

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

1.1 Product identifier

Product Name

• **Green-Seal® II Thermal**

Synonyms

• 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, and Sealant

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.topcoilsite.com
msds@topcoilsite.com

Telephone (General) • 403-219-0255

1.4 Emergency telephone number

Manufacturer

• 403-219-0255

Poison & Drug Information Service (Alberta Health 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

• Not classified

2.2 Label Elements

CLP

Hazard statements • No label element(s) required

2.3 Other Hazards

CLP

• According to Regulation (EC) No. 1272/2008 (CLP) this material is not considered hazardous.

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

UN GHS

• Skin Mild Irritation 3
Hazardous to the aquatic environment Acute 3

2.2 Label elements

UN GHS

WARNING

Hazard statements • Causes mild skin irritation
Harmful to aquatic life

Precautionary statements

Prevention • Avoid release to the environment.

Response • If skin irritation occurs: Get medical advice/attention.

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

2.3 Other hazards

UN GHS

• According to the Globally Harmonized System for Classification and Labeling (GHS) this product is considered hazardous

United States (US)

According to: OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS 2012 • Not classified

2.2 Label elements

OSHA HCS 2012

Hazard statements • No label element(s) required

2.3 Other hazards

OSHA HCS 2012 • This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

Canada

According to: WHMIS 2015

2.1 Classification of the substance or mixture

WHMIS 2015 • Not classified

2.2 Label elements

WHMIS 2015

Hazard statements • No label element(s) required

Precautionary statements

2.3 Other hazards

WHMIS 2015 • In Canada, the product mentioned above is not considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

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
Solvent-refined heavy paraffinic petroleum distillates	CAS: 64741-88-4 EC Number: 265-090-8 EU Index: 649-454-00-7	38.5% TO 49.5%	NDA	EU CLP: Annex VI, Table 3.1: Carc. 1B, H350 UN GHS Revision 4: Skin Irrit. 3; Asp. Tox. 2 OSHA HCS 2012: Not Classified WHMIS 2015: Not Classified	NDA
Graphite	CAS: 7782-42-5 EC Number: 231-955-3	> 20%	NDA	EU CLP: STOT RE 1 (Lungs / Inhl), H372 UN GHS Revision 4: STOT RE 1 (Lungs / Inhl) OSHA HCS 2012: Comb. Dust; STOT RE 1 (Lungs / Inhl) WHMIS 2015: Comb. Dust; STOT RE 1 (Lungs / Inhl)	NDA
Ethene, homopolymer	CAS: 9002-88-4	< 10%	Ingestion/Oral-Rat LD50 • >8 g/kg Inhalation-Rat LC50 • 75.5 g/m ³ 30 Minute(s)	EU CLP: Not Classified UN GHS Revision 4: Not Classified OSHA HCS 2012: Comb. Dust WHMIS 2015: Comb. Dust	NDA
Talc	CAS: 14807-96-6 EC Number: 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
Carbon Black	CAS: 1333-86-4 EC Number: 215-609-9	< 5%	Ingestion/Oral-Rat LD50 • >15400 mg/kg Skin-Rabbit LD50 • >3 g/kg	EU CLP: Carc. 2, H351; STOT RE 1, H372 UN GHS Revision 4: Carc. 2; STOT RE 1 (Lungs, Inhl) OSHA HCS 2012: Carc. 2; STOT RE 1 (Lungs, Inhl); Comb. Dust WHMIS 2015: Carc. 2; STOT RE 1 (Lungs, Inhl); Comb. Dust	NDA
Benzenesulfonic acid, dodecyl-, calcium salt	CAS: 26264-06-2 EINECS: 247-557-8	0.55% TO 2.75%	Ingestion/Oral-Rat LD50 • 1300 mg/kg	EU CLP: Acute Tox. 4, H302 UN GHS Revision 4: Acute Tox. 4 (orl); Aquatic Acute 2 OSHA HCS 2012: Acute Tox. 4 (orl) WHMIS 2015: Acute Tox. 4 (orl)	NDA
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	CAS: 68584-23-6 EINECS: 271-529-4	0.55% TO 2.75%	NDA	EU CLP: Not Classified UN GHS Revision 4: Not Classified OSHA HCS 2012: Not Classified WHMIS 2015: Not Classified	NDA

See Section 16 for full text of H-statements.

Section 4 - First Aid Measures

4.1 Description of first aid measures

- Inhalation** • Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing.
- Skin** • In case of contact with substance, immediately flush skin with running water for at least 20 minutes.

- Eye** • In case of contact with substance, immediately flush eyes with running water for at least 20 minutes.
- Ingestion** • Obtain medical attention immediately if ingested.

4.2 Most important symptoms and effects, both acute and delayed

- Refer to Section 11 - Toxicological Information.

4.3 Indication 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 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** • No data available

- Hazardous Combustion Products** • Hazardous decomposition products formed under fire conditions: Carbon oxides, metal oxides.

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** • Ventilate the area. Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact.
- Emergency Procedures** • Keep unauthorized personnel away. Stay upwind.

6.2 Environmental precautions

- Avoid run off to waterways and sewers.

6.3 Methods and material for containment and cleaning up

- Containment/Clean-up Measures** • Stop leak if you can do it without risk.
SMALL SPILLS: Take up with sand or other non-combustible absorbent material and place into containers for later disposal.
LARGE SPILLS: Dike far ahead of liquid spill for later disposal.

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. Keep away from heat and ignition sources. Use good safety and industrial hygiene practices. Wear appropriate personal protective equipment, avoid direct contact. 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.

7.2 Conditions for safe storage, including any incompatibilities

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

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
Carbon Black (1333-86-4)	TWAs	3 mg/m ³ TWA (inhalable particulate matter)	3.5 mg/m ³ TWA [CMP]	3 mg/m ³ TWA	3.5 mg/m ³ TWA	3 mg/m ³ TWA (inhalable)
Talc (14807-96-6)	TWAs	2 mg/m ³ TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable particulate matter)	2 mg/m ³ TWA [CMP] (respirable fraction, particulate matter containing no asbestos and less than 1% crystalline silica)	2.5 mg/m ³ TWA (containing no asbestos fibers)	2 mg/m ³ TWA (respirable particulate)	2 mg/m ³ TWA (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate)
Graphite	TWAs	2 mg/m ³ TWA (all forms except graphite fibers, respirable particulate matter)	2 mg/m ³ TWA [CMP] (all forms except fibres, respirable fraction)	3 mg/m ³ TWA (containing no asbestos and <1% crystalline silica; all forms except fibres; natural and synthetic, respirable dust)	2 mg/m ³ TWA (all forms except Graphite fibres, respirable)	2 mg/m ³ TWA (all forms except Graphite fibres, respirable)
Exposure Limits/Guidelines (Con't.)						
	Result	Canada Manitoba	Canada New Brunswick	Canada Northwest Territories	Canada Nova Scotia	Canada Nunavut
Carbon Black (1333-86-4)	TWAs	3 mg/m ³ TWA (inhalable particulate matter)	3.5 mg/m ³ TWA	3.5 mg/m ³ TWA	3 mg/m ³ TWA (inhalable particulate matter)	3.5 mg/m ³ TWA
	STELs	Not established	Not established	7 mg/m ³ STEL	Not established	7 mg/m ³ STEL
Talc (14807-96-6)	TWAs	2 mg/m ³ TWA (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter)	2 mg/m ³ TWA (particulate matter containing no Asbestos and <1% Crystalline silica, respirable fraction)	2 mg/m ³ TWA (respirable fraction)	2 mg/m ³ TWA (particulate matter containing no Asbestos and <1% Crystalline silica, respirable particulate matter)	2 mg/m ³ TWA (respirable fraction)
Graphite	TWAs	2 mg/m ³ TWA (all forms except Graphite fibres, respirable particulate matter)	2 mg/m ³ TWA (all forms except graphite fibres)	2 mg/m ³ TWA (natural, all forms, except Graphite fibres, respirable fraction)	2 mg/m ³ TWA (all forms except Graphite fibres, respirable particulate matter)	2 mg/m ³ TWA (natural, all forms, except Graphite fibres, respirable fraction)
	STELs	Not established	Not established	4 mg/m ³ STEL (natural, all forms, except Graphite fibres, respirable fraction)	Not established	4 mg/m ³ STEL (natural, all forms, except Graphite fibres, respirable fraction)
Exposure Limits/Guidelines (Con't.)						
	Result	Canada Ontario	Canada Quebec	Canada Saskatchewan	Canada Yukon	China
Carbon Black (1333-86-4)	STELs	Not established	Not established	7 mg/m ³ STEL	7 mg/m ³ STEL	8 mg/m ³ STEL (total dust)
	TWAs	3 mg/m ³ TWA (inhalable)	3.5 mg/m ³ TWA EV	3.5 mg/m ³ TWA	3.5 mg/m ³ TWA	4 mg/m ³ TWA (total dust)
Talc (14807-96-6)	STELs	Not established	Not established	Not established	Not established	6 mg/m ³ STEL (free SiO ₂ <10%, total dust); 2 mg/m ³ STEL (free SiO ₂ <10%, respirable dust)

	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)
Ethene, homopolymer (9002-88-4)	STELs	Not established	Not established	Not established	Not established	10 mg/m3 STEL (total dust)
	TWAs	Not established	Not established	Not established	Not established	5 mg/m3 TWA (total dust)
Graphite	STELs	Not established	Not established	4 mg/m3 STEL (natural, except Graphite fibres, respirable fraction)	Not established	8 mg/m3 STEL (total dust); 4 mg/m3 STEL (respirable dust)
	TWAs	2 mg/m3 TWA (except Graphite fibres, respirable)	2 mg/m3 TWAEV (containing no Asbestos and <1% Crystalline silica, except Graphite fibres, respirable dust)	2 mg/m3 TWA (natural, except Graphite fibres, respirable fraction)	20 mppcf TWA; 30 mppcf TWA (synthetic); 10 mg/m3 TWA (synthetic)	4 mg/m3 TWA (total dust); 2 mg/m3 TWA (respirable dust)

Exposure Limits/Guidelines (Con't.)

	Result	France	Germany DFG	Indonesia	Israel	Japan
Carbon Black (1333-86-4)	TWAs	3.5 mg/m3 TWA [VME]	Not established	3.5 mg/m3 TWA	3 mg/m3 TWA (inhalable fraction)	4 mg/m3 OEL (Class 2 Dust, total dust); 1 mg/m3 OEL (Class 2 Dust, respirable dust)
Talc (14807-96-6)	TWAs	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)	0.5 mg/m3 OEL (Class 1 Dust, respirable dust); 2 mg/m3 OEL (Class 1 Dust, total dust)
Graphite (7782-42-5)	TWAs	2 mg/m3 TWA [VME] (alveolar fraction)	Not established	2 mg/m3 TWA	2 mg/m3 TWA (respirable fraction, all forms except graphite fibers)	2 mg/m3 OEL (Class 1 Dust, total dust); 0.5 mg/m3 OEL (Class 1 Dust, respirable dust)
	MAKs	Not established	1.5 mg/m3 TWA MAK (respirable fraction); 4 mg/m3 TWA MAK (inhalable fraction)	Not established	Not established	Not established

Exposure Limits/Guidelines (Con't.)

	Result	Malaysia	Mexico	Netherlands	NIOSH	OSHA
Carbon Black (1333-86-4)	STELs	Not established	7 mg/m3 STEL [PPT-CT]	Not established	Not established	Not established
	TWAs	3.5 mg/m3 TWA	3.5 mg/m3 TWA VLE-PPT	Not established	3.5 mg/m3 TWA; 0.1 mg/m3 TWA (Carbon black in presence of Polycyclic aromatic hydrocarbons, as PAH)	3.5 mg/m3 TWA
Talc (14807-96-6)	TWAs	2 mg/m3 TWA (respirable fraction of particulate matter)	2 mg/m3 TWA VLE-PPT (respirable fraction)	0.25 mg/m3 TWA	2 mg/m3 TWA (containing no Asbestos and <1% Quartz, respirable dust)	Not established
Graphite	TWAs	2 mg/m3 TWA (all forms except Graphite fibres, respirable fraction)	2 mg/m3 TWA VLE-PPT (synthetic and natural)	Not established	2.5 mg/m3 TWA (natural, respirable dust)	15 mg/m3 TWA (synthetic, total dust); 5 mg/m3 TWA (synthetic, respirable fraction)

Exposure Limits/Guidelines (Con't.)

	Result	OSHA Vacated	Portugal	Singapore	Thailand	United Kingdom
Carbon Black (1333-86-4)	TWAs	3.5 mg/m3 TWA	3.5 mg/m3 TWA [VLE-MP]	3.5 mg/m3 PEL	Not established	3.5 mg/m3 TWA
	STELs	Not established	Not established	Not established	Not established	7 mg/m3 STEL
Talc (14807-96-6)	TWAs	2 mg/m3 TWA (<1% Crystalline silica, containing no Asbestos, respirable dust)	2 mg/m3 TWA [VLE-MP] (respirable fraction, particulate matter containing no Asbestos and <1% Crystalline silica)	2 mg/m3 PEL	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)
	STELs	Not established	Not established	Not established	Not established	3 mg/m3 STEL (calculated, respirable dust)
Graphite (7782-42-5)	TWAs	2.5 mg/m3 TWA (natural, respirable dust); 10 mg/m3 TWA (synthetic, total dust); 5 mg/m3 TWA (synthetic, respirable fraction)	2 mg/m3 TWA [VLE-MP] (all forms except Graphite fibers, respirable fraction)	2 mg/m3 PEL (respirable dust)	Not established	10 mg/m3 TWA (inhalable dust); 4 mg/m3 TWA (respirable dust)
	STELs	Not established	Not established	Not established	Not established	30 mg/m3 STEL (calculated, inhalable dust); 12 mg/m3 STEL (calculated, respirable dust)

Exposure Limits/Guidelines (Con't.)

	Result	United States - California	Venezuela
Carbon Black (1333-86-4)	TWAs	3.5 mg/m3 PEL	3.5 mg/m3 TWA [VTRE-L-8/40]
Talc (14807-96-6)	TWAs	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)
Graphite	TWAs	2.5 mg/m3 PEL (natural, respirable dust); 10 mg/m3 PEL (synthetic total dust); 5 mg/m3 PEL (synthetic respirable fraction)	2 mg/m3 TWA [VTRE-L-8/40 (dust)]

Exposure Control Notations

Japan

•Carbon Black (1333-86-4): **Carcinogens:** (Group 2B - Possibly Carcinogenic to Humans)

Mexico

•Talc (14807-96-6): **Carcinogens:** (A4 - Not classifiable as a human carcinogen)
 •Carbon Black (1333-86-4): **Carcinogens:** (A4 - Not classifiable as a human carcinogen)

Egypt

•Graphite (7782-42-5): **Nuisance Dusts:** (10 mg/m3 TWA (synthetic, containing <1% Quartz, total dust); 30 mppcf TWA (synthetic, containing <1% Quartz, total dust); 3 mg/m3 TWA (synthetic, containing <1% Quartz, total dust))

Portugal

•Talc (14807-96-6): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
 •Carbon Black (1333-86-4): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)

Indonesia

•Talc (14807-96-6): **Carcinogens:** (A4 - not classifiable as a human carcinogen (not containing asbestos fiber))
 •Carbon Black (1333-86-4): **Carcinogens:** (A4 - not classifiable as a human carcinogen)

Argentina

•Talc (14807-96-6): **Carcinogens:** (A1 - Confirmed human carcinogen)
 •Carbon Black (1333-86-4): **Carcinogens:** (A4 - Not classifiable as a human carcinogen)

Canada British Columbia

•Carbon Black (1333-86-4): **Carcinogens:** (IARC Category 2B - Possible Human Carcinogen) | **Designated Substances:** (IARC Category 2B - Possible Human Carcinogen)

Canada Manitoba

•Talc (14807-96-6): **Carcinogens:** (A4 Not Classifiable as a Human Carcinogen (containing no Asbestos fibers))
 •Carbon Black (1333-86-4): **Carcinogens:** (A3 Confirmed Animal Carcinogen with Unknown Relevance to Humans)

Canada New Brunswick

•Talc (14807-96-6): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)
 •Carbon Black (1333-86-4): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen)

Canada Nova Scotia

- Talc (14807-96-6): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen (containing no Asbestos fibers))
- Carbon Black (1333-86-4): **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans)

Venezuela

- Talc (14807-96-6): **Ceilings:** (Present)
- Carbon Black (1333-86-4): **Ceilings:** (Present)

ACGIH

- Talc (14807-96-6): **Carcinogens:** (A4 - Not Classifiable as a Human Carcinogen (containing no asbestos fibers))
- Carbon Black (1333-86-4): **Carcinogens:** (A3 - Confirmed Animal Carcinogen with Unknown Relevance to Humans)

Germany DFG

- Graphite (7782-42-5): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to (inhalable fraction; respirable fraction))
- Talc (14807-96-6): **Carcinogens:** (Category 3B (could be carcinogenic for man; free of asbestos fibers))
- Carbon Black (1333-86-4): **Carcinogens:** (Category 3B (could be carcinogenic for man; inhalable fraction))

Exposure Limits Supplemental

Thailand

- Graphite (7782-42-5): **Mineral Dusts:** (15 mppcf TWA)
- Graphite as Particulates not otherwise classified (PNOC): **Mineral Dusts:** (15 mppcf TWA (respirable dust); 15 mg/m3 TWA (total dust); 50 mppcf TWA (total dust); 5 mg/m3 TWA (respirable dust))
- Talc (14807-96-6): **Mineral Dusts:** (20 mppcf TWA)

Israel

- Carbon Black (1333-86-4): **Action Levels:** (1.50 mg/m3 AL) | **Substances Requiring Environmental - Occu:** (Present)

OSHA

- Graphite (7782-42-5): **Mineral Dusts:** (15 mppcf TWA (natural))
- Graphite as Particulates not otherwise classified (PNOC): **Mineral Dusts:** (15 mppcf TWA (respirable fraction); 5 mg/m3 TWA (respirable fraction); 50 mppcf TWA (total dust); 15 mg/m3 TWA (total dust))
- Talc (14807-96-6): **Mineral Dusts:** (20 mppcf TWA (if 1% Quartz or more; use Quartz limit))

ACGIH

- Graphite (7782-42-5): **TLV Basis - Critical Effects:** (pneumoconiosis (all forms except graphite fibers))
- Talc (14807-96-6): **TLV Basis - Critical Effects:** (pulmonary fibrosis (containing no asbestos fibers); pulmonary function (containing no asbestos fibers))
- Carbon Black (1333-86-4): **TLV Basis - Critical Effects:** (bronchitis)

8.2 Exposure controls

Engineering

- Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Measures/Controls

Personal Protective Equipment

Respiratory

- In case of insufficient ventilation, wear suitable respiratory equipment.

Eye/Face

- Wear protective eyewear (goggles, face shield, or safety glasses).

Skin/Body

- Natural Rubber, latex gloves. Break through time: 4-8 Hours. Wear 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 of Governmental Industrial Hygiene

BEI = Biological Exposure Indices

MAK = Maximale Arbeitsplatz Konzentration is the maximum permissible concentration

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

STEL = Short Term Exposure Limits are based on 15-minute exposures

TLV = Threshold Limit Value determined by the American Conference of Governmental Industrial Hygienists (ACGIH)

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

TWAEV = 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	Black semi-solid paste with mild petroleum odor.
Color	Black	Odor	Mild, petroleum.

Odor Threshold	Data lacking		
General Properties			
Boiling Point	Data lacking	Melting Point/Freezing Point	Data lacking
Decomposition Temperature	Data lacking	pH	Data lacking
Specific Gravity/Relative Density	Data lacking	Water Solubility	Data lacking
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	Data lacking	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

- Keep away from heat, sparks and flame.

10.5 Incompatible materials

- None in particular.

10.6 Hazardous decomposition products

- Hazardous decomposition products formed under fire conditions: Carbon oxides, metal oxides.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Components		
Ethene, homopolymer (< 10%)	9002-88-4	Acute Toxicity: Ingestion/Oral-Rat LD50 • >8 g/kg; Ingestion/Oral-Mouse LDLo • 5000 mg/kg; <i>Sense Organs and Special Senses:Olfaction:Change in sensation of smell; Behavioral:Somnolence (general depressed activity); Behavioral:Changes in motor activity (specific assay);</i> Ingestion/Oral-Mouse TDLo • 2500 mg/kg; <i>Kidney, Ureter, and Bladder:Changes in tubules (including acute renal failure, acute tubular necrosis); Blood:Changes in spleen; Biochemical:Metabolism (intermediary):Other proteins;</i> Inhalation-Rat LC50 • 75.5 g/m ³ 30 Minute(s)
Talc (> 5%)	14807-96-6	Irritation: Skin-Human • 300 µg 3 Day(s)-Intermittent • Mild irritation; Tumorigen / Carcinogen: Inhalation-Rat • 11 mg/m ³ 1 Year(s)-Intermittent; <i>Tumorigenic:Equivocal tumorigenic agent by RTECS criteria; Lungs, Thorax, or Respiration:Tumors;</i> Inhalation-Rat TCLo • 18 mg/m ³ 6 Hour(s) 2 Year(s)-Intermittent; <i>Tumorigenic:Carcinogenic by RTECS criteria; Lungs, Thorax, or Respiration:Bronchiogenic carcinoma; Endocrine:Tumors</i>
Carbon Black (< 5%)	1333-86-4	Acute Toxicity: Ingestion/Oral-Rat LD50 • >15400 mg/kg; <i>Behavioral:Somnolence (general depressed activity);</i> Skin-Rabbit LD50 • >3 g/kg; Mutagen: DNA adduct • Inhalation-Mouse • 6200 µg/m ³ 16 Hour(s) 12 Week(s)-Intermittent; DNA damage • Inhalation-Rat • 50 µg/L 13 Week(s)-Intermittent; DNA damage • Inhalation-Rat • 50 g/L 13

		Week(s); Tumorigen / Carcinogen: Inhalation-Rat TCl ₀ • 11600 µg/m ³ 18 Hour(s) 2 Year(s)-Intermittent; <i>Tumorigenic: Carcinogenic by RTECS criteria; Lungs, Thorax, or Respiration: Tumors</i>
Benzenesulfonic acid, dodecyl-, calcium salt (0.55% TO 2.75%)	26264-06-2	Acute Toxicity: Ingestion/Oral-Rat LD50 • 1300 mg/kg

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•Data lacking UN GHS 4•Data lacking OSHA HCS 2012•Data lacking WHMIS 2015•Data lacking
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
STOT-RE	EU/CLP•Data lacking UN GHS 4•Data lacking OSHA HCS 2012•Data lacking WHMIS 2015•Data lacking

Potential Health Effects

Inhalation

Acute (Immediate) • Under normal conditions of use, no health effects are expected.

Chronic (Delayed) • No data available

Skin

Acute (Immediate) • Under normal conditions of use, no health effects are expected.

Chronic (Delayed) • No data available

Eye

Acute (Immediate) • Under normal conditions of use, no health effects are expected.

Chronic (Delayed) • No data available

Ingestion

Acute (Immediate) • May be harmful if swallowed.

Chronic (Delayed) • No data available

Carcinogenic Effects • This material contains a component that may cause cancer, however based on regulatory criteria this material is not classified as a carcinogen.

Carcinogenic Effects		
	CAS	IARC
Carbon Black	1333-86-4	Group 2B-Possible Carcinogen

Key to abbreviations

LC = Lethal Concentration

LD = Lethal Dose

TC = Toxic Concentration

TD = Toxic Dose

Section 12 - Ecological Information

12.1 Toxicity

- Harmful to aquatic life.

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.

Packaging waste • 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	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
TDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
IMO/IMDG	Not Applicable	Not Regulated	Not Applicable	Not Applicable	NDA
IATA/ICAO	Not Applicable	Not Regulated	Not Applicable	Not Applicable	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

State Right To Know		
Component	CAS	PA
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	No
Benzenesulfonic acid, dodecyl-, calcium salt	26264-06-2	Yes
Carbon Black	1333-86-4	Yes
Ethene, homopolymer	9002-88-4	No
Graphite	7782-42-5	Yes
Solvent-refined heavy paraffinic petroleum distillates	64741-88-4	No
Talc	14807-96-6	Yes

Inventory						
Component	CAS	Australia AICS	Canada DSL	Canada NDSL	China	EU EINECS
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	Yes	Yes	No	Yes	Yes
Benzenesulfonic acid, dodecyl-, calcium salt	26264-06-2	Yes	Yes	No	Yes	Yes
Carbon Black	1333-86-4	Yes	Yes	No	Yes	Yes
Ethene, homopolymer	9002-88-4	Yes	Yes	No	Yes	No
Graphite	7782-42-5	Yes	Yes	No	Yes	Yes
Solvent-refined heavy paraffinic petroleum distillates	64741-88-4	Yes	Yes	No	Yes	Yes
Talc	14807-96-6	Yes	Yes	No	Yes	Yes

Inventory (Con't.)				
Component	CAS	EU ELNICS	Japan ENCS	TSCA
Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	No	No	Yes

Benzenesulfonic acid, dodecyl-, calcium salt	26264-06-2	No	Yes	Yes
Carbon Black	1333-86-4	Yes	Yes	Yes
Ethene, homopolymer	9002-88-4	No	Yes	Yes
Graphite	7782-42-5	No	No	Yes
Solvent-refined heavy paraffinic petroleum distillates	64741-88-4	No	No	Yes
Talc	14807-96-6	No	Yes	Yes

United States - California

Environment

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

•Solvent-refined heavy paraffinic petroleum distillates	64741-88-4	Not Listed
•Carbon Black	1333-86-4	carcinogen, 2/21/2003 (airborne, unbound particles of respirable size)
•Talc	14807-96-6	Not Listed
•Ethene, homopolymer	9002-88-4	Not Listed
•Graphite	7782-42-5	Not Listed
•Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	Not Listed
•Benzenesulfonic acid, dodecyl-, calcium salt	26264-06-2	Not Listed

U.S. - California - Proposition 65 - Developmental Toxicity

•Solvent-refined heavy paraffinic petroleum distillates	64741-88-4	Not Listed
•Carbon Black	1333-86-4	Not Listed
•Talc	14807-96-6	Not Listed
•Ethene, homopolymer	9002-88-4	Not Listed
•Graphite	7782-42-5	Not Listed
•Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	Not Listed
•Benzenesulfonic acid, dodecyl-, calcium salt	26264-06-2	Not Listed

U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

•Solvent-refined heavy paraffinic petroleum distillates	64741-88-4	Not Listed
•Carbon Black	1333-86-4	Not Listed
•Talc	14807-96-6	Not Listed
•Ethene, homopolymer	9002-88-4	Not Listed
•Graphite	7782-42-5	Not Listed
•Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	Not Listed
•Benzenesulfonic acid, dodecyl-, calcium salt	26264-06-2	Not Listed

U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

•Solvent-refined heavy paraffinic petroleum distillates	64741-88-4	Not Listed
•Carbon Black	1333-86-4	Not Listed
•Talc	14807-96-6	Not Listed
•Ethene, homopolymer	9002-88-4	Not Listed
•Graphite	7782-42-5	Not Listed
•Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	Not Listed
•Benzenesulfonic acid, dodecyl-, calcium salt	26264-06-2	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Female

•Solvent-refined heavy paraffinic petroleum distillates	64741-88-4	Not Listed
•Carbon Black	1333-86-4	Not Listed
•Talc	14807-96-6	Not Listed
•Ethene, homopolymer	9002-88-4	Not Listed
•Graphite	7782-42-5	Not Listed
•Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	Not Listed
•Benzenesulfonic acid, dodecyl-, calcium salt	26264-06-2	Not Listed

U.S. - California - Proposition 65 - Reproductive Toxicity - Male

•Solvent-refined heavy paraffinic petroleum distillates	64741-88-4	Not Listed
•Carbon Black	1333-86-4	Not Listed
•Talc	14807-96-6	Not Listed
•Ethene, homopolymer	9002-88-4	Not Listed
•Graphite	7782-42-5	Not Listed
•Benzenesulfonic acid, C10-16-alkyl derivs., calcium salts	68584-23-6	Not Listed
•Benzenesulfonic acid, dodecyl-, calcium salt	26264-06-2	Not Listed

15.2 Chemical Safety Assessment

- No Chemical Safety Assessment has been carried out.

15.3 Other Information

- WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information

Relevant Phrases (code & full text)

- H302 - Harmful if swallowed
- H350 - May cause cancer.
- H351 - Suspected of causing cancer.
- H372 - Causes damage to organs through prolonged or repeated exposure.

Revision Date

- 24/April/2018

Last Revision Date

- 24/April/2018

Preparation Date

- 24/April/2018

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