

RelaTECH CS 460 EP1 Grease

SECTION 1: IDENTIFICATION OF THE SUBSTANCE /MIXTURE AND OF THE COMPANY /UNDERTAKING

1.1 Product Identifier

Material Name: RelaTECH CS 460 EP1 Grease
SDS #: 411

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

Product Use: Industrial grease
Uses advised against: This product must not be used in applications other than recommended in section 1 without taking the advice from supplier/manufacturer

1.3 Details of supplier of safety data sheet

Manufacturers/Supplier: RelaDyne, LLC
8280 Montgomery Road, Suite 101
Cincinnati, OH 45236
Telephone Number: 888-830-3156
Emergency Telephone Number: 800-535-5053 INFOTRAC
Website: www.reladyne.com

SECTION 2:HAZARD IDENTIFICATION

2.1 Classification of the substance of mixture

OSHA Hazard Communication Standard : This material is considered hazardous in accordance with OSHA HazCom 2012, 29 CFR 1910.1200

Classification of substance or mixture or mixture Serious Eye Damage / Eye Irritation – Category 2 A

2.2 Label elements

Hazardous pictogram:



Signal word: WARNING

Hazardous statement(s):

Causes serious eye irritation

2.3 Precautionary Statements**Prevention:**

- Wash face , hands and any exposed skin thoroughly after handling
- Wear eye /face protection

General Advice:

- None

Eye:

- If in Eyes : Rinse cautiously with water for several times. Remove contact lenses , if present and easy to do . Continue rinsing
- If eye irritation persists , get medical advice /attention

Storage:

- None

Disposal:

- None

Other Information:

- 36.71 % ingredients consist of unknown toxicity

Hazard not otherwise classified (HNOC):Not Applicable**SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS**

This material is defined as mixture and has no known hazards under GHS classification.

| Chemical Name | CAS # | % by Weight | Trade Secret |
|--|--------------|-------------|--------------|
| Antimony Dialkyldithiocarbamate | - | ≤ 5 % | * |
| Petroleum distillate , hydrotreated heavy naphthenic | 64742-52-5 | 30-60 % | * |
| Zinc alkyldithiophosphate | Confidential | ≤ 2 % | * |
| Calcium carbonate | 471-34-1 | ≤ 10 % | * |

the exact percentage of composition has been withheld as a trade secret*Additional information:**

As per 29 CFR 1910.1200 paragraph (i), formulation is considered as trade secret and therefore specific chemical names and their percentages of components used have not been disclosed. The details about their specific chemical names and their percentages may be provided on request to health professionals, authorized representatives of regulatory authority, employees concerned in accordance with applicable provisions of this paragraph.

SECTION 4: FIRST AID MEASURES**4.1 Description of first aid measures****General information:** Not expected to be health hazard if used under normal conditions

Inhalation: Under normal conditions of intended use, this material is not expected to be inhalation hazard. If some symptom exist, remove to fresh air. If not breathing, give artificial respiration. Get medical attention

Skin Contact: Remove contaminated clothes. Flush exposed area with plenty of water followed by washing by soap, if available. If persistent irritation occurs, obtain medical attention. If product is injected into or under the skin due to any reason, the victim, regardless of size or appearance of wound, victim should be brought immediately to medical attention for emergency surgical needs. Though the initial symptoms due to high pressure injection may be minimal / absent, early surgical treatment may significantly reduce the extent of injury.

Eye Contact: Immediately flush with large quantities of cool water for at least 15 minutes. Get medical attention.

Ingestion: In general no treatment is necessary unless large quantities are swallowed, however, it's advisable to take medical attention. Do not induce vomiting unless directed by medical personnel. Do not give anything by mouth by an unconscious person.

Self-protection for first aider: When administering the first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing Media:

Suitable extinguishing media: Water Spray (fog), dry chemical, foam, or carbon dioxide, sand to extinguish flames.

Unsuitable extinguishing media: Water stream may splash burning liquid and spread fire.

5.2 Special hazard arising from the substances or mixture: Hazardous combustion product may include a complex mixture of airborne solid and liquid particulates and gases (smoke), carbon monoxide, unidentified inorganic and organic compounds.

5.3 Advice to firefighters: Proper protective equipment include chemical resistant gloves to be worn, chemical resistant suit is recommended when large contact with spill product is expected. Self-contained breathing apparatus (SCBA) must be worn when approaching a fire in confined area. Select the fire fighters clothing approved by relevant standard

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Fully encapsulating, vapor protective clothing should be worn for spills and leaks with no fire. Do not touch and walk through spill area. Do not touch damaged container or spilled material unless wearing appropriate protective clothing/equipment. Ventilate the closed area.

6.2 Emergency procedures

Isolate the spill / leak area in all directions for about 50 meters (150 ft) for liquids and about 25 meters (75ft.) for solids and semi-solids. Eliminate all ignition sources (no smoking, flares, sparks / flames in close vicinity). Keep unauthorized persons away and ventilate closed space before entering.

6.3 Environmental procedures:

Use appropriate measures for containment of spilled material to the environment. Prevent from entering/ spreading to drain, water, river, ditches by using sand, earth, floor dryers or other appropriate barriers.

6.4 Methods and materials for containment and cleaning up

Shovel into suitable properly marked container for disposal or reclamation in accordance with local regulations.

6.5 Reference to other sections

Refer to section 8 – exposure control / personal protection and section 13- disposal considerations

SECTION 7: HANDLING AND STORAGE

7.1 General Precautions

Store in well-ventilated area, if risk on vapor inhalation is there. Use the information in this data sheet as input for risk management arising due to local conditions which help to manage safe handling of this product.

7.2 Precautions for safe handling

Avoid prolonged and repeated contact with skin. Avoid inhaling the vapors/mist. When handling the drums, kegs, pails etc., proper safety shoes, and other protective clothes, safety glasses etc. should be worn. Dispose appropriately any contaminated rags/material as per prevailing local allowable practices. Keep containers in closely tight and, cool and well ventilated areas.

7.3 Conditions for safe storage, including any incompatibilities

Keep containers tightly close, well-ventilated areas but covered, avoiding contact with rain or other water ingress possibilities. Keep the storage place cool preferably <120 °F / <50 °C. Higher temperature may create pressure buildup inside container and chances of container busting or leakage may occur under aggravated conditions. Keep away from other oxidizing and incompatible materials.

7.4 Specific End Use (s):

This material should not be used for any other purpose than the intended use as per section 1 without the expert advice.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

| Material | Source | Type | ppm | mg/m3 | Notation |
|--------------------------|----------------------|---------|-----|-----------|----------|
| Mineral oil mist | TWA(mist) , ACGIH | Ceiling | | 5.0 mg/m3 | |
| Calcium carbonate | TWA (vacated) | - | | 15 mg/m3 | |
| Molybdenum (IV) sulfide | TWA (ACGIH TLV) | - | | 10 mg/m3 | |

Additional information:

Due to semi-solid nature of the product, generation of mist and dusts is unlikely to occur

Biological exposure index (BEI):

No biological limit allocated

PNEC related information:

Data not available

Monitoring methods:

Monitoring of the concentration of substances in the breathing zone of workers or in general workplace may be required to confirm the compliance with local governing authority.

8.2 Engineering measures/controls

Adequate ventilation systems may be needed to control concentrations of airborne contaminants above permissible threshold applicable limits.

8.3 Personal protective equipment pictograms



Respiratory: In case of insufficient ventilation, use suitable respiratory equipment

Eye/Face: Wear safety goggles

Skin/Body: Wear safety shoes and protective gloves

8.4 Environmental Exposure controls

Minimize release to the environment. Follow best practices for site management and disposal of waste as per local regulations

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

***Information on physical and chemical properties* Material description**

| | |
|---------------------------------|--|
| Appearance | Semi-solid |
| Color | Green |
| Odor | Slight hydrocarbon |
| Odor threshold | Data not available |
| General properties | |
| Boiling point | No data available |
| pH | Not applicable |
| Specific gravity (15 °C) | 0.87, 7.506 (lbs/gal) |
| Flash point, COC, °F/°C | 550/288 |
| Upper/lower flammability limits | No data available |
| Auto-ignition temperature | No data available |
| Flammability | No data available |
| VOC, % wt., ASTM D-972 | 1 |
| Vapor pressure @ ambient temp. | < 0.13 kPa (< 1 mm Hg) |
| Vapor density (air =1) | < 1 |
| Explosive properties | Not classified |
| Oxidizing properties | No data available |
| Other Information | |
| Electrical conductivity | Though no data available, this material is not expected to be a static accumulator |

SECTION 10: STABILITY AND REACTIVITY

| | |
|--|--|
| 10.1 Reactivity : | No reactivity is expected under normal conditions of intended use. However, under high temperature or adverse operating conditions thermal / chemical decomposition of the product may be possible |
| 10.2 Chemical Stability : | No hazardous reaction is expected under normal conditions of temperature and pressure |
| 10.3 Possibility of hazardous reactions | Hazardous polymerization is not expected. Reacts with strong oxidizing agents. |
| 10.4 Conditions to avoid | Extreme temperature and direct sunlight / heat /flame |
| 10.5 incompatible materials | Strong oxidizing agents |
| 10.6 hazardous decomposition products | Hazardous decomposition is not expected to form under normal conditions of storage |

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

| | |
|------------------------------|---|
| Basis of assessment | Information given hereby is based on the components and the toxicology of similar products and the data indicated here are representative of mainly base oil which is present in majority |
| Acute oral toxicity | Expected to be low toxicity ; LD 50 (rat) > 5000 mg/kg (literature) |
| Acute dermal toxicity | Expected to be low toxicity ; LD 50 (rat) > 3000 mg/kg (|

| | |
|--|--|
| | literature) |
| Acute inhalation toxicity | Not determined |
| Skin corrosion / irritation | Expected to be slightly irritating . prolonged/repeated contact with skin without adequate cleaning may clog the pores of the skin , may result disorder such as oil acne/folliculitis |
| Serious eye damage /irritation | Expected to be slightly irritating |
| Respiratory /skin sensitization | Not determined |
| Aspiration hazard | Not determined |
| Germ cell mutagenicity | Not determined |
| Carcinogenicity | Not considered to be carcinogenic as it contain severely hydrotreated mineral oils which are reported to be non-carcinogenic in lab animal studies. The class of oils used in making this product are not classified as carcinogenic by IARC |

11.2 Material Carcinogenicity Classification

| | |
|---|---|
| Highly refined base oil blend (IP 346 < 3 %) | ACGIH group A4 ; not classified as human carcinogen |
| | IARC 3 ; not classified as to carcinogen to humans |
| | GHS / CLP , no carcinogenicity classification |

Based on our raw material suppliers information/SDS , this material is not known to contain any chemical listed as a carcinogen or suspected carcinogen by OSHA Hazard Communication Standard 29CFR 1910.1200, IARC, or the National Toxicology Program (NTP).

SECTION 12: ECOLOGICAL INFORMATION

| | |
|---|---|
| Basis of assessment | Eco-toxicological data has not been determined specifically on this product. The information given herewith are based on the information given on eco-toxicity of components and/or on similar products. the information given here are representative of the product as whole and not as individual components |
| 12.1 Toxicity | Sparingly soluble mixture in aqueous media. Not toxic to fish but may coat gill structure and cause suffocation if spilled. This product may cause gastrointestinal distress in birds and mammals through ingestion. |
| 12.2 Persistence and degradability | Expected to be not readily biodegradable. The major oil component expected to biodegrade over period of 100-120 days in aerobic environment at temperature above 70 F (21°C), however finished product contain component that may persist in the environment. |
| 12.3 Bioaccumulative potential | May contain component that bioaccumulate |
| 12.4 Mobility in soil | Product is semi-solid in nature in most conditions and may absorb to soil and may not be mobile. It floats on water |
| 12.5 other adverse effects | Product contain the components that have been classified non-volatile in nature and therefore not expected to release to environment in significant quantities. |

SECTION 13: DISPOSAL INFORMATION

13.1 Waste treatment methods

Product disposal

Try to minimize the product waste by using best applicable practices. It is the responsibility of the waste generator to evaluate the waste classification and appropriate disposal methodology in accordance with the applicable regulation. Do not dispose in to environment, in drain or in river / ponds / water reservoirs.

Container disposal

To be disposed in accordance with local prevailing and allowable regulations.

SECTION 14: TRANSPORT INFORMATION

| | Bulk shipping | Non-bulk shipping | Identification # | Hazardous class |
|-------------------|---|-------------------|------------------|-----------------|
| US DOT | Not required | Not required | Not required | Not required |
| Canadian TDG | Not required | Not required | Not required | Not required |
| European | Not required | Not required | Not required | Not required |
| ADR,IMDG,IATA-DGR | Not classified as hazardous product for land, sea and air transport | | | |

SECTION 15: REGULATORY INFORMATION

OSHA Hazard Communication Standard: This material is considered hazardous in accordance with OSHA HAzCom 2012, 29 CFR 1910.1200.

TSCA Inventory list: All components are listed

US Federal Regulations :

Section 313 of Title III of the Superfund Amendment and reauthorization Act of 1986 (SARA) . This product does not contain any chemicals which are subjected to the reporting requirements of the Act and Title 40 of code of Federal Regulations , Part 372

SARA 311/312 Hazard Categories

| | |
|------------------------------------|-----|
| Acute Health Hazard: | yes |
| Chronic Health Hazard: | No |
| Fire Hazard: | No |
| Sudden Release of Pressure Hazard: | No |
| Reactive Hazard | No |

Cal Prop 65 : This product doesn't intentionally contain any chemical known by state of California to cause cancer and/or birth defects.

WHMIS:This product is not a controlled product ;

Canadian NPRI: none of the components are listed

CEPA toxic substance: none of the components are listed

Canadian (NDSL) : All components are listed

Australia Inventory (AICS) : All components are listed or exempted

China Inventory (IECSC) : All components are listed

Japan InventoryAll components are listed or exempted

Korea Inventory : All components are listed

Malaysia Inventory (EHS Register) : Not determined

New Zealand inventory of Chemicals (NZIoC) : All components are listed or exempted

Philippines Inventory (PICCS) : All components are listed or exempted

Taiwan Inventory (CSNN) : Not determined

SECTION 16: OTHER INFORMATION

| | NFPA 704 | HMIS | KEY |
|------------|----------|------|--------------|
| Health | 1 | 0 | 0 = Minimal |
| Fire | 1 | 1 | 1 = slight |
| Reactivity | 0 | 0 | 2 = Moderate |
| Specific | None | N/A | 3 = Serious |

This safety data sheet contains the following revisions:

Revision Date: June 22, 2018

Supersedes: March 23, 2017

This Safety Data Sheet is prepared according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012. The information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.