					

Containment/Clean-upCarefully shovel or sweep up spilled material and place in suitable container.MeasuresAvoid generating dust.

Use clean nonsparking tools to collect material.

Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

#### 6.4 Reference to other sections

• Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

## Section 7 - Handling and Storage

## 7.1 Precautions for safe handling

Handling • Use only with adequate ventilation. Use good safety and industrial hygiene practices. Wear appropriate personal protective equipment, avoid direct contact. Do not breathe dust. Avoid contact with skin, eyes, and clothing. Do not eat, drink or smoke when using this product. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco. Keep away from heat, sparks, and flame. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.

## 7.2 Conditions for safe storage, including any incompatibilities

**Storage** • Keep container tightly closed. Store in a cool, dry, well-ventilated place. Keep container closed.

## 7.3 Specific end use(s)

• Refer to Section 1.2 - Relevant identified uses.

## Section 8 - Exposure Controls/Personal Protection

## 8.1 Control parameters

Exposure Limits/Guidelines						
	Result	ACGIH	Argentina	Australia	Canada Alberta	Canada British Columbia
Asphalt (8052-42-4)	TWAs	as benzene-	0.5 mg/m3 TWA [CMP] (Bitumen, inhalable fraction, as soluble aerosol in benzene)	5 mg/m3 TWA (fume)	5 mg/m3 TWA (Petroleum; Bitumen, fume)	0.5 mg/m3 TWA (inhalable fume, as Benzene- soluble aerosol)
Talc (14807-96-6)	TWAs	2 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter)	2 mg/m3 TWA [CMP] (respirable fraction, particulate matter containing no asbestos and less than 1% crystalline silica)	(containing no	2 mg/m3 TWA (respirable particulate)	2 mg/m3 TWA (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate)
Crystalline silica (14808-60-7)	TWAs	0.025 mg/m3 TWA (respirable particulate matter)	0.05 mg/m3 TWA [CMP] (respirable fraction)	0.1 mg/m3 TWA (respirable dust)	0.025 mg/m3 TWA (respirable particulate)	0.025 mg/m3 TWA (respirable)
		Ехро	sure Limits/Gu	idelines (Con't.)		
	Result	Canada Manitoba	Canada New Brunswick	Canada Northwest Territories	Canada Nova Scotia	Canada Nunavut
Asphalt	TWAs	0.5 mg/m3 TWA (fume, inhalable particulate matter, as Benzene soluble aerosol)	5 mg/m3 TWA (petroleum fumes)	0.5 mg/m3 TWA (Bitumen, fume, as Benzene soluble aerosol (inhalable fraction))	0.5 mg/m3 TWA (fume, inhalable particulate matter, as Benzene soluble aerosol)	0.5 mg/m3 TWA (Bitumen, fume, as Benzene soluble aerosol (inhalable fraction))
(8052-42-4)	STELs	Not established	Not established	1.5 mg/m3 STEL (Bitumen, fume, as Benzene soluble aerosol (inhalable fraction))	Not established	1.5 mg/m3 STEL (Bitumen, fume, as Benzene soluble aerosol (inhalable fraction))
Talc (14807-96-6)	TWAs	2 mg/m3 TWA (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter)	2 mg/m3 TWA (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction)	2 mg/m3 TWA (respirable fraction)	2 mg/m3 TWA (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter)	2 mg/m3 TWA (respirable fraction)
Crystalline silica (14808-60-7)			0.1 mg/m3 TWA (respirable fraction)	0.05 mg/m3 TWA (respirable fraction, listed under Silica - crystalline)	0.025 mg/m3 TWA (respirable particulate matter)	0.05 mg/m3 TWA (respirable fraction, listed under Silica - crystalline)
		•		idelines (Con't.) Canada		
	Result	Canada Ontario	Canada Quebec	Canada Saskatchewan	Canada Yukon	China

Asphalt (8052-42-4)	STELs	Not established	Not established	1.5 mg/m3 STEL (fume and inhalable fraction, as Benzene soluble aerosol)	10 mg/m3 STEL (fume)	12.5 mg/m3 STEL (fume, as Benzene soluble matter)
	TWAs	0.5 mg/m3 TWA (fume, inhalable, as Benzene- soluble aerosol)	5 mg/m3 TWAEV (fume)	0.5 mg/m3 TWA (fume and inhalable fraction, as Benzene soluble aerosol)	5 mg/m3 TWA (fume)	5 mg/m3 TWA (fume, as Benzene soluble matter)
Talc	STELs	Not established	Not established	Not established	Not established	6 mg/m3 STEL (free SiO2 <10%, total dust); 2 mg/m3 STEL (free SiO2 <10%, respirable dust)
(14807-96-6)	TWAs	2 mg/m3 TWA (containing no Asbestos and <1% Crystalline silica, respirable)	3 mg/m3 TWAEV (respirable dust)	2 mg/m3 TWA (respirable fraction)	20 mppcf TWA	3 mg/m3 TWA (free SiO2 <10%, total dust); 1 mg/m3 TWA (free SiO2 <10%, respirable dust)
Crystalline silica (14808-60-7)		Not established	Not established	Not established	Not established	2 mg/m3 STEL (containing 10 - 50% free SiO2, total dust); 1.4 mg/m3 STEL (containing 50 - 80% free SiO2, total dust); 1 mg/m3 STEL (containing >80% free SiO2, total dust); 1.4 mg/m3 STEL (containing 10 - 50% free SiO2, respirable dust); 0.6 mg/m3 STEL (containing 50 - 80% free SiO2, respirable dust); 0.4 mg/m3 STEL (containing >80% free SiO2, respirable dust)
	TWAs	0.10 mg/m3 TWA (designated substances regulation, respirable, listed under Silica, crystalline)	0.1 mg/m3 TWAEV (respirable dust)	0.05 mg/m3 TWA (respirable fraction, listed under Silica - crystalline (Trydimite removed))	300 particle/mL TWA (listed under Silica - Quartz, crystalline)	0.7 mg/m3 TWA (containing 50 - 80% free SiO2, total dust); 0.3 mg/m3 TWA (containing 50 - 80% free SiO2, respirable dust); 1 mg/m3 TWA (containing 10 - 50% free SiO2, total dust); 0.7 mg/m3 TWA (containing 10 - 50% free SiO2, respirable dust); 0.5 mg/m3 TWA (containing >80%

						free SiO2, total dust); 0.2 mg/m3 TWA (containing >80% free SiO2, respirable dust)			
	1 1	Expo	sure Limits/Gu	idelines (Con't.)					
	Result France Germany DFG India Indonesia Israel								
Asphalt (8052-42-4)	TWAs	Not established	Not established	Not established	0.5 mg/m3 TWA (soluble aerosol, fume)	0.5 mg/m3 TWA (fume, inhalable fraction, as benzene soluble aerosol)			
Talc (14807-96-6)	TWAs	Not established	Not established	Not established	2 mg/m3 TWA (not containing fiber Asbestos, use NAB asbestos for talc containing fiber asbestos, respirable particulate)	4 mg/m3 TWA (airborne dust no otherwise classified); 2 mg/m3 TWA (particulate matter containing no Asbestos and <1% crystalline silica, respirable fraction)			
Crystalline silica (14808-60-7)	TWAs	0.1 mg/m3 TWA [VME] (restrictive limit, alveolar fraction)	Not established	(10600)/(%Quartz + 10) mppcm TWA, dust count; (10)/(%Quartz + 2) mg/m3 TWA, respirable dust; (30)/(%Quartz + 3) mg/m3 TWA, total dust	0.1 mg/m3 TWA (respirable particulate)	0.025 mg/m3 TWA (respirable fraction)			
Zinc powder, stabilized	Ceilings	Not established	0.4 mg/m3 Peak (respirable fraction); 4 mg/m3 Peak (inhalable fraction)	Not established	Not established	Not established			
(7440-66-6)	MAKs	Not established	0.1 mg/m3 TWA MAK (respirable fraction); 2 mg/m3 TWA MAK (inhalable fraction)	Not established	Not established	Not established			
				idelines (Con't.)					
	Result	Japan	Malaysia	Mexico	Netherlands	NIOSH			
	STELs	Not established	Not established	10 mg/m3 STEL [PPT-CT]	Not established	Not established			
(8052-42-4)	TWAs	Not established	5 mg/m3 TWA (fume)	5 mg/m3 TWA VLE-PPT	Not established	Not established			
	Ceilings	Not established	Not established	Not established	Not established	5 mg/m3 Ceiling (fume, 15 min)			
Talc (14807-96-6)	TWAs	0.5 mg/m3 OEL (Class 1 Dust, respirable dust); 2 mg/m3 OEL (Class 1 Dust, total dust)	2 mg/m3 TWA (respirable fraction of particulate matter)	(respirable	0.25 mg/m3 TWA	2 mg/m3 TWA (containing no Asbestos and <1% Quartz, respirable dust)			

Crystalline silica (14808-60-7)	TWAs	0.03 mg/m3 OEL (respirable dust) as Silica, crystalline (general form)	0.1 mg/m3 TWA (respirable fraction)	0.1 mg/r VLE-PP (respiral fraction)	ble	0.075 mg/m TWA (respi dust, listed Silicium dio	rable under	0.05 mg/m3 TWA (respirable dust)
		Expo	osure Limits/Gu	lidelines	s (Con't.	)		
	Result	OSHA	OSHA Vacated	1	tugal	Russi	а	Singapore
Asphalt (8052-42-4)	TWAs	Not established	Not established	0.5 mg/n [VLE-MF	n3 TWA P] (fumes, e fraction, ene	Not establis		5 mg/m3 PEL (fume)
Talc (14807-96-6)	TWAs	Not established	2 mg/m3 TWA (<1% Crystalline silica, containing no Asbestos, respirable dust)	2 mg/m3 [VLE-MF (respirab fraction, particula containir Asbestos <1% Cry silica)	e] te matter ng no s and	Not establis	hed	2 mg/m3 PEL
	TWAs	50 μg/m3 TWA (listed under Respirable crystalline silica)	0.1 mg/m3 TWA (respirable dust)	0.025 mg TWA [VL (respirab fraction)	E-MP]	1 mg/m3 TV (quartz glas disintegratic aerosol, tota of aerosols, under Silico dioxide amorphous vitreous); 1 TWA (conta >70% Silico dioxide in du total mass c aerosols, lis under Crysta silicon dioxid	s, on al mass listed n and mg/m3 ining n ust, of ted alline	0.1 mg/m3 PEL (respirable dust)
Crystalline silica STELs I		Not established	Not established	Not esta	blished	3 mg/m3 ST (quartz glas disintegratic aerosol, tota of aerosols, under Silico dioxide amorphous vitreous); 3 STEL (conta >70% Silico dioxide in du total mass c aerosols, lis under Silico dioxide crys	EL s, on al mass listed n and mg/m3 aining n ust, of ted n	Not established
		Expos	sure Limits/Guid	delines	(Con't.)		-7	
	Res	•			United	States -		enezuela
Asphalt (8052-42-4)	TWA	0.5 mg/m3 TWA	A (as 5 mg/m3 TM			i <b>fornia</b> PEL (fume)	0.5 mg [VTRE	/m3 TWA -L-8/40 (fume, izene soluble

	STELs	Not established	10 mg/m3 STEL (fumes)	Not established	Not established
Talc (14807-96-6)	TWAs	2 mg/m3 TWA (containing no asbestos fibres, respirable dust); 0.1 fiber/cm3 TWA (containing asbestos fibres, respirable dust)	1 mg/m3 TWA (respirable dust)	2 mg/m3 PEL (respirable dust, containing no Asbestos fibers, <1% Crystalline silica)	2 mg/m3 TWA [VTRE-L-8/40 (respirable fraction; particulate containing no Asbestos and <1% Crystalline silica)
	STELs	Not established	3 mg/m3 STEL (calculated, respirable dust)	Not established	Not established
	TWAs	0.025 mg/m3 TWA (respirable dust)	0.1 mg/m3 TWA (respirable) as Silica, crystalline (general form)	0.3 mg/m3 PEL (total dust); 0.1 mg/m3 PEL (respirable dust)	[VTRE-L-8/40
Crystalline silica	STELs	Not established	0.3 mg/m3 STEL (calculated, respirable) as Silica, crystalline (general form)	Not established	Not established

#### **Exposure Control Notations**

#### Japan

•Crystalline silica as Silica, crystalline (general form): Carcinogens: (Group 1 - Carcinogenic to Humans) Mexico

•Talc (14807-96-6): Carcinogens: (A4 - Not classifiable as a human carcinogen)

•Asphalt (8052-42-4): **Carcinogens:** (A4 - Not classifiable as a human carcinogen)

#### Portugal

•Talc (14807-96-6): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen)

•Asphalt (8052-42-4): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen (fumes))

•Crystalline silica (14808-60-7): Carcinogens: (A2 - Suspected Human Carcinogen) Indonesia

#### Indonesia

•Talc (14807-96-6): Carcinogens: (A4 - not classifiable as a human carcinogen (not containing asbestos fiber))

•Asphalt (8052-42-4): **Carcinogens:** (A4 - not classifiable as a human carcinogen)

#### Argentina

•Talc (14807-96-6): Carcinogens: (A1 - Confirmed human carcinogen)

•Asphalt (8052-42-4): Carcinogens: (A4 - Not classifiable as a human carcinogen (fumes))

•Crystalline silica (14808-60-7): Carcinogens: (A2 - Suspected human carcinogen)

#### Canada Alberta

•Crystalline silica as Silica, crystalline (general form): **Designated Substances:** (Designated substance - requires code of practice (respirable))

#### Canada British Columbia

Asphalt (8052-42-4): Carcinogens: (IARC Category 2A - Probable Human Carcinogen (fume; occupational exposure to oxidized Bitumens and their emissions during road paving); IARC Category 2B - Possible Human Carcinogen (fume; occupational exposure to straight-run Bitumens and their emissions during road paving)) | Designated Substances: (IARC Category 2B - Possible Human Carcinogen (fume; occupational exposure to straight-run Bitumens and their emissions during road paving); IARC Category 2A - Probable Human Carcinogen (fume; occupational exposure to oxidized Bitumens and their emissions during road paving))
Crystalline silica (14808-60-7): Carcinogens: (ACGIH Category A2 - Suspected Human Carcinogen; IARC Category 1 - Human

Carcinogen) | **Designated Substances:** (ACGIH Category A2 - Suspected Human Carcinogen; IARC Category 1 - Human Carcinogen)

#### Canada Manitoba

•Talc (14807-96-6): Carcinogens: (A4 Not Classifiable as a Human Carcinogen (containing no Asbestos fibers))

•Asphalt (8052-42-4): Carcinogens: (A4 Not Classifiable as a Human Carcinogen (fume, Coal tar-free))

•Crystalline silica (14808-60-7): Carcinogens: (A2 Suspected Human Carcinogen)

#### **Canada New Brunswick**

•Talc (14807-96-6): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen)

•Asphalt (8052-42-4): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen (fumes)) Canada Nova Scotia

•Talc (14807-96-6): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen (containing no Asbestos fibers))

•Asphalt (8052-42-4): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen (fume, Coal tar-free))

•Crystalline silica (14808-60-7): Carcinogens: (A2 - Suspected Human Carcinogen)

#### Canada Ontario

•Crystalline silica (14808-60-7): **Designated Substances:** (0.10 mg/m3 TWA (respirable fraction, listed under Silica, crystalline)) **Canada Quebec** 

•Crystalline silica (14808-60-7): Carcinogens: (C2 carcinogen - effect suspected in humans)

#### Canada Saskatchewan

•Crystalline silica as Silica, crystalline (general form): Designated Substances: (Present (respirable size))

#### Venezuela

•Talc (14807-96-6): Ceilings: (Present)

•Asphalt (8052-42-4): Ceilings: (Present)

•Crystalline silica (14808-60-7): Ceilings: (Present)

#### ACGIH

•Talc (14807-96-6): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen (containing no asbestos fibers))

•Asphalt (8052-42-4): Carcinogens: (A4 - Not Classifiable as a Human Carcinogen (fume, coal tar-free))

•Crystalline silica (14808-60-7): Carcinogens: (A2 - Suspected Human Carcinogen)

#### Germany DFG

•Zinc powder, stabilized (7440-66-6): Pregnancy: (no risk to embryo/fetus if exposure limits adhered to (respirable; inhalable))

•Talc (14807-96-6): Carcinogens: (Category 3B (could be carcinogenic for man; free of asbestos fibers))

•Asphalt (8052-42-4): Carcinogens: (Category 2 (considered to be carcinogenic for man; aerosol and vapor)) | Skin: (skin notation (aerosol and vapour))

•Crystalline silica (14808-60-7): Carcinogens: (Category 1 (causes cancer in man; alveola fraction))

#### Exposure Limits Supplemental

#### Thailand

•Talc (14807-96-6): Mineral Dusts: (20 mppcf TWA)

•Crystalline silica (14808-60-7): **Mineral Dusts:** (TWA ((250/(%SiO2 + 5)), mppcf, respirable dust); TWA ((10/(%SiO2 + 2)), mg/m3, respirable dust); TWA ((30/(%SiO2 + 2)), mg/m3, total dust)) **Israel** 

•Asphalt (8052-42-4): **Biological Markers of Occupational Exposure:** (Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative))

#### OSHA

•Talc (14807-96-6): Mineral Dusts: (20 mppcf TWA (if 1% Quartz or more; use Quartz limit))

•Crystalline silica (14808-60-7): **Mineral Dusts:** ((250)/(%SiO2 + 5) mppcf TWA, respirable fraction; (10)/(%SiO2 + 2) mg/m3 TWA, respirable fraction)

#### ACGIH

•Talc (14807-96-6): **TLV Basis - Critical Effects:** (pulmonary fibrosis (containing no asbestos fibers); pulmonary function (containing no asbestos fibers))

Asphalt (8052-42-4): BEIs: (Medium: urine Time: end of shift at end of workweek Parameter: 1-Hydroxypyrene with hydrolysis (nonquantitative)) | TLV Basis - Critical Effects: (eye and upper respiratory tract irritation (fume))
 Crystalline silica (14808-60-7): TLV Basis - Critical Effects: (lung cancer; pulmonary fibrosis)

## 8.2 Exposure controls

Engineering
 Measures/Controls
 Ensure that dust handling systems (such as exhaust ducts, dust collectors, vessels and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is not leakage from the equipment). It is recommended that dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion supression system or an oxygen-deficient environment. Use only appropriately classified electrical equipment.

#### Personal Protective Equipment

• For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow

	Standard EN 149. Us	se a NI	tions found in 29 CFR 1910.134 or European OSH/MSHA or European Standard EN 149 sure limits are exceeded or symptoms are	
Eye/Face	Wear safety goggles.			
Skin/Body	• Wear appropriate glo	ves. W	/ear long sleeves and/or protective coveralls.	
Environmental Exposure Controls	• Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste.			
Key to abbreviations				
ACGIH = American Conference Industrial Hygiene	of Governmental	PEL	Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)	
BEI = Biological Exposure Indices		STEL	= Short Term Exposure Limits are based on 15-minute exposures	
MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration		TLV	Threshold Limit Value determined by the American Conference of Governmental Industrial Hygienists (ACGIH)	
NIOSH = National Institute of O	ccupational Safety and	TWA	Time-Weighted Averages are based on 8h/day, 40h/week exposures	
OSHA = Occupational Safety and Health Administration		TWAE	V = Time-Weighted Average Exposure Value	

# Section 9 - Physical and Chemical Properties

## 9.1 Information on Basic Physical and Chemical Properties

Material Description			
Physical Form	Solid	Appearance/Description	Light grey semi-solid paste with mild petroleum odor.
Color	Light grey.	Odor	Mild, petroleum.
Odor Threshold	Data lacking		
General Properties			
Boiling Point	260 °C(500 °F)	Melting Point/Freezing Point	Data lacking
Decomposition Temperature	Data lacking	рН	Data lacking
Specific Gravity/Relative Density	Data lacking	Water Solubility	Insoluble
Viscosity	Data lacking	Explosive Properties	Data lacking
Oxidizing Properties:	Data lacking		
Volatility			
Vapor Pressure	Data lacking	Vapor Density	Data lacking
Evaporation Rate	Data lacking		
Flammability			
Flash Point	> 171 °C(> 339.8 °F)	UEL	Data lacking
LEL	Data lacking	Autoignition	Data lacking
Flammability (solid, gas)	Data lacking		
Environmental			
Octanol/Water Partition coefficient	Data lacking		

## 9.2 Other Information

• No additional physical and chemical parameters noted.

## Section 10: Stability and Reactivity

## **10.1 Reactivity**

• No dangerous reaction known under conditions of normal use.

## **10.2 Chemical stability**

• Stable under normal temperatures and pressures.

## 10.3 Possibility of hazardous reactions

• Hazardous polymerization will not occur.

## **10.4 Conditions to avoid**

• Avoid generating dust. Keep away from heat, sparks and flame.

## **10.5 Incompatible materials**

• Strong oxidising agents.

## **10.6 Hazardous decomposition products**

• Hazardous decomposition products formed under fire conditions: Carbon oxides, Zinc oxide.

## **Section 11 - Toxicological Information**

## 11.1 Information on toxicological effects

	Components			
Zinc powder, stabilized (45% TO 65%)	7440- 66-6	Irritation: Skin-Human • 300 µg 3 Day(s)-Intermittent • Mild irritation; Tumorigen / Carcinogen: Ingestion/Oral-Mouse TDLo • 12.6 mg/kg 46 Week(s)- Continuous; <i>Tumorigenic</i> :Carcinogenic by RTECS criteria; <i>Gastrointestinal</i> :Tumors; <i>Tumorigenic</i> :Facilitates action of known carcinogen		
Talc (< 5%)	14807- 96-6	Irritation: Skin-Human • 300 µg 3 Day(s)-Intermittent • Mild irritation; Tumorigen / Carcinogen: Inhalation-Rat • 11 mg/m <sup>3</sup> 1 Year(s)-Intermittent; <i>Tumorigenic</i> :Equivocal tumorigenic agent by RTECS criteria; <i>Lungs, Thorax, or</i> <i>Respiration</i> :Tumors; Inhalation-Rat TCLo • 18 mg/m <sup>3</sup> 6 Hour(s) 2 Year(s)- Intermittent; <i>Tumorigenic</i> :Carcinogenic by RTECS criteria; <i>Lungs, Thorax, or</i> <i>Respiration</i> :Bronchiogenic carcinoma; <i>Endocrine</i> :Tumors		
Asphalt (2.1% TO 3.85%)	8052- 42-4	Acute Toxicity: Ingestion/Oral-Rat LD50 • >5000 mg/kg; Gastrointestinal:Hypermotility, diarrhea; Multi-dose Toxicity: Inhalation-Rat TCLo • 100 mg/m <sup>3</sup> 6 Hour(s) 14 Week(s)- Intermittent; Sense Organs and Special Senses:Olfaction:Tumors; Behavioral:Food intake (animal); Nutritional and Gross Metabolic:Gross Metabolite Changes:Weight loss or decreased weight gain; Inhalation-Human TDLo • 10 mg/m <sup>3</sup> 5.5 Year(s)- Intermittent; Sense Organs and Special Senses:Eye:Conjunctive irritation; Lungs, Thorax, or Respiration:Cough; Gastrointestinal:Changes in structure or function of salivary glands; Tumorigen / Carcinogen: Skin-Mouse • 69 g/kg 43 Week(s)-Intermittent; Tumorigenic:Equivocal tumorigenic agent by RTECS criteria; Lungs, Thorax, or Respiration:Tumors; Skin and Appendages:Other:Tumors		
Zinc O,O-bis(mixed iso- butyl and pentyl) phosphorodithioate (0.5355% TO 0.98175%)	68457- 79-4	Acute Toxicity: Ingestion/Oral-Rat LD50 • 3.6 g/kg; Behavioral:Somnolence (general depressed activity); Lungs, Thorax, or Respiration:Other changes; Gastrointestinal:Hypermotility, diarrhea		
Crystalline silica (30% TO 55%)	14808- 60-7	Acute Toxicity: Inhalation-Human TCLo • 16 mppcf 8 Hour(s) 17.9 Year(s)- Intermittent; Lungs, Thorax, or Respiration:Fibrosis, focal (pneumoconiosis); Lungs, Thorax, or Respiration:Cough; Lungs, Thorax, or Respiration:Dyspnea; Inhalation-Rat TCLo • 200 mg/kg; Lungs, Thorax, or Respiration:Fibrosis, focal (pneumoconiosis); Lungs, Thorax, or Respiration:Other changes; Nutritional and Gross Metabolic:Changes in Chemistry or Temperature:Fe; Multi-dose Toxicity: Inhalation-Hamster TCLo • 3 mg/m <sup>3</sup> 6 Hour(s) 78 Week(s)- Intermittent; Lungs, Thorax, or Respiration:Fibrosis (interstitial); Lungs, Thorax, or Respiration:Changes in lung weight; Inhalation-Rat TCLo • 58 mg/m <sup>3</sup> 13 Week(s)- Intermittent; Lungs, Thorax, or Respiration:Other changes; Endocrine:Changes in		

<ul> <li>thymus weight; Blood:Changes in leucocyte (WBC) count; Inhalation-Rat TCLo •</li> <li>6.2 mg/m³ 6 Hour(s) 6 Week(s)-Intermittent; Lungs, Thorax, or Respiration:Other changes; Blood:Changes in spleen; Immunological Including Allergic:Increase in cellular immune response;</li> <li>Mutagen: Micronucleus test • Unreported Route-Hamster • Lung (Somatic cell) •</li> <li>160 µg/cm³; DNA damage • Unreported Route-Human • Other Cell Type • 120 mg/L 24 Hour(s); Micronucleus test • Unreported Route-Human • Lung (Somatic cell) • 40 µg/cm³;</li> <li>Tumorigen / Carcinogen: Inhalation-Rat TCLo • 50 mg/m³ 6 Hour(s) 71 Week(s)-Intermittent; Tumorigenic:Carcinogenic by RTECS criteria; Liver:Tumors</li> </ul>
---

GHS Properties	Classification
Acute toxicity	EU/CLP•Data lacking UN GHS 4•Data lacking OSHA HCS 2012•Data lacking WHMIS 2015•Data lacking
Skin corrosion/Irritation	EU/CLP•Data lacking UN GHS 4•Skin Mild Irritation 3 OSHA HCS 2012•Data lacking WHMIS 2015•Data lacking
Serious eye damage/Irritation	EU/CLP•Data lacking UN GHS 4•Data lacking OSHA HCS 2012•Data lacking WHMIS 2015•Data lacking
Skin sensitization	EU/CLP•Data lacking UN GHS 4•Data lacking OSHA HCS 2012•Data lacking WHMIS 2015•Data lacking
Respiratory sensitization	EU/CLP•Data lacking UN GHS 4•Data lacking OSHA HCS 2012•Data lacking WHMIS 2015•Data lacking
Aspiration Hazard	EU/CLP•Data lacking UN GHS 4•Data lacking OSHA HCS 2012•Data lacking WHMIS 2015•Data lacking
Carcinogenicity	EU/CLP•Carcinogenicity 1A; May cause cancer by inhalation UN GHS 4•Carcinogenicity 1A OSHA HCS 2012•Carcinogenicity 1A WHMIS 2015•Carcinogenicity 1A
Germ Cell Mutagenicity	EU/CLP•Data lacking UN GHS 4•Data lacking OSHA HCS 2012•Data lacking WHMIS 2015•Data lacking
Toxicity for Reproduction	EU/CLP•Data lacking UN GHS 4•Data lacking OSHA HCS 2012•Data lacking WHMIS 2015•Data lacking
STOT-SE	EU/CLP•Data lacking UN GHS 4•Data lacking

	OSHA HCS 2012•Data lacking WHMIS 2015•Data lacking
	EU/CLP•Specific Target Organ Toxicity Repeated Exposure 1
STOT-RE	UN GHS 4•Specific Target Organ Toxicity Repeated Exposure 1
STOT-RE	OSHA HCS 2012•Specific Target Organ Toxicity Repeated Exposure 1
	WHMIS 2015 • Specific Target Organ Toxicity Repeated Exposure 1

#### Potential Health Effects

Inhalation				
Acute (Immediate)	<ul> <li>Under normal conditions of use, no health effects are expected.</li> </ul>			
Chronic (Delayed)	No data available			
Skin				
Acute (Immediate)	Causes mild skin irritation.			
Chronic (Delayed)	No data available			
Eye				
Acute (Immediate)	<ul> <li>Exposure to dust may cause mechanical irritation.</li> </ul>			
Chronic (Delayed)	No data available			
Ingestion				
Acute (Immediate)	<ul> <li>Under normal conditions of use, no health effects are expected.</li> </ul>			
Chronic (Delayed)	No data available			
Other				
Chronic (Delayed)	<ul> <li>May cause damage to lungs through prolonged or repeated exposure.</li> </ul>			
Carcinogenic Effects	Carcinogenic Effects • Repeated and prolonged exposure may cause cancer.			
Carcinogenic Effects				

Carcinogenic Enects				
	CAS	IARC	NTP	
Asphalt	8052-42-4	Group 2B-Possible Carcinogen	Not Listed	
Crystalline silica	14808-60-7	Group 1-Carcinogenic	Known Human Carcinogen	

## **11.2 Other information**

• Heating above the melting point releases metallic oxides which may cause metal fume fever which is an influenza like illness. Symptoms include headache, metallic taste in the mouth, cough, thirst, throat irritation, shortness of breath, fever, sweating and pain in the limbs. This illness is not permanent and recovery usually occurs within 24-48 hours after onset.

#### Key to abbreviations

LC = Lethal Concentration LD = Lethal Dose TC = Toxic Concentration TD = Toxic Dose

## **Section 12 - Ecological Information**

## 12.1 Toxicity

Components				
Zinc powder, stabilized (45% TO 65%)	7440- 66-6	<ul> <li>Aquatic Toxicity-Fish: 96 Hour(s) LC50 Pimephales promelas (Fathead Minnow) 0.238 mg/L Comments: Trace Metals Toxicity and Bioaccumulation in Mudskipper Periophthalmus waltoni Koumans 1941 (Gobiidae: Perciformes)</li> <li>28 Day(s) NOEC Cyprinus carpio (Common Carp) 0.0026 mg/L Comments: Bioaccumulation of Micropollutants and Biomarker Responses in Caged Carp (Cyprinus carpio)</li> <li>Aquatic Toxicity-Crustacea: 21 Day(s) NOEC Water Flea 0.062 mg/L Comments:</li> </ul>		

Bioavailability Models for Predicting Acute and Chronic Toxicity of Zinc to Algae, Daphnids, and Fish in Natural Surface Waters 48 Hour(s) EC50 <i>Ceriodaphnia dubia</i> 0.07 mg/L Comments: Influence of Water Chemistry on the Acute Toxicity of Copper and Zinc to the Cladoceran Ceriodaphnia cf dubia <b>Aquatic Toxicity-Algae and Other Aquatic Plant(s)</b> : 72 Hour(s) EC50 <i>Pseudokirchneriella</i> <i>subcapitata (Green Algae)</i> 0.106 mg/L Comments: Bioavailability Models for Predicting Acute and Chronic Toxicity of Zinc to Algae, Daphnids, and Fish in Natural Surface Waters 14 Day(s) NOEC <i>Euglena gracilis (Flagellate Euglenoid)</i> 0.0075 mg/L Comments: Water
14 Day(s) NOEC <i>Euglena gracilis (Flagellate Euglenoid)</i> 0.0075 mg/L Comments: Water Quality Bioassay Using Selected Protozoa, II. The Effects of Zinc on Population Growth of Euglena gracilis

• Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

## 12.2 Persistence and degradability

• Material data lacking.

## 12.3 Bioaccumulative potential

• Material data lacking.

## 12.4 Mobility in Soil

• Material data lacking.

## 12.5 Results of PBT and vPvB assessment

• No PBT and vPvB assessment has been conducted.

## **12.6 Other adverse effects**

• No studies have been found.

## **Section 13 - Disposal Considerations**

## **13.1 Waste treatment methods**

**Product waste** • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

# • Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

## **Section 14 - Transport Information**

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	UN3077	Environmentally hazardous substance, solid, n.o.s (Zinc)	9	Ш	NDA
TDG	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc)	9	Ξ	NDA
IMO/IMDG	UN3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc)	9	111	NDA
IATA/ICAO	UN3077	Environmentally hazardous substance, solid, n.o.s (Zinc)	9	III	NDA

14.6 Special precautions for user

• None specified.

### 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code • Data lacking.

## **Section 15 - Regulatory Information**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

**SARA Hazard Classifications** 

• Chronic, Pressure(Sudden Release of)

State Right To Know		
Component	CAS	PA
Asphalt	8052-42-4	Yes
Crystalline silica	14808-60- 7	Yes
Talc	14807-96- 6	Yes
Zinc O,O- bis(mixed iso-butyl and pentyl) phosphorodithioate	4	No
Zinc powder, stabilized	7440-66-6	Yes

Inventory						
Component	CAS	Australia AICS	Canada DSL	Canada NDSL	Chir	a EU EINECS
Asphalt	8052-42- 4	Yes	Yes	No	Yes	Yes
Crystalline silica	14808-60- 7	Yes	Yes	No	Yes	Yes
Talc	14807-96- 6	Yes	Yes	No	Yes	Yes
Zinc O,O- bis(mixed iso-butyl and pentyl) phosphorodithioate	4	Yes	Yes	No	Yes	Yes
Zinc powder, stabilized	7440-66- 6	Yes	Yes	No	Yes	Yes
Inventory (Con't.)						
Component	CAS	EU ELNICS	Japan E	NCS TS	CA	

Component	CAS	EU ELNICS	Japan ENCS	TSCA
Asphalt	8052-42-4	No	Yes	Yes
Crystalline silica	14808-60- 7	No	Yes	Yes
Talc	14807-96- 6	No	Yes	Yes
Zinc O,O- bis(mixed iso-butyl and pentyl) phosphorodithioate	4	No	Yes	Yes
Zinc powder, stabilized	7440-66-6	No	No	Yes

## **United States - California**

#### Environment

U.S. - California - Proposition 65 - Carcinogens List

•Talc	14807-96-6	Not Listed
•Asphalt	8052-42-4	Not Listed
•Zinc powder, stabilized	7440-66-6	Not Listed
<ul> <li>Zinc O,O-bis(mixed iso-butyl and pentyl) phosphorodithioate</li> </ul>	68457-79-4	Not Listed
Crystalline silica	14808-60-7	Not Listed
U.S California - Proposition 65 - Developmental Toxicity		
•Talc	14807-96-6	Not Listed
•Asphalt	8052-42-4	Not Listed
•Zinc powder, stabilized	7440-66-6	Not Listed
<ul> <li>Zinc O,O-bis(mixed iso-butyl and pentyl) phosphorodithioate</li> </ul>	68457-79-4	Not Listed
•Crystalline silica	14808-60-7	Not Listed
U.S California - Proposition 65 - Maximum Allowable Dose Levels	(MADL)	
•Talc	14807-96-6	Not Listed
•Asphalt	8052-42-4	Not Listed
•Zinc powder, stabilized	7440-66-6	Not Listed
<ul> <li>Zinc O,O-bis(mixed iso-butyl and pentyl) phosphorodithioate</li> </ul>	68457-79-4	Not Listed
•Crystalline silica	14808-60-7	Not Listed
U.S California - Proposition 65 - No Significant Risk Levels (NSRL	)	
•Talc	14807-96-6	Not Listed
•Asphalt	8052-42-4	Not Listed
•Zinc powder, stabilized	7440-66-6	Not Listed
<ul> <li>Zinc O,O-bis(mixed iso-butyl and pentyl) phosphorodithioate</li> </ul>	68457-79-4	Not Listed
Crystalline silica	14808-60-7	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Female		
•Talc	14807-96-6	Not Listed
•Asphalt	8052-42-4	Not Listed
•Zinc powder, stabilized	7440-66-6	Not Listed
<ul> <li>Zinc O,O-bis(mixed iso-butyl and pentyl) phosphorodithioate</li> </ul>	68457-79-4	Not Listed
Crystalline silica	14808-60-7	Not Listed
U.S California - Proposition 65 - Reproductive Toxicity - Male		
•Talc	14807-96-6	Not Listed
•Asphalt	8052-42-4	Not Listed
•Zinc powder, stabilized	7440-66-6	Not Listed
•Zinc O,O-bis(mixed iso-butyl and pentyl) phosphorodithioate	68457-79-4	Not Listed
•Crystalline silica	14808-60-7	Not Listed

## **15.2 Chemical Safety Assessment**

• No Chemical Safety Assessment has been carried out.

## **Section 16 - Other Information**

## Relevant Phrases (code & full text)

	<ul> <li>H350i - May cause cancer by inhalation.</li> <li>H372 - Causes damage to organs through prolonged or repeated exposure.</li> </ul>
Revision Date	• 31/January/2018
Last Revision Date	• 31/January/2018
Preparation Date	• 21/May/2013
Disclaimer/Statement of Liability	• 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 given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material

used in combination with any other materials or in any process, unless specified in the text.

Key to abbreviations NDA = No Data Available