Vanderbilt Chemicals, LLC
A Wholly Owned Subsidiary of R.T. Vanderbilt Holding Company, Inc.

# SAFETY DATA SHEET

GHS
United States

## Section 1. Product and company identification

**Product name** VANLUBE® AZ

**Code** 50401

**Supplier/Manufacturer** Vanderbilt Chemicals, LLC
30 Winfield Street
Norwalk, CT 06855

**In case of emergency**
1-203-853-1400

Chemtrec: 1-800-424-9300
Outside US:
+1-703-527-3887

**Synonym** Zinc diamyldithiocarbamate in oil.

**Material uses** Lubricant additives

**Product type** Liquid.

## Section 2. Hazards identification

**OSHA/HCS status** While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Classification of the substance or mixture** Not classified.

**GHS label elements**

**Signal word** No signal word.

**Hazard statements** No known significant effects or critical hazards.

**Precautionary statements**

**Prevention** Not applicable.

**Response** Not applicable.

**Storage** Not applicable.

**Disposal** Not applicable.

**Hazards not otherwise classified** None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** Mixture

| Ingredient name | CAS number | % by weight |
|---|---|---|
| zinc diamyldithiocarbamate | 15337-18-5 | 50 |
| petroleum process oil, <3.0% DMSO extractable material | 64742-52-5 | 50 |

**Occupational exposure limits, if available, are listed in Section 8.**

# Section 4. First aid measures

## Description of necessary first aid measures

**Eye contact** Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Skin contact** Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion** Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

## Most important symptoms/effects, acute and delayed

### Potential acute health effects

**Eye contact** No known significant effects or critical hazards.

**Inhalation** No known significant effects or critical hazards.

**Skin contact** No known significant effects or critical hazards.

**Ingestion** No known significant effects or critical hazards.

### Over-exposure signs/symptoms

**Eye contact** No specific data.

**Inhalation** No specific data.

**Skin contact** No specific data.

**Ingestion** No specific data.

## Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments** No specific treatment.

**Protection of first-aiders** No action shall be taken involving any personal risk or without suitable training.

**See toxicological information (Section 11)**

# Section 5. Fire-fighting measures

## Extinguishing media

**Suitable extinguishing media** Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media** None known.

**Specific hazards arising from the chemical** In a fire or if heated, a pressure increase will occur and the container may burst.

# Section 5. Fire-fighting measures

**Hazardous thermal decomposition products**

Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
metal oxide/oxides

**Special protective actions for fire-fighters**

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.

**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.

# Section 6. Accidental release measures

## Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**

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. Put on appropriate personal protective equipment.

**For emergency responders**

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**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 and materials for containment and cleaning up

**Small spill**

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill**

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

# Section 7. Handling and storage

## Precautions for safe handling

**Protective measures**

Put on appropriate personal protective equipment (see Section 8).

**Advice on general occupational hygiene**

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. See also Section 8 for additional information on hygiene measures.

# Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities**

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. See Section 10 for incompatible materials before handling or use.

# Section 8. Exposure controls/personal protection

## Control parameters

### Occupational exposure limits

| Ingredient name | Exposure limits |
|---|---|
| petroleum process oil, <3.0% DMSO extractable material | **ACGIH TLV (United States, 3/2012).**<br>TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction<br>**NIOSH REL (United States, 1/2013).**<br>TWA: 5 mg/m³ 10 hours. Form: Mist<br>STEL: 10 mg/m³ 15 minutes. Form: Mist<br>**ACGIH TLV (United States).**<br>STEL: 10 mg/m³<br>**OSHA PEL (United States, 6/2010).**<br>TWA: 5 mg/m³ 8 hours. |

**Appropriate engineering controls**

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls**

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.

## Individual protection measures

**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.

**Eye/face protection**

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, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields. Recommended: splash goggles

### Skin protection

**Hand protection**

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.

**Body protection**

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. Recommended: lab coat

**Other skin protection**

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

# Section 8. Exposure controls/personal protection

**Respiratory protection**

Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

**Personal protective equipment (Pictograms)**

**Recommended Personal Protective Equipment (when used in metal working fluid formulations)**

**Respiratory Protection Statement:**

When used in metal working fluid (MWF) formulations where liquid aerosol concentrations ("oil mist") may be generated and detected in accordance with NIOSH analytical method 5524, or any other application where liquid aerosol concentrations may be generated and detected in accordance with NIOSH Method 5026, one of the following types of respirators may be necessary:
- An oil proof (class P) air-purifying, half mask respirator capable to filtering 99.97% of particles 0.3 microns or larger when aerosol ("oil mist") concentrations are 5.0 mg/m3 (total particulate mass) or less;
- a supplied-air respirator operated in a continuous-flow mode when aerosol ("oil mist") concentrations are 12.5 mg/m3 (total particulate mass) or less;
- a powered, air-purifying respirator with an oil proof (class P) high-efficiency particulate filter when aerosol ("oil mist") concentrations are 12.5 mg/m3 (total particulate mass) or less;
- an air-purifying, full-facepiece respirator with an oil proof (class P) filter capable to filtering 99.97% of particles 0.3 microns or larger when aerosol ("oil mist") concentrations are 25.0 mg/m3 (total particulate mass) or less; or
- a supplied-air respirator operated in a pressure-demand or other positive-pressure mode.

Appropriate respiratory equipment depends on conditions of work and use. Consult a safety professional for process-specific guidance. Safety procedures should be developed for each intended application.

**Dermal Protection Statement:**

Hand Protection

When used in metal working fluids, and / or when cleaning up spills, or if there is a risk of splashing, use neoprene or nitrile rubber gloves to avoid direct skin contact.

Breakthrough time:
Breakthrough time data are generated by glove manufacturers under laboratory test conditions and represent how long a glove can be expected to provide effective permeation resistance. It is important when following breakthrough time recommendations that actual workplace conditions are considered. Most gloves provide protection for only a limited time before they must be discarded and replaced because they will break through after repeated use. Always consult with your glove supplier for up-to-date technical information on breakthrough times for the recommended glove type.

Recommendations on the selection of gloves are as follows:

Continuous contact:
Gloves with a minimum breakthrough time of 240 minutes, or >480 minutes if suitable gloves can be obtained. If suitable gloves are not available to offer that level of protection, gloves with shorter breakthrough times may be acceptable as long as appropriate glove maintenance and replacement regimes are determined and adhered to.

Short-term / splash protection:
Recommended breakthrough times as above.
It is recognized that for short-term, transient exposures, gloves with shorter breakthrough times may commonly be used. Therefore, appropriate maintenance and replacement regimes must be determined and rigorously followed.

Glove Thickness:

# Section 8. Exposure controls/personal protection

For general applications, gloves with a thickness typically greater than 0.35 mm are recommended.

It should be emphasized that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times. Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be considered to ensure selection of the most appropriate glove for the task.

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:
- Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
- Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

Skin and Body

When used in metal working fluids, neoprene or nitrile rubber coated aprons and/or impervious neoprene or nitrile rubber coated suits and boots should be used.

Breakthrough time:
Breakthrough time data are generated by protective clothing manufacturers under laboratory test conditions and represent how long a garment can be expected to provide effective permeation resistance. It is important when following breakthrough time recommendations that actual workplace conditions are considered. Most protective clothing provides protection for only a limited time before it must be discarded and replaced because it will break down after repeated chemical exposures. Always consult with your protective clothing supplier for up-to-date technical information on breakthrough times for the recommended protective clothing type.

Recommendations on the selection of protective clothing are as follows:

Continuous contact:
Protective clothing with a minimum breakthrough time of 240 minutes, or >480 minutes if suitable clothing can be obtained. If suitable clothing is not available to offer that level of protection, clothing with shorter breakthrough times may be acceptable as long as appropriate clothing maintenance and replacement regimes are determined and adhered to.

Short-term / splash protection:
Recommended breakthrough times as above.
It is recognized that for short-term, transient exposures, clothing with shorter breakthrough times may commonly be used. Therefore, appropriate maintenance and replacement regimes must be determined and rigorously followed.

Clothing Thickness:
For general applications, clothing with a thickness typically greater than 0.35 mm is recommended.

Clothing thickness is not necessarily a good predictor of clothing resistance to a specific chemical, as the permeation efficiency of the clothing will be dependent on the composition of the material. Selection should also be based on consideration of the task and knowledge of breakthrough times. Thickness may also vary depending on the manufacturer, type and model. The manufacturers' technical data should always be considered to ensure selection of the most appropriate clothing for the task.

Note: Depending on the activity being conducted, clothing of varying thickness may be required for specific tasks. For example:
- Thinner clothing (down to 0.1 mm or less) may be required where a high degree of mobility is needed. However, these types of clothing are only likely to give short duration protection and would normally be just for single use applications, then disposed of.
- Thicker clothing (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

# Section 8. Exposure controls/personal protection

Refer to the follow standards for further information:
- Respiratory protection: EN 529
- Gloves: EN 420, EN 374
- Eye protection: EN 166
- Filtering half-mask: EN 149
- Filtering half-mask with valve: EN 405
- Half-mask: EN 140 plus filter
- Full-face mask: EN 136 plus filter
- Particulate filters: EN 143
- Gas/combined filters: EN 14387

**Eye / Face Protection Statement:**

When used in metal working fluids, and / or when cleaning up spills, or if there is a risk of splashing, use safety glasses with side shields or splash resistant goggles.

**General Information:**

Specific work environments and material handling practices may vary. Safety procedures should be developed for each application. The correct choice of personal protective equipment (PPE) depends upon the chemicals being handled, and the conditions of work and use.

Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organization for standards.

The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

**Engineering Controls:**

When used in metal working fluids, or any other application where liquid aerosol concentrations (“oil mist”) may be generated, provide local exhaust ventilation or other engineering controls to keep the liquid aerosol concentrations (“oil mist”) below applicable occupational exposure limits.

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated.

# Section 9. Physical and chemical properties

| | |
|---|---|
| **Appearance** | |
| **Physical state** | Liquid. |
| **Color** | Amber. |
| **Odor** | Not available. |
| **Odor threshold** | Not available. |
| **pH** | Not available. |
| **Melting point** | Not available. |

## Section 9. Physical and chemical properties

| | |
|---|---|
| **Boiling point** | Not available. |
| **Flash point** | Closed cup: 136°C (276.8°F) [Pensky-Martens] |
| **Burning time** | Not applicable. |
| **Burning rate** | Not applicable. |
| **Evaporation rate** | 0.01 (butyl acetate = 1) |
| **Flammability (solid, gas)** | Not available. |
| **Lower and upper explosive (flammable) limits** | Not available. |
| **Vapor pressure** | <0.0013 kPa (<0.01 mm Hg) [room temperature] |
| **Vapor density** | 5 [Air = 1] |
| **Density** | 0.97 g/cm³ [25°C (77°F)] |
| **Relative density** | 0.9 |
| **Solubility** | Easily soluble in the following materials: acetone.<br>Insoluble in the following materials: cold water. |
| **Solubility in water** | Not available. |
| **Partition coefficient: n-octanol/water** | Not applicable. |
| **Auto-ignition temperature** | Not available. |
| **Decomposition temperature** | Not available. |
| **SADT** | Not available. |
| **Viscosity** | Kinematic (room temperature): 3.36 $cm^2/s$ (336 cSt) [at 25°C] |

## Section 10. Stability and reactivity

| | |
|---|---|
| **Reactivity** | No specific test data related to reactivity available for this product or its ingredients. |
| **Chemical stability** | The product is stable. |
| **Possibility of hazardous reactions** | Under normal conditions of storage and use, hazardous reactions will not occur. |
| **Conditions to avoid** | No specific data. |
| **Incompatible materials** | No specific data. |
| **Hazardous decomposition products** | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

## Section 11. Toxicological information

**Information on toxicological effects**

**Acute toxicity**

# Section 11. Toxicological information

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| petroleum process oil, <3.0% DMSO extractable material | LD50 Dermal | Rabbit | >2000 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |
| zinc diamyldithiocarbamate | LD50 Oral | Rat | >2000 mg/kg | - |

## Irritation/Corrosion

Not available.

## Conclusion/Summary

**Skin** Non-irritating to the skin. (Reconstructed Human Epidermis Test Method)

**Eyes** Non-irritating to the eyes. (Rabbit)

## Sensitization

| Product/ingredient name | Route of exposure | Species | Result |
|---|---|---|---|
| zinc diamyldithiocarbamate | skin | Mouse | Not sensitizing |

## Mutagenicity

| Product/ingredient name | Test | Experiment | Result |
|---|---|---|---|
| zinc diamyldithiocarbamate | OECD 471 | Experiment: In vitro<br>Subject: Bacteria | Negative |
| | OECD 490 | Experiment: In vitro<br>Subject: Mammalian-Animal | Negative |
| | OECD 487 | Experiment: In vitro<br>Subject: Mammalian-Human | Negative |

## Carcinogenicity

Not available.

## Reproductive toxicity

| Product/ingredient name | Maternal toxicity | Fertility | Development toxin | Species | Dose | Exposure |
|---|---|---|---|---|---|---|
| zinc diamyldithiocarbamate | - | - | - | Rat | Oral: 250 mg/kg | - |

## Teratogenicity

Not available.

## Specific target organ toxicity (single exposure)

Not available.

## Specific target organ toxicity (repeated exposure)

Not available.

## Aspiration hazard

# Section 11. Toxicological information

Not available.

**Information on the likely routes of exposure** Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

## Potential acute health effects

**Eye contact** No known significant effects or critical hazards.

**Inhalation** No known significant effects or critical hazards.

**Skin contact** No known significant effects or critical hazards.

**Ingestion** May be harmful if swallowed.

## Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** No specific data.

**Inhalation** No specific data.

**Skin contact** No specific data.

**Ingestion** No specific data.

## Delayed and immediate effects and also chronic effects from short and long term exposure

### Short term exposure

**Potential immediate effects** Not available.

**Potential delayed effects** Not available.

### Long term exposure

**Potential immediate effects** Not available.

**Potential delayed effects** Not available.

### Potential chronic health effects

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| zinc diamyldithiocarbamate | Sub-chronic NOAEL Oral | Rat | 250 mg/kg | - |

**General** No known significant effects or critical hazards.

**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.

## Numerical measures of toxicity

### Acute toxicity estimates

| Route | ATE value |
|---|---|
| Oral | 5000 mg/kg |

**Other information** Not available.

# Section 12. Ecological information

## Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---|---|---|---|
| zinc diamyldithiocarbamate | Acute EC50 >1000 mg/l<br>Acute NOEC >1000 mg/l | Micro-organism<br>Micro-organism | 3 hours<br>3 hours |

**Conclusion/Summary**

zinc diamyldithiocarbamate:
Fish: In an OECD 203 study, the 96 hour toxicity (LC50) of exposure of fathead minnow to the test item resulted in an LC50 value of greater than 100% v/v saturated solution, based on the nominal test concentration. The No Observed Effect Concentration (NOEC) was 100% v/v saturated solution.

Invertebrates: In an OECD 202 study, the acute toxicity of the test item to the freshwater invertebrate daphnia magna was investigated and based on the geometric mean measured test concentrations gave a 48-Hour EC50 value of greater than 0.0076 mg/L as zinc (equivalent to 0.071 mg/L as test item). The No Observed Effect Concentration was 0.0076 mg/L as zinc (equivalent to 0.071 mg/L as test item) mg/L. This study showed that there were no toxic effects at saturation.

Algae: In an OECD 201 study, the effect of the test item on the growth of Pseudokirchneriella subcapitata was investigated and the 72-hour EC50 value based on growth rate was determined to be greater than 100% v/v saturated solution. The NOEC was given as 12.5% v/v saturated solution and the LOEC determined to be 25% v/v saturated solution.

## Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|---|---|---|---|---|
| zinc diamyldithiocarbamate | OECD 301B | 21 % - Not readily - 28 days | - | - |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|---|---|---|
| zinc diamyldithiocarbamate | - | - | Not readily |

## Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| zinc diamyldithiocarbamate | >9.4 | - | high |

## Mobility in soil

**Soil/water partition coefficient ($K_{OC}$)**

Not available.

**Other adverse effects**

No known significant effects or critical hazards.

# Section 13. Disposal considerations

**Disposal methods**

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

## Section 13. Disposal considerations

safe way. 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.**

## Section 14. Transport information

| Regulatory information | UN number | Proper shipping name | Classes | PG* | Label | Additional information |
|---|---|---|---|---|---|---|
| DOT Classification | Not regulated. | - | - | - | | - |
| TDG Classification | Not regulated. | - | - | - | | - |
| ADR/RID Class | Not regulated. | - | - | - | | - |
| IMDG Class | Not regulated. | - | - | - | | - |
| IATA-DGR Class | Not regulated. | - | - | - | | - |

PG* : Packing group

## Section 15. Regulatory information

**United States Inventory (TSCA 8b)** All components are active or exempted.

**U.S. Federal regulations**

**TSCA 8(a) CDR Exempt/Partial exemption**: Not determined

**Clean Water Act (CWA) 307**: zinc bis(dipentyldithiocarbamate)

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 304 RQ** Not applicable.

**SARA 311/312**

**Classification** Not applicable.

**Composition/information on ingredients**

No products were found.

**SARA 313**

| | Product name | CAS number | % |
|---|---|---|---|
| Form R - Reporting requirements | zinc diamyldithiocarbamate | 15337-18-5 | 50 |
| Supplier notification | zinc diamyldithiocarbamate | 15337-18-5 | 50 |

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

**State regulations**

# Section 15. Regulatory information

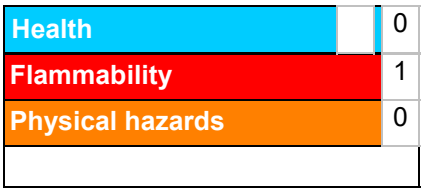
| | |
|---|---|
| **Massachusetts** | The following components are listed: OIL MIST, MINERAL |
| **New York** | None of the components are listed. |
| **New Jersey** | The following components are listed: ZINC compounds; MINERAL OIL (UNTREATED and MILDLY TREATED) |
| **Pennsylvania** | The following components are listed: ZINC COMPOUNDS |
| **California Prop. 65** | None of the components are listed. |

**International regulations**

| | |
|---|---|
| **Australia Inventory (AIIC)** | All components are listed or exempted. |
| **Canada Inventory** | All components are listed or exempted. |
| **China Inventory (IECSC)** | All components are listed or exempted. |
| **Europe inventory** | All components are listed or exempted. |
| **Japan Inventory (CSCL)** | All components are listed or exempted. |
| **Korea inventory (KECI)** | All components are listed or exempted. |
| **New Zealand Inventory of Chemicals (NZIoC)** | All components are listed or exempted. |
| **Philippines Inventory (PICCS)** | All components are listed or exempted. |
| **Taiwan Chemical Substances Inventory (TCSI)** | All components are listed or exempted. |

# Section 16. Other information

**Hazardous Material Identification 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. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.**

**The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.**

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

# Section 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.**

## History

| | |
|---|---|
| **Date of printing** | 12/22/2022 |
| **Validation date** | 12/22/2022 |
| **Date of previous issue** | 5/17/2018 |
| **Version** | 4 |
| **Key to abbreviations** | ATE = Acute Toxicity Estimate<br>BCF = Bioconcentration Factor<br>GHS = Globally Harmonized System of Classification and Labelling of Chemicals<br>IATA = International Air Transport Association<br>IBC = Intermediate Bulk Container<br>IMDG = International Maritime Dangerous Goods<br>LogPow = logarithm of the octanol/water partition coefficient<br>MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)<br>UN = United Nations |
| **References** | Not available. |
| **Information contact** | **Vanderbilt Global Services, LLC**<br>**Corporate Risk Management**<br>**1-203-295-2143** |

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## Notice to reader

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