SAFETY DATA SHEET

GGT

SECTION 1. IDENTIFICATION

Product name : GGT
SDS-Identcode : 104G

Manufacturer or supplier's details
Company name of supplier : Bestolife Corporation
Address : 2126 Vanco Drive
           Irving TX 75061,
Telephone : 855-243-9164/972-865-8961
Telefax : 214-631-3047
                     (24-hours/7 days)
E-mail address : www.bestolife.com

Recommended use of the chemical and restrictions on use
Recommended use : Industrial use
                   Thread Compound (Pipe Dope) and Jacking grease for use in
                   Offshore industries
                   Mining, (without offshore industries)
Restrictions on use : Do not use on oxygen lines or in oxygen enriched atmos-
                    pheres.

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)
Skin sensitization : Category 1

GHS label elements
Hazard pictograms :

Signal Word : Warning
Hazard Statements : H317 May cause an allergic skin reaction.
Precautionary Statements :
Prevention:
P261 Avoid breathing dust, fume, gas, mist, vapors or spray.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves.
Response:
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 If skin irritation or rash occurs: Get medical atten-
tion.
P363 Wash contaminated clothing before reuse.
Disposal:
P501 Dispose of contents and container to an approved waste disposal plant.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>64742-52-5</td>
<td>&gt;= 30 - &lt; 50</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>&gt;= 20 - &lt; 30</td>
</tr>
<tr>
<td>Graphite</td>
<td>7782-42-5</td>
<td>&gt;= 20 - &lt; 30</td>
</tr>
<tr>
<td>Dolomite</td>
<td>16389-88-1</td>
<td>&gt;= 5 - &lt; 10</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>12-Hydroxy lithium stearate</td>
<td>7620-77-1</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
<tr>
<td>Calcium bis(di C8-C10, branched, C9 rich, alkylnapththalenesulphonate)</td>
<td>57855-77-3</td>
<td>&gt;= 1 - &lt; 5</td>
</tr>
</tbody>
</table>

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.

If inhaled : If inhaled, remove to fresh air. Get medical attention if symptoms occur.

In case of skin contact : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

In case of eye contact : Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.

If swallowed : If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and delayed

Protection of first-aiders : First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists (see section 8).

Notes to physician : Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES
SAFETY DATA SHEET

GGT

Version 10.0
Revision Date: 10/13/2020
SDS Number: 130170-00015
Date of last issue: 05/06/2020
Date of first issue: 05/27/2015

Suitable extinguishing media:
- Water spray
- Alcohol-resistant foam
- Carbon dioxide (CO2)
- Dry chemical

Unsuitable extinguishing media:
- None known.

Specific hazards during fire fighting:
- Exposure to combustion products may be a hazard to health.

Hazardous combustion products:
- Carbon oxides
- Metal oxides
- Sulfur oxides

Specific extinguishing methods:
- Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Use water spray to cool unopened containers.
- Remove undamaged containers from fire area if it is safe to do so.
- Evacuate area.

Special protective equipment for fire-fighters:
- In the event of fire, wear self-contained breathing apparatus.
- Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
- Use personal protective equipment.
- Follow safe handling advice (see section 7) and personal protective equipment recommendations (see section 8).

Environmental precautions:
- Avoid release to the environment.
- Prevent further leakage or spillage if safe to do so.
- Retain and dispose of contaminated wash water.
- Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up:
- Sweep up or vacuum up spillage and collect in suitable container for disposal.
- Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
- Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures:
- See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

Advice on safe handling:
- For outdoor use only
- Do not get on skin or clothing.
- Avoid breathing dust, fume, gas, mist, vapors or spray.
- Do not swallow.
- Avoid contact with eyes.
- Handle in accordance with good industrial hygiene and safety practice, based on the results of the workplace exposure assessment.
Take care to prevent spills, waste and minimize release to the environment.

Conditions for safe storage:
- Keep in properly labeled containers.
- Store in accordance with the particular national regulations.

Materials to avoid:
- Do not store with the following product types:
  - Strong oxidizing agents

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic</td>
<td>64742-52-5</td>
<td>TWA (Mist)</td>
<td>5 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Inhalable particulate matter)</td>
<td>5 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Mist)</td>
<td>5 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ST (Mist)</td>
<td>10 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>TWA (Dust)</td>
<td>20 Million particles per cubic foot</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable)</td>
<td>2 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable particulate matter)</td>
<td>2 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td>Graphite</td>
<td>7782-42-5</td>
<td>TWA (Respirable)</td>
<td>2.5 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable particulate matter)</td>
<td>2 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Dust)</td>
<td>15 Million particles per cubic foot</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td>Dolomite</td>
<td>16389-88-1</td>
<td>TWA (Respirable)</td>
<td>5 mg/m³ (Calcium carbonate)</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (total)</td>
<td>10 mg/m³ (Calcium carbonate)</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>TWA (Respirable dust)</td>
<td>0.05 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (respirable)</td>
<td>10 mg/m³ / %SiO2+2</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (respirable)</td>
<td>250 mppcf / %SiO2+5</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable particulate matter)</td>
<td>0.025 mg/m³</td>
<td>ACGIH</td>
</tr>
</tbody>
</table>
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These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard.

Quartz

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

Personal protective equipment
Respiratory protection:
General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection
Material:
Chemical-resistant gloves

Remarks:
Choose gloves to protect hands against chemicals depending on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Eye protection:
Wear the following personal protective equipment:
Safety glasses

Skin and body protection:
Select appropriate protective clothing based on chemical resistance data and an assessment of the local exposure potential.
Skin contact must be avoided by using impervious protective clothing (gloves, aprons, boots, etc).

Hygiene measures:
If exposure to chemical is likely during typical use, provide eye flushing systems and safety showers close to the working place.
When using do not eat, drink or smoke.
Contaminated work clothing should not be allowed out of the workplace.
Wash contaminated clothing before re-use.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Viscous semi-solid
Color: black
Odor: Petroleum
Odor Threshold: No data available
pH: Not applicable (not an aqueous solution)
Melting point/freezing point: No data available
Initial boiling point and boiling range: No data available
Flash point: >= 392 °F / >= 200 °C
Method: ASTM D 92, Cleveland open cup Distillates (petroleum), hydrotreated heavy naphthenic
Evaporation rate: Not applicable
Flammability (solid, gas): Not classified as a flammability hazard
Upper explosion limit / Upper flammability limit: No data available
Lower explosion limit / Lower flammability limit: No data available
Vapor pressure: Not applicable
Relative vapor density: Not applicable
Relative density: 1.2
Density: No data available
Solubility(ies):
Water solubility : negligible
Partition coefficient: n-octanol/water : Not applicable
Autoignition temperature : No data available
Decomposition temperature : No data available
Viscosity
  Viscosity, dynamic : No data available
  Viscosity, kinematic : Not applicable
Flow time : No data available
Explosive properties : Not explosive
Oxidizing properties : The substance or mixture is not classified as oxidizing.
Molecular weight : No data available
Particle size : No data available

SECTION 10. STABILITY AND REACTIVITY

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

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Skin contact
Ingestion
Eye contact

Acute toxicity
Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated heavy naphthenic:
Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
  Method: OECD Test Guideline 401
  Remarks: Based on data from similar materials
Acute inhalation toxicity : LC50 (Rat): > 5.53 mg/l
  Exposure time: 4 h
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403  
Assessment: The substance or mixture has no acute inhalation toxicity  
Remarks: Based on data from similar materials

Acute dermal toxicity:  
LD50 (Rabbit): > 5,000 mg/kg  
Method: OECD Test Guideline 402  
Remarks: Based on data from similar materials

Talc:

Acute oral toxicity:  
LD50 (Rat): > 5,000 mg/kg  
Remarks: Based on data from similar materials

Graphite:

Acute oral toxicity:  
LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 423  
Assessment: The substance or mixture has no acute oral toxicity  
Remarks: Based on data from similar materials

Acute inhalation toxicity:  
LC50 (Rat): > 2 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403

Dolomite:

Acute oral toxicity:  
LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 420  
Assessment: The substance or mixture has no acute oral toxicity  
Remarks: Based on data from similar materials

Acute inhalation toxicity:  
LC50 (Rat): > 3 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Assessment: The substance or mixture has no acute inhalation toxicity  
Remarks: Based on data from similar materials

Acute dermal toxicity:  
LD50 (Rat): > 2,000 mg/kg  
Method: OECD Test Guideline 402  
Assessment: The substance or mixture has no acute dermal toxicity  
Remarks: Based on data from similar materials

Quartz:

Acute oral toxicity:  
LD50 (Rat): > 5,000 mg/kg

12-Hydroxy lithium stearate:

Acute oral toxicity:  
LD50 (Rat): > 2,000 mg/kg  
Assessment: The substance or mixture has no acute oral toxicity
**Calcium bis(di C8-C10, branched, C9 rich, alkynaphthalenesulphonate):**
- **Acute oral toxicity**: LD50 (Rat): > 5,000 mg/kg
- **Acute dermal toxicity**: LD50 (Rabbit): > 5,000 mg/kg

**Skin corrosion/irritation**
Not classified based on available information.

**Components:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Species</th>
<th>Result</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species:</td>
<td>Rabbit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Result:</td>
<td>No skin irritation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remarks:</td>
<td>Based on data from similar materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Talc:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species:</td>
<td>Rabbit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Result:</td>
<td>No skin irritation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphite:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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</tr>
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<td>Method:</td>
<td>OECD Test Guideline 404</td>
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</tr>
<tr>
<td>Result:</td>
<td>No skin irritation</td>
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<td></td>
</tr>
<tr>
<td>Dolomite:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species:</td>
<td>Rabbit</td>
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<td></td>
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<tr>
<td>Method:</td>
<td>OECD Test Guideline 404</td>
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<tr>
<td>Result:</td>
<td>No skin irritation</td>
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</tr>
<tr>
<td>Remarks:</td>
<td>Based on data from similar materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-Hydroxy lithium stearate:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species:</td>
<td>Rabbit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Result:</td>
<td>No skin irritation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remarks:</td>
<td>Based on data from similar materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcium bis(di C8-C10, branched, C9 rich, alkynaphthalenesulphonate):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species:</td>
<td>Rabbit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Result:</td>
<td>Skin irritation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remarks:</td>
<td>Based on data from similar materials</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Serious eye damage/eye irritation**
Not classified based on available information.

**Components:**

<table>
<thead>
<tr>
<th>Component</th>
<th>Species</th>
<th>Result</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated heavy naphthenic:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Species:</td>
<td>Rabbit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Result:</td>
<td>No eye irritation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Remarks: Based on data from similar materials

Talc:
Species: Rabbit
Result: No eye irritation

Graphite:
Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

Dolomite:
Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405
Remarks: Based on data from similar materials

12-Hydroxy lithium stearate:
Species: Rabbit
Result: No eye irritation
Remarks: Based on data from similar materials

Calcium bis(di C8-C10, branched, C9 rich, alkynaphthalenesulphonate):
Species: Rabbit
Result: Irritation to eyes, reversing within 21 days
Remarks: Based on data from similar materials

Respiratory or skin sensitization
Skin sensitization
May cause an allergic skin reaction.

Respiratory sensitization
Not classified based on available information.

Components:

Distillates (petroleum), hydrotreated heavy naphthenic:
Test Type: Buehler Test
Routes of exposure: Skin contact
Species: Guinea pig
Result: negative
Remarks: Based on data from similar materials

Talc:
Routes of exposure: Skin contact
Species: Humans
Result: negative
Graphite:
Test Type: Local lymph node assay (LLNA)
Routes of exposure: Skin contact
Species: Mouse
Result: negative

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

12-Hydroxy lithium stearate:
Test Type: Local lymph node assay (LLNA)
Routes of exposure: Skin contact
Species: Mouse
Method: OECD Test Guideline 429
Result: negative

Calcium bis(di C8-C10, branched, C9 rich, alkynaphthalenesulphonate):
Test Type: Buehler Test
Routes of exposure: Skin contact
Species: Guinea pig
Result: positive
Remarks: Based on data from similar materials

Assessment: Probability or evidence of low to moderate skin sensitization rate in humans

Germ cell mutagenicity
Not classified based on available information.

Components:
Distillates (petroleum), hydrotreated heavy naphthenic:
Genotoxicity in vitro: Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative
Genotoxicity in vivo: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Species: Mouse
Application Route: Intraperitoneal injection
Method: OECD Test Guideline 474
Result: negative
Remarks: Based on data from similar materials

Talc:
Genotoxicity in vitro: Test Type: DNA damage and repair, unscheduled DNA syn-
thesis in mammalian cells (in vitro)
Result: negative

Genotoxicity in vivo:
Test Type: Chromosome aberration test in vitro
Species: Rat
Application Route: Ingestion
Result: negative

Graphite:
Genotoxicity in vitro:
Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative

Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative

Dolomite:
Genotoxicity in vitro:
Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative
Remarks: Based on data from similar materials

Calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate):
Genotoxicity in vitro:
Test Type: Bacterial reverse mutation assay (AMES)
Method: OECD Test Guideline 471
Result: negative
Remarks: Based on data from similar materials

Test Type: In vitro mammalian cell gene mutation test
Method: OECD Test Guideline 476
Result: negative
Remarks: Based on data from similar materials

Test Type: Chromosome aberration test in vitro
Method: OECD Test Guideline 473
Result: negative
Remarks: Based on data from similar materials

Carcinogenicity:
Not classified based on available information.

Product:
Carcinogenicity - Assessment:
Petroleum distillates have been classified as not carcinogenic based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L).
# SAFETY DATA SHEET

**GGT**

<table>
<thead>
<tr>
<th>Version</th>
<th>Revision Date:</th>
<th>SDS Number:</th>
<th>Date of last issue:</th>
<th>Date of first issue:</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.0</td>
<td>10/13/2020</td>
<td>130170-00015</td>
<td>05/06/2020</td>
<td>05/27/2015</td>
</tr>
</tbody>
</table>

## Components:

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

- **Species**: Mouse
- **Application Route**: Skin contact
- **Exposure time**: 78 weeks
- **Method**: OECD Test Guideline 451
- **Result**: negative

### Talc:

- **Species**: Mouse
- **Application Route**: Inhalation (dust/mist/fume)
- **Exposure time**: 2 Years
- **Result**: negative

### Quartz:

- **Species**: Humans
- **Application Route**: Inhalation (dust/mist/fume)
- **Result**: positive
- **Remarks**: These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard.

### Carcinogenicity - Assessment:

- **IARC**: Group 1: Carcinogenic to humans
  - Quartz (Silica dust, crystalline) 14808-60-7
- **OSHA**: OSHA specifically regulated carcinogen
  - Quartz (crystalline silica) 14808-60-7
- **NTP**: Known to be human carcinogen
  - Quartz (Silica, Crystalline (Respirable Size)) 14808-60-7

### Reproductive toxicity

Not classified based on available information.

## Components:

### Talc:

- **Effects on fetal development**: Test Type: Embryo-fetal development
  - **Species**: Rat
  - **Application Route**: Ingestion
  - **Result**: negative

### Graphite:

- **Effects on fertility**: Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
  - **Species**: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative

Effects on fetal development:
Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative
Remarks: Based on data from similar materials

**Dolomite:**

Effects on fertility:
Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative
Remarks: Based on data from similar materials

Effects on fetal development:
Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative
Remarks: Based on data from similar materials

**Calcium bis(di C8-C10, branched, C9 rich, alkynaphthalenesulphonate):**

Effects on fertility:
Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative
Remarks: Based on data from similar materials

Effects on fetal development:
Test Type: Combined repeated dose toxicity study with the reproduction/developmental toxicity screening test
Species: Rat
Application Route: Ingestion
Method: OECD Test Guideline 422
Result: negative
Remarks: Based on data from similar materials

**STOT-single exposure**
Not classified based on available information.

**STOT-repeated exposure**
Not classified based on available information.
Components:

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

12-Hydroxy lithium stearate:
- Routes of exposure: Ingestion
- Assessment: No significant health effects observed in animals at concentrations of 100 mg/kg bw or less.

Repeated dose toxicity

Components:

Distillates (petroleum), hydrotreated heavy naphthenic:
- Species: Rat
- NOAEL: > 0.98 mg/l
- Application Route: inhalation (dust/mist/fume)
- Exposure time: 28 Days
- Remarks: Based on data from similar materials

Dolomite:
- Species: Mouse
- NOAEL: 1,300 mg/kg
- Application Route: Ingestion
- Exposure time: 28 Days
- Remarks: Based on data from similar materials

Quartz:
- Species: Humans
- LOAEL: 0.053 mg/m³
- Application Route: inhalation (dust/mist/fume)
- Remarks: These substance(s) are inextricably bound in the product and therefore do not contribute to a dust inhalation hazard.

12-Hydroxy lithium stearate:
- Species: Rat
- NOAEL: > 88 mg/kg
- Application Route: Ingestion
- Exposure time: 90 Days

Calcium bis(di C8-C10, branched, C9 rich, alkynaphthalenesulphonate):
- Species: Rat
- NOAEL: 100 mg/kg
- LOAEL: 300 mg/kg
- Application Route: Ingestion
- Exposure time: 90 Days
- Method: OECD Test Guideline 408
Aspiration toxicity
Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

**Components:**

<table>
<thead>
<tr>
<th>Distillates (petroleum), hydrotreated heavy naphthenic:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish</td>
</tr>
<tr>
<td>: LC50 (Pimephales promelas (fathead minnow)): &gt; 100 mg/l</td>
</tr>
<tr>
<td>: Exposure time: 96 h</td>
</tr>
<tr>
<td>: Method: OECD Test Guideline 203</td>
</tr>
<tr>
<td>: Remarks: Based on data from similar materials</td>
</tr>
</tbody>
</table>

| Toxicity to daphnia and other aquatic invertebrates     |
| : EC50 (Daphnia magna (Water flea)): > 10,000 mg/l     |
| : Exposure time: 48 h                                   |
| : Remarks: Based on data from similar materials         |

| Toxicity to algae/aquatic plants                        |
| : EC50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l |
| : Exposure time: 72 h                                   |
| : Method: OECD Test Guideline 201                        |
| : Remarks: Based on data from similar materials         |

| Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) |
| : NOEC (Daphnia magna (Water flea)): 10 mg/l                  |
| : Exposure time: 21 d                                          |
| : Remarks: Based on data from similar materials              |

| Toxicity to microorganisms                                |
| : NOEC: > 1.93 mg/l                                       |
| : Exposure time: 10 min                                   |
| : Remarks: Based on data from similar materials           |

<table>
<thead>
<tr>
<th>Talc:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish</td>
</tr>
<tr>
<td>: LC50 (Brachydanio rerio (zebrafish)): &gt; 100,000 mg/l</td>
</tr>
<tr>
<td>: Exposure time: 24 h</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Graphite:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toxicity to fish</td>
</tr>
<tr>
<td>: LL50 (Danio rerio (zebra fish)): &gt; 100 mg/l</td>
</tr>
<tr>
<td>: Exposure time: 96 h</td>
</tr>
<tr>
<td>: Test substance: Water Accommodated Fraction</td>
</tr>
<tr>
<td>: Method: OECD Test Guideline 203</td>
</tr>
</tbody>
</table>

| Toxicity to daphnia and other aquatic invertebrates      |
| : EL50 (Daphnia magna (Water flea)): > 100 mg/l          |
| : Exposure time: 48 h                                   |
| : Test substance: Water Accommodated Fraction            |
| : Method: OECD Test Guideline 202                        |

| Toxicity to algae/aquatic plants                         |
| : EL50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l |
| : Exposure time: 72 h                                   |
| : Test substance: Water Accommodated Fraction            |
Method: OECD Test Guideline 201

NOELR (Pseudokirchneriella subcapitata (green algae)):: > 100 mg/l
Exposure time: 72 h
Test substance: Water Accommodated Fraction
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50: > 1,012.5 mg/l
Exposure time: 3 h
Method: OECD Test Guideline 209

Dolomite:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 16.6 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203
Remarks: No toxicity at the limit of solubility. Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 16.6 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202
Remarks: No toxicity at the limit of solubility. Based on data from similar materials

Toxicity to algae/aquatic plants : NOEC (Desmodesmus subspicatus (green algae)): 14 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201
Remarks: Based on data from similar materials

Quartz:

Ecotoxicology Assessment

Acute aquatic toxicity : No toxicity at the limit of solubility.

Chronic aquatic toxicity : No toxicity at the limit of solubility.

12-Hydroxy lithium stearate:

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l
Exposure time: 96 h
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): > 100 mg/l
Exposure time: 48 h
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : NOELR (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
Exposure time: 72 h
Method: OECD Test Guideline 201

Calcium bis(di C8-C10, branched, C9 rich, alkylnaphthalenesulphonate):
Toxicity to fish:
- LL50 (Cyprinus carpio (Carp)): > 100 mg/l
  - Exposure time: 96 h
  - Test substance: Water Accommodated Fraction
  - Method: OECD Test Guideline 203
  - Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates:
- EL50 (Daphnia magna (Water flea)): > 100 mg/l
  - Exposure time: 48 h
  - Test substance: Water Accommodated Fraction
  - Method: OECD Test Guideline 202
  - Remarks: Based on data from similar materials

Toxicity to algae/aquatic plants:
- EL50 (Pseudokirchneriella subcapitata (green algae)): > 10 mg/l
  - Exposure time: 72 h
  - Test substance: Water Accommodated Fraction
  - Method: OECD Test Guideline 201
  - Remarks: Based on data from similar materials

  - EL10 (Pseudokirchneriella subcapitata (green algae)): > 1 mg/l
  - Exposure time: 72 h
  - Test substance: Water Accommodated Fraction
  - Method: OECD Test Guideline 201
  - Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):
- NOELR (Daphnia magna (Water flea)): 2.2 mg/l
  - Exposure time: 21 d
  - Test substance: Water Accommodated Fraction
  - Method: OECD Test Guideline 211

Toxicity to microorganisms:
- NOEC: > 100 mg/l
  - Exposure time: 3 h
  - Method: OECD Test Guideline 209
  - Remarks: Based on data from similar materials

Persistence and degradability

Components:

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

- Biodegradability: Result: Not readily biodegradable.
- Biodegradation: 2 - 4 %
- Exposure time: 28 d
- Method: OECD Test Guideline 301B

**12-Hydroxy lithium stearate:**

- Biodegradability: Result: Readily biodegradable.
- Biodegradation: 78 %
- Exposure time: 28 d
- Method: OECD Test Guideline 301C
Biodegradability: Result: Not readily biodegradable.
Remarks: Based on data from similar materials

Bioaccumulative potential

Components:

Calcium bis(di C8-C10, branched, C9 rich, alkynaphthalenesulphonate):

Partition coefficient: n-octanol/water: log Pow: > 6.6

Mobility in soil
No data available

Other adverse effects
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

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

SECTION 14. TRANSPORT INFORMATION

International Regulations

UNRTDG
Not regulated as a dangerous good

IATA-DGR
Not regulated as a dangerous good

IMDG-Code
Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

Domestic regulation

49 CFR
Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.
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SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity
This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards: Respiratory or skin sensitization

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Pennsylvania Right To Know
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5
Talc 14807-96-6
Graphite 7782-42-5
Dolomite 16389-88-1
Quartz 14808-60-7

California Prop. 65
WARNING: This product can expose you to chemicals including Quartz, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

California List of Hazardous Substances
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5
Talc 14807-96-6
Graphite 7782-42-5

California Permissible Exposure Limits for Chemical Contaminants
Distillates (petroleum), hydrotreated heavy naphthenic 64742-52-5
Talc 14807-96-6
Graphite 7782-42-5
Quartz 14808-60-7

California Regulated Carcinogens
Quartz 14808-60-7

The ingredients of this product are reported in the following inventories:

DSL: All components of this product are on the Canadian DSL

TSCA: All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

AICS: All ingredients listed or exempt.

SECTION 16. OTHER INFORMATION

Further information
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Version 10
Revision Date: 10/13/2020
SDS Number: 130170-00015
Date of last issue: 05/06/2020
Date of first issue: 05/27/2015

NFPA 704:

<table>
<thead>
<tr>
<th>Level</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Health</td>
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<tr>
<td>2</td>
<td>Flammability</td>
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<tr>
<td>0</td>
<td>Instability</td>
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</table>

HMIS® IV:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH</td>
<td>/ 2</td>
</tr>
<tr>
<td>FLAMMABILITY</td>
<td>1</td>
</tr>
<tr>
<td>PHYSICAL HAZARD</td>
<td>0</td>
</tr>
</tbody>
</table>

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL : USA. NIOSH Recommended Exposure Limits
OSHA CARC : OSHA Specifically Regulated Chemicals/Carcinogens
OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3 : USA. Occupational Exposure Limits (OSHA) - Table Z-3 Mineral Dusts
ACGIH / TWA : 8-hour, time-weighted average
NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour workday during a 40-hour workweek
NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded at any time during a workday
OSHA CARC / PEL : Permissible exposure limit (PEL)
OSHA Z-1 / TWA : 8-hour time weighted average
OSHA Z-3 / TWA : 8-hour time weighted average

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMG - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECl - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Pre-
SAFETY DATA SHEET

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Revision Date: 10/13/2020
SDS Number: 130170-00015
Date of last issue: 05/06/2020
Date of first issue: 05/27/2015


Revision Date: 10/13/2020

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

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user’s end product, if applicable.

US / Z8