

# **Material Safety Data Sheet**

No. 3000/No. 3000-W

# 1. Product and company identification

Product name : No. 3000/No. 3000-W

Material uses : Petroleum lubricating grease
Supplier/Manufacturer : LUBRIPLATE® Lubricants Co.

129 Lockwood St. Newark, NJ 07105

Telephone no.: 1-973-589-9150

Validation date : 07/11/2012.

Prepared by : Atrion International Inc.

In case of emergency : CHEM-TEL 1-800-255-3924 (24 hour)

# 2. Hazards identification

Physical state : Solid. [tacky / grease]

Color : Black.
Odor : Mineral oil.

**Emergency overview** 

Signal word : WARNING!

Hazard statements : HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN

IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN

DAMAGE, BASED ON ANIMAL DATA.

Precautions : Avoid contact with eyes, skin and clothing. Use only with adequate ventilation. Keep

container tightly closed and sealed until ready for use. Wash thoroughly after handling.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Inhalation : Toxic by inhalation. Slightly irritating to the respiratory system.

Ingestion : No known significant effects or critical hazards.

Skin : Slightly irritating to the skin.

Eyes : Slightly irritating to the eyes.

Potential chronic health effects

**Chronic effects**: Contains material that may cause target organ damage, based on animal data.

Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or

dermatitis.

Carcinogenicity: No known significant effects or critical hazards.Mutagenicity: No known significant effects or critical hazards.Teratogenicity: No known significant effects or critical hazards.Developmental effects: No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

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# 2. Hazards identification

**Target organs** 

: Contains material which may cause damage to the following organs: lungs, cardiovascular system, upper respiratory tract, skin, eye, lens or cornea.

### Over-exposure signs/symptoms

**Inhalation** 

: Adverse symptoms may include the following:

respiratory tract irritation

coughing

Ingestion

: No specific data.

Skin

: Adverse symptoms may include the following:

irritation redness dryness cracking

Eyes

: Adverse symptoms may include the following:

irritation watering redness

Medical conditions aggravated by overexposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

# 3. Composition/information on ingredients

### **United States**

| Name   | CAS number | %        |
|--|------------|----------|
| Distillates (petroleum), hydrotreated heavy naphthenic | 64742-52-5 | 60 - 100 |
| Butene, polymers                                       | 9003-29-6  | 10-30    |
| Residual oils (petroleum), solvent-dewaxed             | 64742-62-7 | 5-10     |
| lithium stearate                                       | 4485-12-5  | 1-5      |
| Zinc oxide   | 1314-13-2  | 1-5      |
| Ethylene, polymers, pyrolyzate                         | 9002-88-4  | 1-5      |
| Molybdenum disulphide                                  | 1317-33-5  | 1-5      |
| Antimony tris[O,O-dipropyl] tris(dithiophosphate)      | 15874-48-3 | 1-5      |
| Synthetic graphite                                     | 7782-42-5  | 1-5      |
| Carbon black   | 1333-86-4  | 0.1-1    |

### Canada

| Name   | CAS number | %        |
|--|------------|----------|
| Distillates (petroleum), hydrotreated heavy naphthenic | 64742-52-5 | 60 - 100 |
| Residual oils (petroleum), solvent-dewaxed             | 64742-62-7 | 5-10     |
| lithium stearate                                       | 4485-12-5  | 1-5      |
| Zinc oxide   | 1314-13-2  | 1-5      |
| Ethylene, polymers, pyrolyzate                         | 9002-88-4  | 1-5      |
| Molybdenum disulphide                                  | 1317-33-5  | 1-5      |
| Antimony tris[O,O-dipropyl] tris(dithiophosphate)      | 15874-48-3 | 1-5      |
| Synthetic graphite                                     | 7782-42-5  | 1-5      |
| Carbon black   | 1333-86-4  | 0.1-1    |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

## 4. First aid measures

Eye contact

: Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact

: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation

: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion

: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**Protection of first-aiders** 

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

Notes to physician

: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

# 5. Fire-fighting measures

Flammability of the product

: No specific fire or explosion hazard.

**Extinguishing media** 

Suitable

: Use an extinguishing agent suitable for the surrounding fire.

Not suitable

: None known.

Special exposure hazards

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous thermal decomposition products

 Decomposition products may include the following materials: carbon dioxide carbon monoxide

sulfur oxides
phosphorus oxides
metal oxide/oxides

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

# 6. Accidental release measures

**Personal precautions** 

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

**Environmental precautions** 

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods for cleaning up

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## 6. Accidental release measures

### **Small spill**

: Move containers from spill area. Avoid allowing the spilled material to get wet or using water to clean up spillages or residues, unless the quantity remaining is very small. Absorb with an inert material and place in an appropriate waste disposal container. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

## Large spill

: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# 7. Handling and storage

### **Handling**

: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

### **Storage**

: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

# 8. Exposure controls/personal protection

### **United States**

| Ingredient   | Exposure limits  |
|--|--|
| Distillates (petroleum), hydrotreated heavy naphthenic | ACGIH TLV (United States, 1/2011).  TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction  NIOSH REL (United States, 6/2009).  TWA: 5 mg/m³ 10 hours. Form: Mist  STEL: 10 mg/m³ 15 minutes. Form: Mist  OSHA PEL (United States, 6/2010).  TWA: 5 mg/m³ 8 hours.   |
| Residual oils (petroleum), solvent-dewaxed             | ACGIH TLV (United States, 1/2011).  TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction  NIOSH REL (United States, 6/2009).  TWA: 5 mg/m³ 10 hours. Form: Mist  STEL: 10 mg/m³ 15 minutes. Form: Mist  OSHA PEL (United States, 6/2010).  TWA: 5 mg/m³ 8 hours.   |
| lithium stearate                                       | ACGIH TLV (United States, 1/2011). TWA: 10 mg/m³ 8 hours. Form: Total particulate mass   |
| Zinc oxide   | NIOSH REL (United States, 6/2009).  CEIL: 15 mg/m³ Form: Dust TWA: 5 mg/m³ 10 hours. Form: Dust and fumes STEL: 10 mg/m³ 15 minutes. Form: Fume OSHA PEL 1989 (United States, 3/1989).  TWA: 5 mg/m³ 8 hours. Form: Fume STEL: 10 mg/m³ 15 minutes. Form: Fume TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 10 mg/m³ 8 hours. Form: Total dust OSHA PEL (United States, 6/2010). |

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Molybdenum disulphide

Synthetic graphite

Carbon black

# 8. Exposure controls/personal protection

TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Fume

TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction

TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust **ACGIH TLV (United States, 1/2011).** 

TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction

STEL: 10 mg/m³ 15 minutes. Form: Respirable fraction

Ethylene, polymers, pyrolyzate ACGIH TLV (United States, 1/2008).

TWA: 10 mg/m<sup>3</sup> Form: Inhalable

TWA: 3 mg/m³ Form: Respirable fraction

ACGIH TLV (United States, 1/2011).

TWA: 10 mg/m³, (as Mo) 8 hours. Form: Inhalable fraction TWA: 3 mg/m³, (as Mo) 8 hours. Form: Respirable fraction

OSHA PEL 1989 (United States, 3/1989).

TWA: 10 mg/m³, (as Mo) 8 hours. Form: Total dust

OSHA PEL (United States, 6/2010).

TWA: 15 mg/m³, (as Mo) 8 hours. Form: Total dust

Antimony tris[O,O-dipropyl] tris(dithiophosphate) ACGIH TLV (United States, 1/2011).

TWA: 0.5 mg/m³, (as Sb) 8 hours.

OSHA PEL 1989 (United States, 3/1989).

TWA: 0.5 mg/m³, (as Sb) 8 hours.

NIOSH REL (United States, 6/2009).

TWA: 0.5 mg/m³, (as Sb) 10 hours.

OSHA PEL (United States, 6/2010).

TWA: 0.5 mg/m³, (as Sb) 8 hours.

OSHA PEL 1989 (United States, 3/1989).

TWA: 2.5 mg/m<sup>3</sup> 8 hours. Form: Respirable dust

ACGIH TLV (United States, 1/2011).

TWA: 2 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction

NIOSH REL (United States, 6/2009).

TWA: 2.5 mg/m³ 10 hours. Form: Respirable fraction

OSHA PEL Z3 (United States, 9/2005).

TWA: 15 mppcf 8 hours.

OSHA PEL 1989 (United States, 3/1989).

TWA: 3.5 mg/m<sup>3</sup> 8 hours.

NIOSH REL (United States, 6/2009).

TWA: 3.5 mg/m<sup>3</sup> 10 hours.

TWA: 0.1 mg of PAHs/cm<sup>3</sup> 10 hours. **ACGIH TLV (United States, 1/2011).** 

TWA: 3 mg/m<sup>3</sup> 8 hours. Form: Inhalable fraction

OSHA PEL (United States, 6/2010).

TWA: 3.5 mg/m<sup>3</sup> 8 hours.

### Canada

| Occupational exposure limits                              |                 | TWA (8 hours) |       | STEL (15 mins) |     | Ceiling |       |     |       |       |            |
|---|-----------------|---------------|-------|----------------|-----|---------|-------|-----|-------|-------|------------|
| Ingredient  | List name       | ppm           | mg/m³ | Other          | ppm | mg/m³   | Other | ppm | mg/m³ | Other | Notations  |
| Synthetic graphite  | US ACGIH 1/2011 | -             | 2     | _              | -   | -       | -     | -   | -     | -     | [a]        |
|   | AB 4/2009       | -             | 2     | -              | -   | -       | -     | -   | -     | -     | [b]        |
|   | BC 9/2011       | -             | 2     | -              | -   | -       | -     | -   | -     | -     | [c]        |
|   | ON 7/2010       | -             | 2     | -              | -   | -       | -     | -   | -     | -     | [a]        |
|   | QC 9/2011       | -             | 2     | -              | -   | -       | -     | -   | -     | -     | [a]<br>[d] |
| Antimony tris[O,O-dipropyl] tris (dithiophosphate), as Sb | US ACGIH 1/2011 | -             | 0.5   | -              | -   | -       | -     | -   | -     | _     |            |
| ,                   | AB 4/2009       | -             | 0.5   | _              | -   | -       | _     | -   | -     | -     |            |
|   | BC 9/2011       | -             | 0.5   | _              | -   | -       | _     | -   | -     | _     |            |
|   | ON 7/2010       | -             | 0.5   | -              | -   | -       | -     | -   | -     | -     |            |
|   | QC 9/2011       | -             | 0.5   | _              | -   | -       | _     | -   | -     | _     |            |
| Molybdenum disulphide, as Mo                              | US ACGIH 1/2011 | -             | 10    | -              | -   | -       | -     | -   | -     | -     | [e]        |
| •   | US ACGIH 1/2011 | -             | 3     | -              | -   | -       | -     | -   | -     | -     | [a]        |
|   | AB 4/2009       | -             | 3     | -              | -   | -       | -     | -   | -     | -     | [c]        |
|   |                 | -             | 10    | _              | -   | -       | -     | -   | -     | -     |            |
| Molybdenum disulphide                                     | BC 9/2011       | -             | 10    | -              | -   | -       | -     | -   | -     | -     | [f]        |
| ,   | BC 9/2011       | -             | 3     | -              | -   | -       | -     | -   | -     | -     | [c]        |
| Molybdenum disulphide, as Mo                              | ON 7/2010       | -             | 10    | -              | -   | -       | -     | -   | -     | -     | [e]        |
| •   | ON 7/2010       | -             | 3     | -              | -   | -       | -     | -   | -     | -     | [a]        |

# 8. Exposure controls/personal protection

|  | QC 9/2011       | - | 10  | - | -          | -  | - | - | - | -      |            |
|--|-----------------|---|-----|---|------------|----|---|---|---|--------|------------|
| Zinc oxide   | US ACGIH 1/2011 | - | 2   | - | -          | 10 | - | - | - | -      | [a]        |
|  | AB 4/2009       | - | 2   | - | -          | 10 | - | - | - | -      | [c]        |
|  | BC 9/2011       | - | 2   | - | -          | 10 | - | - | - | -      | [c]        |
|  | ON 7/2010       | - | 2   | - | -          | 10 | - | - | - | -      | [a]        |
|  | QC 9/2011       | - | 5   | - | -          | 10 | - | - | - | <br> - | [g]        |
| Carbon black   | US ACGIH 1/2011 | - | 3   | - | -          | -  | - | - | - | <br> - | [g]<br>[e] |
|  | AB 4/2009       | - | 3.5 | - | -          | -  | - | - | - | <br> - |            |
|  | BC 9/2011       | - | 3   | _ | -          | -  | _ | - | - | -      | [f]        |
|  | ON 7/2010       | - | 3.5 | _ | -          | -  | _ | - | - | -      |            |
|  | QC 9/2011       | - | 3.5 | _ | -          | -  | _ | - | - | -      |            |
| Distillates (petroleum), hydrotreated heavy naphthenic | US ACGIH 1/2011 | - | 5   | - | -          | -  | - | - | - | -      | [e]        |
| neavy naprimenic                                       | ON 7/2010       | _ | 5   |   | l _        | 10 |   | _ | _ |        | [h]        |
|  | QC 9/2011       |   | 5   |   | l <u>-</u> | 10 |   |   | _ |        | [h]        |
| Residual oils (petroleum), solvent-                    | US ACGIH 1/2011 | 1 | 5   |   | 1 _        | -  |   |   | _ |        | [h]<br>[e] |
| dewaxed  | 03 ACGIT 1/2011 |   |     |   |            | _  |   |   |   |        | [6]        |
|  | ON 7/2010       | - | 5   | - | -          | 10 | - | - | - | -      | [h]        |
|  | QC 9/2011       | - | 5   | - | -          | 10 | - | - | - | -      | [h]        |
| lithium stearate                                       | US ACGIH 1/2011 | - | 10  | - | -          | -  | - | - | - | -      | [i]<br>[3] |
|  | AB 4/2009       | - | 10  | - | -          | -  | - | - | - | -      | [3]        |
|  | BC 9/2011       | - | 10  | - | -          | -  | - | - | - | -      |            |
|  | ON 7/2010       | - | 10  | - | -          | -  | - | - | - | }      | [i]        |
| Ethylene, polymers, pyrolyzate                         | US ACGIH 1/2008 | - | 10  | - | -          | -  | - | - | - | -      | [i]<br>[f] |
|  | US ACGIH 1/2008 | - | 3   | - | -          | -  | - | - | - | }      | [a]        |

[3]Occupational exposure limit is based on irritation effects and its adjustment to compensate for unusual work schedules is not required.

**Form:** [a]Respirable fraction [b]Respirable (all forms except graphite fibres) [c]Respirable [d]Respirable dust. [e]Inhalable fraction [f]Inhalable [g]fume [h]mist [i]Total particulate mass

### Consult local authorities for acceptable exposure limits.

# Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### **Engineering measures**

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

# Personal protection Respiratory

: Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

#### **Hands**

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

# 8. Exposure controls/personal protection

Eyes : Safety eyewear complying with an approved standard should be used when a risk

assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

: Personal protective equipment for the body should be selected based on the task being

performed and the risks involved and should be approved by a specialist before

handling this product.

**Environmental exposure** 

controls

Skin

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

# 9. Physical and chemical properties

Physical state : Solid. [tacky / grease]

Flash point : Open cup: 210°C (410°F) [Cleveland.]

Auto-ignition temperature : Not available.

Flammable limits : Lower: 0.9%
Upper: 7%

Color : Black.
Odor : Mineral oil.
pH : Not available.

**Boiling/condensation point** : >288°C (>550.4°F) **Melting/freezing point** : Not available.

Relative density : 0.96

**Density** : Not available.

**Vapor pressure** : <0.0013 kPa (<0.01 mm Hg) [room temperature]

Vapor density : >5 [Air = 1]
Odor threshold : Not available.

**Evaporation rate** : <0.01 (butyl acetate = 1)

Viscosity : Kinematic (40°C (104°F)): 0.6 to 2.37 cm²/s (60 to 237 cSt)

Solubility : Insoluble in the following materials: cold water and hot water.

LogK<sub>ow</sub>: Not available.

Physical/chemical : Kinematic viscosity (100 °C 212 °F)): 7 to 19 mm²/s (7 to 19 cSt)

properties comments

# 10. Stability and reactivity

Chemical stability : The product is stable.
Conditions to avoid : No specific data.

**Incompatible materials**: Reactive or incompatible with the following materials: oxidizing materials and acids.

Hazardous decomposition products

Possibility of hazardous

Possibility of hazardous reactions

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

: Under normal conditions of storage and use, hazardous reactions will not occur.

Under normal conditions of storage and use, hazardous polymerization will not occur.

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# 11. Toxicological information

## **Acute toxicity**

| Product/ingredient name                                      | Result    | Species | Dose         | Exposure |
|--|-----------|---------|--------------|----------|
| Carbon black   | LD50 Oral |         | >15400 mg/kg | -        |
| Distillates (petroleum),<br>hydrotreated heavy<br>naphthenic | LD50 Oral | Rat     | >5000 mg/kg  | -        |
| lithium stearate   | LD50 Oral | Rat     | 15 g/kg      | -        |

## **Chronic toxicity**

Not available.

## **Irritation/Corrosion**

| Product/ingredient name | Result               | Species | Score | Exposure                   | Observation |
|-------------------------|----------------------|---------|-------|----------------------------|-------------|
| Zinc oxide              | Eyes - Mild irritant | Rabbit  | -     | 24 hours 500<br>milligrams | -           |
|                         | Skin - Mild irritant | Rabbit  | -     | 24 hours 500<br>milligrams | -           |

## **Sensitizer**

Not available.

## **Carcinogenicity**

## **Classification**

| Product/ingredient name                                      | ACGIH | IARC | EPA | NIOSH | NTP | OSHA |
|--|-------|------|-----|-------|-----|------|
| Distillates (petroleum),<br>hydrotreated heavy<br>naphthenic | A4    | -    | -   | -     | -   | -    |
| Residual oils (petroleum), solvent-dewaxed                   | A4    | -    | -   | -     | -   | -    |
| lithium stearate   | A4    | -    | -   | -     | -   | -    |
| Zinc oxide   | A4    | -    | -   | -     | -   | -    |
| Ethylene, polymers, pyrolyzate                               | -     | 3    | -   | -     | -   | -    |
| Carbon black   | A3    | 2B   | -   | +     | -   | -    |

## **Mutagenicity**

Not available.

## **Teratogenicity**

Not available.

## **Reproductive toxicity**

Not available.

# 12. Ecological information

**Ecotoxicity** 

: This material is very toxic to aquatic life with long lasting effects.

### **Aquatic ecotoxicity**

| Product/ingredient name | Result                              | Species  | Exposure |
|-------------------------|-------------------------------------|--|----------|
| Zinc oxide              | Acute EC50 0.042 mg/l Fresh water   | Algae - Pseudokirchneriella<br>subcapitata - Exponential growth<br>phase | 72 hours |
|                         | Acute LC50 98 μg/l Fresh water      | Daphnia - Daphnia magna -<br>Neonate                                     | 48 hours |
|                         | Acute LC50 2246000 μg/l Fresh water | Fish - Pimephales promelas - Neonate                                     | 96 hours |
|                         | Chronic NOEC 0.017 mg/l Fresh water | Algae - Pseudokirchneriella subcapitata - Exponential growth phase       | 72 hours |

Persistence/degradability

Not available.

# 13. Disposal considerations

Waste disposal

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

# 14. Transport information

| Regulatory information | UN number | Proper shipping name   | Classes | PG* | Label                                   | Additional information  |
|------------------------|-----------|--|---------|-----|---|---|
| DOT Classification     | UN3077    | Environmentally<br>hazardous substance,<br>solid, n.o.s. (Zinc<br>oxide). Marine<br>pollutant (Zinc oxide) | 9       | III | *************************************** | Limited quantity Yes.  Special provisions 8, 146, 335, B54, IB8, IP3, N20, T1, TP33 |
|                        |           |  |         |     |   |   |

| No. 3000/No. 3000-V       | V      |  |   |     |                     |  |  |  |  |
|---------------------------|--------|--|---|-----|---------------------|--|--|--|--|
| 14. Transport information |        |  |   |     |                     |  |  |  |  |
| TDG Classification        | UN3077 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc oxide). Marine pollutant (Zinc oxide) | 9 | III | 9 SAMANIE POLITIANT | Explosive Limit and Limited Quantity Index 5  Special provisions 16  |  |  |  |
| IMDG Class                | UN3077 | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc oxide). Marine pollutant (Zinc oxide) | 9 | III | ***                 | Emergency schedules<br>(EmS)<br>F-A, S-F   |  |  |  |
| IATA-DGR Class            | UN3077 | Environmentally hazardous substance, solid, n.o.s. (Zinc oxide)                                | 9 | III |                     | Passenger and Cargo Aircraft Quantity limitation: 400 kg Packaging instructions: 956 Cargo Aircraft Only Quantity limitation: 400 kg Packaging instructions: 956 Limited Quantities - Passenger Aircraft Quantity limitation: 30 kg Packaging instructions: Y956 |  |  |  |

PG\*: Packing group

# 15. Regulatory information

## **United States**

**HCS Classification** 

: Toxic material Irritating material Target organ effects

### U.S. Federal regulations

: TSCA 8(a) IUR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): Not determined.

SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: Distillates (petroleum), hydrotreated heavy naphthenic; Zinc oxide; Antimony tris[O,O-dipropyl] tris(dithiophosphate); Synthetic graphite

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:

Distillates (petroleum), hydrotreated heavy naphthenic: Immediate (acute) health hazard; Zinc oxide: Immediate (acute) health hazard, Delayed (chronic) health hazard; Antimony tris[O,O-dipropyl] tris(dithiophosphate): Immediate (acute) health hazard; Residual oils (petroleum), solvent-dewaxed: Immediate (acute) health hazard, Delayed (chronic) health hazard; Synthetic graphite: Immediate (acute) health hazard

Clean Water Act (CWA) 307: Antimony tris[O,O-dipropyl] tris(dithiophosphate); Zinc oxide

Clean Air Act (CAA) 112 accidental release prevention: No products were found.

# 15. Regulatory information

Clean Air Act Section 112 : Listed

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 : Not listed

Class I Substances

Clean Air Act Section 602 : Not listed

**Class II Substances** 

**DEA List I Chemicals** 

: Not listed

(Precursor Chemicals)

DEA List II Chemicals (Essential Chemicals)

: Not listed

### **SARA 313**

|                                 | Product name  | CAS number              | Concentration |
|---------------------------------|---|-------------------------|---------------|
| Form R - Reporting requirements | Zinc oxide<br>Antimony tris[O,O-dipropyl] tris(dithiophosphate) | 1314-13-2<br>15874-48-3 | 1-5<br>1-5    |
| Supplier notification           | Zinc oxide Antimony tris[O,O-dipropyl] tris(dithiophosphate)    | 1314-13-2<br>15874-48-3 | 1-5<br>1-5    |

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

### State regulations

Massachusetts : The following components are listed: GRAPHITE (NATURAL)DUST; MOLYBDENUM

DISULFIDE; ZINC OXIDE FUME

**New York**: None of the components are listed.

New Jersey: The following components are listed: MINERAL OIL (UNTREATED and MILDLY

TREATED); GRAPHITE (NATURAL); GRAPHITE; MINERAL OIL (UNTREATED and

MILDLY TREATED); ANTIMONY compounds; ZINC OXIDE; CARBON BLACK

Pennsylvania : The following components are listed: GRAPHITE; ANTIMONY COMPOUNDS; ZINC

OXIDE (ZNO); CARBON BLACK

## California Prop. 65

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

| Ingredient name | Cancer | Reproductive |     | Maximum acceptable dosage level |
|-----------------|--------|--------------|-----|---------------------------------|
| Carbon black    | Yes.   | No.          | No. | No.                             |

## **Canada**

WHMIS (Canada) : Class D-1B: Material causing immediate and serious toxic effects (Toxic).

**Canadian lists** 

Canadian NPRI : The following components are listed: Antimony; Zinc

**CEPA Toxic substances**: None of the components are listed.

Canada inventory : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

#### International regulations

07/11/2012. United States/Canada 11/13

#### **Regulatory information** 15.

International lists

: Australia inventory (AICS): Not determined. China inventory (IECSC): Not determined.

Japan inventory: Not determined. Korea inventory: Not determined.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined. Taiwan inventory (CSNN): Not determined.

**Chemical Weapons Convention List Schedule** 

: Not listed

**I Chemicals** 

**Chemical Weapons** 

**Convention List Schedule** 

**II Chemicals** 

: Not listed

**Chemical Weapons Convention List Schedule** 

**III Chemicals** 

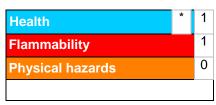
: Not listed

## 16. Other information

Label requirements

: HARMFUL IF INHALED. MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. PROLONGED OR REPEATED CONTACT MAY DRY SKIN AND CAUSE IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

**Hazardous Material** Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

**National Fire Protection** Association (U.S.A.)



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## 16. Other information

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

**Date of issue** : 07/11/2012.

**Date of previous issue** : No previous validation.

Version : 1

Indicates information that has changed from previously issued version.

### **Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.