

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

1.1 Product identifier

Product Name

• **TK II Modified®**

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, Sealant, high temperature casing & tubing compound

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 • 403-219-0255
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 • Hazardous to the aquatic environment Acute 1 - H400
Hazardous to the aquatic environment Chronic 1 - H410

2.2 Label Elements

CLP

WARNING



Hazard statements • H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects

Precautionary

statements

Prevention • P273 - Avoid release to the environment.

Response • P391 - Collect spillage.

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

2.3 Other Hazards

CLP • 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.

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 • Acute Toxicity Oral 4
Skin Mild Irritation 3
Hazardous to the aquatic environment Acute 1
Hazardous to the aquatic environment Chronic 1

2.2 Label elements

UN GHS

WARNING



Hazard statements • Harmful if swallowed
Causes mild skin irritation
Very toxic to aquatic life
Very toxic to aquatic life with long lasting effects

Precautionary statements

Prevention • Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.

Response • If skin irritation occurs: Get medical advice/attention.
IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
Rinse mouth.
Collect spillage.

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

Supplemental information • 60.7 - 66.9 percent of this product consists of an ingredient of unknown toxicity.

2.3 Other hazards

UN GHS • 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

United States (US)

According to: **OSHA 29 CFR 1910.1200 HCS**

2.1 Classification of the substance or mixture

OSHA HCS 2012 • Acute Toxicity Oral 4
Hazards Not Otherwise Classified - Health Hazards - Metal fume fever

2.2 Label elements

OSHA HCS 2012

WARNING



Hazard statements • Harmful if swallowed

Precautionary statements

Prevention • Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.

Response • IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.
Rinse mouth.

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

Supplemental information • 60.7 - 66.9 percent of this product consists of an ingredient of unknown toxicity.

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 • Acute Toxicity Oral 4
Health Hazards Not Otherwise Classified 1

2.2 Label elements

WHMIS 2015

DANGER



Hazard statements • Harmful if swallowed
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 • Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.

EU CLP: Skin Irrit. 2, H315; Eye
Irrit. 2, H319

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media

- In case of fire use media as appropriate for surrounding fire.

Unsuitable Extinguishing Media

- No data available

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

- The product itself does not burn.

Hazardous Combustion Products

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

5.3 Advice for firefighters

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

Exposure Limits/Guidelines (Con't.)

Result	Canada Manitoba	Canada New Brunswick	Canada Northwest Territories	Canada Nova Scotia	Canada Nunavut
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Exposure Limits/Guidelines (Con't.)

	Result	France	Germany DFG	Germany TRGS	Indonesia	Israel
Sulfonic acid, petroleum, calcium salt (61789-86-4)	TWAs	Not established	Not established	5 mg/m ³ TWA AGW (respirable fraction, exposure factor 4)	Not established	Not established
	Ceilings	Not established	20 mg/m ³ Peak (respirable fraction)	Not established	Not established	Not established
	MAKs	Not established	5 mg/m ³ TWA MAK (respirable fraction)	Not established	Not established	Not established
Calcium monocarbonate (471-34-1)	TWAs	10 mg/m ³ TWA [VME]	Not established	Not established	Not established	Not established
Copper oxide	TWAs	Not established	Not established	Not established	Not established	1 mg/m ³ TWA (dust and mist, as Cu)
	TWAs	2 mg/m ³ TWA [VME] (alveolar fraction)	Not established	Not established	2 mg/m ³ TWA	<i>as Copper compounds</i> 2 mg/m ³ TWA (respirable fraction, all forms except graphite fibers)
Graphite (7782-42-5)	MAKs	Not established	1.5 mg/m ³ TWA MAK (respirable fraction); 4 mg/m ³ TWA MAK (inhalable fraction)	Not established	Not established	Not established

Exposure Limits/Guidelines (Con't.)

	Result	Venezuela
Calcium monocarbonate (471-34-1)	TWAs	10 mg/m ³ TWA [VTRE-L-8/40
Graphite	TWAs	2 mg/m ³ TWA [VTRE-L-8/40 (dust)

Exposure Control Notations

Japan

•Copper oxide as Copper compounds: **Sensitizers:** (Group 2 skin sensitizer (Evaluation does not necessarily apply to all individuals within the group))

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))

•Calcium monocarbonate (471-34-1): **Nuisance Dusts:** (10 mg/m³ TWA (containing <1% Quartz, total dust); 30 mppcf TWA (containing <1% Quartz, total dust); 3 mg/m³ TWA (containing <1% Quartz, inhalable dust))

Germany DFG

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

•Graphite (7782-42-5): **Pregnancy:** (no risk to embryo/fetus if exposure limits adhered to (inhalable fraction; respirable fraction))

•Sulfonic acid, petroleum, calcium salt (61789-86-4): **Pregnancy:** (classification not yet possible (respirable fraction))

Exposure Limits Supplemental

Thailand

Section 9 - Physical and Chemical Properties

9.1 Information on Basic Physical and Chemical Properties

Material Description

Physical Form	Solid	Appearance/Description	Brown/copper semi-solid paste with mild petroleum odor.
Color	Brown/copper	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	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

Section 11 - Toxicological Information

11.1 Information on toxicological effects

		Components
Zinc powder, stabilized (> 25%)	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; Tumorigenic: Carcinogenic by RTECS criteria; Gastrointestinal: Tumors; Tumorigenic: Facilitates action of known carcinogen
Copper oxide (10% TO 15%)	1317-38-0	Acute Toxicity: Ingestion/Oral-Rat LD50 • 470 mg/kg; Multi-dose Toxicity: Ingestion/Oral-Woman TDLo • 0.7 mg/kg 7 Day(s)-Continuous; Gastrointestinal: Hypermotility, diarrhea; Gastrointestinal: Nausea or vomiting; Gastrointestinal: Other changes
Calcium monocarbonate (1.5% TO 3%)	471-34-1	Acute Toxicity: Ingestion/Oral-Rat LD50 • 6450 mg/kg; Irritation: Eye-Rabbit • 750 µg 24 Hour(s) • Severe irritation; Skin-Rabbit • 500 mg 24 Hour(s) • Moderate irritation; Multi-dose Toxicity: Ingestion/Oral-Woman TDLo • 4.08 g/kg 30 Day(s)-Intermittent; Vascular: BP elevation not characterized in autonomic section; Gastrointestinal: Changes in structure or function of endocrine pancreas; Biochemical: Metabolism (intermediary): Effect on inflammation or mediation of inflammation
Benzenesulfonic acid, dodecyl-, calcium salt (0.3% TO 1.5%)	26264-06-2	Acute Toxicity: Ingestion/Oral-Rat LD50 • 1300 mg/kg
Sulfonic acid, petroleum, calcium salt (0.3% TO 1.5%)	61789-86-4	Acute Toxicity: Ingestion/Oral-Rat LD50 • >5 g/kg; Gastrointestinal: Hypermotility, diarrhea; Skin-Rabbit LD50 • >5 g/kg

GHS Properties	Classification
Acute toxicity	<p>EU/CLP•Data lacking</p> <p>UN GHS 4•Acute Toxicity - Oral 4 - ATEmix (oral) = 1188 mg/kg</p> <p>OSHA HCS 2012•Acute Toxicity - Oral 4 - ATEmix (oral) = 1188 mg/kg</p> <p>WHMIS 2015•Acute Toxicity - Oral 4 - ATEmix (oral) = 1188 mg/kg</p>
Skin corrosion/Irritation	<p>EU/CLP•Data lacking</p> <p>UN GHS 4•Skin Mild Irritation 3</p> <p>OSHA HCS 2012•Data lacking</p> <p>WHMIS 2015•Data lacking</p>
Serious eye damage/Irritation	<p>EU/CLP•Data lacking</p> <p>UN GHS 4•Data lacking</p> <p>OSHA HCS 2012•Data lacking</p> <p>WHMIS 2015•Data lacking</p>
Skin sensitization	<p>EU/CLP•Data lacking</p> <p>UN GHS 4•Data lacking</p> <p>OSHA HCS 2012•Data lacking</p> <p>WHMIS 2015•Data lacking</p>
Respiratory sensitization	<p>EU/CLP•Data lacking</p> <p>UN GHS 4•Data lacking</p> <p>OSHA HCS 2012•Data lacking</p> <p>WHMIS 2015•Data lacking</p>
Aspiration Hazard	<p>EU/CLP•Data lacking</p> <p>UN GHS 4•Data lacking</p> <p>OSHA HCS 2012•Data lacking</p> <p>WHMIS 2015•Data lacking</p>
Carcinogenicity	<p>EU/CLP•Data lacking</p> <p>UN GHS 4•Data lacking</p> <p>OSHA HCS 2012•Data lacking</p> <p>WHMIS 2015•Data lacking</p>
Germ Cell Mutagenicity	<p>EU/CLP•Data lacking</p> <p>UN GHS 4•Data lacking</p> <p>OSHA HCS 2012•Data lacking</p> <p>WHMIS 2015•Data lacking</p>
Toxicity for Reproduction	<p>EU/CLP•Data lacking</p> <p>UN GHS 4•Data lacking</p> <p>OSHA HCS 2012•Data lacking</p> <p>WHMIS 2015•Data lacking</p>
STOT-SE	<p>EU/CLP•Data lacking</p> <p>UN GHS 4•Data lacking</p> <p>OSHA HCS 2012•Data lacking</p> <p>WHMIS 2015•Data lacking</p>
STOT-RE	<p>EU/CLP•Data lacking</p> <p>UN GHS 4•Data lacking</p> <p>OSHA HCS 2012•Data lacking</p> <p>WHMIS 2015•Data lacking</p>

Potential Health Effects

Inhalation

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

Chronic (Delayed) • No data available

Skin

Acute (Immediate) • Causes mild skin irritation.

Chronic (Delayed) • No data available

Eye

Component	CAS	Inventory (Con't.)		
		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
Calcium monocarbonate	471-34-1	No	Yes	Yes
Copper oxide	1317-38-0	No	Yes	Yes
Graphite	7782-42-5	No	No	Yes
Mineral oil, petroleum distillates, solvent-refined (mild) heavy paraffinic	64741-88-4	No	No	Yes
Sulfonic acid, petroleum, calcium salt	61789-86-4	No	Yes	Yes
Zinc powder, stabilized	7440-66-6	No	No	Yes

United States - California

Environment

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

•Sulfonic acid, petroleum, calcium salt	61789-86-4	Not Listed
•Copper oxide	1317-38-0	Not Listed
•Zinc powder, stabilized	7440-66-6	Not Listed
•Calcium monocarbonate	471-34-1	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
•Mineral oil, petroleum distillates, solvent-refined (mild) heavy paraffinic	64741-88-4	Not Listed

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

•Sulfonic acid, petroleum, calcium salt	61789-86-4	Not Listed
•Copper oxide	1317-38-0	Not Listed
•Zinc powder, stabilized	7440-66-6	Not Listed
•Calcium monocarbonate	471-34-1	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
•Mineral oil, petroleum distillates, solvent-refined (mild) heavy paraffinic	64741-88-4	Not Listed

Section 16 - Other Information

Relevant Phrases (code & full text)

- H302 - Harmful if swallowed
- H315 - Causes skin irritation
- H319 - Causes serious eye irritation
- H350 - May cause cancer.
- H372 - Causes damage to organs through prolonged or repeated exposure.

Revision Date • 26/May/2017

Last Revision Date • 26/May/2017

Preparation Date • 26/May/2017

**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