

SAFETY DATA SHEET

GHS
United States

Section 1. Product and company identification

| | | |
|------------------------------|--|--|
| Product name | VANLUBE® LVZ | <u>In case of emergency</u> |
| Code | 50708 | 1-203-853-1400 |
| Supplier/Manufacturer | Vanderbilt Chemicals, LLC 30 Winfield Street Norwalk, CT 06855 | Chemtrec: 1-800-424-9300 Outside US: +1-703-527-3887 |
| Chemical name | zinc carboxylate in aliphatic solvent | |
| Synonym | Not available. | |
| Material uses | Lubricant additives | |
| Product type | Liquid. | |

Section 2. Hazards identification

| | |
|---|---|
| OSHA/HCS status | This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). |
| Classification of the substance or mixture | FLAMMABLE LIQUIDS - Category 4 EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION (Unborn child) - Category 2 |

GHS label elements

Hazard pictograms



Signal word

Warning

Hazard statements

Combustible liquid.
Causes serious eye irritation.
Suspected of damaging the unborn child.

Precautionary statements

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection: Recommended: splash goggles. Wear protective clothing: Recommended: lab coat. Keep away from flames and hot surfaces. - No smoking. Wash hands thoroughly after handling.

Response

IF exposed or concerned: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Storage

Store locked up. Store in a well-ventilated place. Keep cool.

Disposal

Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified

None known.

Section 2. Hazards identification

Section 3. Composition/information on ingredients

Substance/mixture Mixture

| Ingredient name | CAS number | % by weight |
|------------------|------------|-------------|
| zinc carboxylate | - | 75 |
| paraffinic oil | 64742-47-8 | 25 |

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. Continue to rinse for at least 10 minutes. Get medical attention. |
| Inhalation | Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| Skin contact | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| Ingestion | Wash out mouth with water. Remove dentures if any. 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. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |

Most important symptoms/effects, acute and delayed

Potential acute health effects

| | |
|---------------------|---|
| Eye contact | Causes serious eye irritation. |
| 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 | Adverse symptoms may include the following: pain or irritation watering redness |
| Inhalation | Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations |

Section 4. First aid measures

| | |
|---------------------|---|
| Skin contact | Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations |
| Ingestion | Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations |

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

| | |
|-----------------------------------|--|
| Notes to physician | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments | No specific treatment. |
| Protection of first-aiders | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

| | |
|---------------------------------------|--|
| Suitable extinguishing media | Use dry chemical, CO ₂ , water spray (fog) or foam. |
| Unsuitable extinguishing media | Do not use water jet. |

Specific hazards arising from the chemical

Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products

Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
|------------------------------------|--|

Section 6. Accidental release measures

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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. 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. Contaminated absorbent material may pose the same hazard as the spilled product. 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). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.

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.

Conditions for safe storage, including any incompatibilities Store in accordance with local regulations. Store in a segregated and approved area. 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. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|-----------------|--|
| paraffinic oil | ACGIH TLV (United States, 6/2013). Absorbed through skin. TWA: 200 mg/m ³ , (as total hydrocarbon vapor) 8 hours. |

Appropriate engineering controls

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. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

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: chemical splash goggles. 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. 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.

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

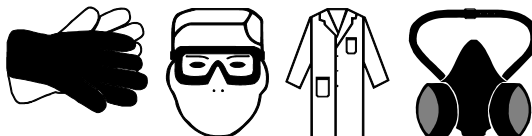
Other skin protection

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.

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. Recommended: Vapor and dust respirator.

Personal protective equipment (Pictograms)



Section 9. Physical and chemical properties

Appearance

| | |
|--|--|
| Physical state | Liquid. |
| Color | Colorless to light yellow. [Light] |
| Odor | Petroleum |
| Odor threshold | Not available. |
| pH | Not available. |
| Melting point | Not available. |
| Boiling point | Not available. |
| Flash point | Closed cup: 78°C (172.4°F) [Continuously Closed Cup] |
| Burning time | Not applicable. |
| Burning rate | Not applicable. |
| Evaporation rate | Not available. |
| Flammability (solid, gas) | Not available. |
| Lower and upper explosive (flammable) limits | Not available. |
| Vapor pressure | Not available. |
| Vapor density | Not available. |
| Density | 1.07 g/cm ³ [25°C (77°F)] |
| Relative density | Not available. |
| Solubility | Insoluble in the following materials: cold water. |
| Solubility in water | Not available. |
| Partition coefficient: n-octanol/water | Not available. |
| Auto-ignition temperature | Not available. |
| Decomposition temperature | Not available. |
| SADT | Not available. |
| Viscosity | Kinematic (40°C (104°F)): 0.31 to 0.39 cm ² /s (31 to 39 cSt) |

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 | Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. |
| Incompatible materials | Reactive or incompatible with the following materials: oxidizing materials |
| Hazardous decomposition products | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Section 10. Stability and reactivity

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|-------------|---------|-------------|----------|
| zinc carboxylate | LD50 Dermal | Rat | >2000 mg/kg | - |
| | LD50 Oral | Rat | >2000 mg/kg | - |
| paraffinic oil | LD50 Dermal | Rabbit | >3600 mg/kg | - |
| | LD50 Oral | Rat | >5000 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|-----------------|---------|-------|----------|-------------|
| zinc carboxylate | Eyes - Irritant | Rabbit | - | - | - |

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Conclusion/Summary

zinc carboxylate: Suspected of damaging the unborn child.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

Routes of entry anticipated: Oral, Inhalation.

Potential acute health effects

Eye contact

Causes serious eye irritation.

Section 11. Toxicological information

| | |
|---------------------|---|
| Inhalation | No known significant effects or critical hazards. |
| Skin contact | May be harmful in contact with skin. |
| Ingestion | May be harmful if swallowed. |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|---------------------|---|
| Eye contact | Adverse symptoms may include the following: pain or irritation watering redness |
| Inhalation | Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations |
| Skin contact | Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations |
| Ingestion | Adverse symptoms may include the following: reduced fetal weight increase in fetal deaths skeletal malformations |

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

Not available.

| | |
|------------------------------|---|
| 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 | Suspected of damaging the unborn child. |
| 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 | 3333.3 mg/kg |
| Dermal | 2500 mg/kg |

Other information Not available.

Section 11. Toxicological information

Section 12. Ecological information

Toxicity

Not available.

Conclusion/Summary zinc carboxylate: Harmful to aquatic life with long lasting effects.

Persistence and degradability

Not available.

Bioaccumulative potential

Not available.

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 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. 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 |
|------------------------|-----------|----------------------|---------|-----|-------|------------------------|
| | | | | | | |

Section 14. Transport information

| DOT Classification | Not regulated. | - | - | - | - | Remarks For bulk (> 119 gallons) packages, this material is regulated under U. S. Department of Transportation regulations for domestic shipments. Its proper shipping description is NA 1993, combustible liquid, n.o.s. (paraffinic naphthenic oil), PG III. |
|---------------------------|----------------|---|---|---|---|--|
| 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 listed or exempted.

EPA Accession No. 253351

zinc carboxylate: EPA has issued a Significant New Use Rule (SNUR) under Section (5)(a) of TSCA regulating releases to water. The requirements are specific in 40 CFR 721.10760.

U.S. Federal regulations

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

TSCA 12(b) one-time export: zinc carboxylate

Clean Water Act (CWA) 307: zinc carboxylate

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ

Not applicable.

SARA 311/312

Classification

FLAMMABLE LIQUIDS - Category 4
EYE IRRITATION - Category 2A
TOXIC TO REPRODUCTION (Unborn child) - Category 2

Composition/information on ingredients

Section 15. Regulatory information

| Name | % | Classification |
|------------------|----|---|
| zinc carboxylate | 75 | EYE IRRITATION - Category 2A TOXIC TO REPRODUCTION (Unborn child) - Category 2 |
| paraffinic oil | 25 | FLAMMABLE LIQUIDS - Category 3 |

SARA 313

| | Product name | CAS number | % |
|---------------------------------|------------------|------------|----|
| Form R - Reporting requirements | zinc carboxylate | - | 75 |
| Supplier notification | zinc carboxylate | - | 75 |

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

| | |
|----------------------------|---|
| Massachusetts | None of the components are listed. |
| New York | None of the components are listed. |
| New Jersey | The following components are listed: zinc carboxylate |
| Pennsylvania | The following components are listed: zinc carboxylate |
| California Prop. 65 | None of the components are listed. |

International regulations

| | |
|--|--|
| Australia inventory (AICS) | 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 (ENCS) | 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) | Not determined. |

Section 16. Other information

| Hazardous Material Identification System (U.S.A.) | |
|---|---|
| Health | 2 |
| Flammability | 2 |
| Physical hazards | 0 |
| | |

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.

Section 16. Other information

[National Fire Protection Association \(U.S.A.\)](#)



History

| | |
|-------------------------------|---|
| Date of printing | 11/20/2017 |
| Validation date | 11/20/2017 |
| Date of previous issue | 6/20/2016 |
| Version | 4 |
| Key to abbreviations | <p>ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations</p> |

References Not available.

Information contact **Vanderbilt Global Services, LLC**
Corporate Risk Management
1-203-295-2143

Visit www.vanderbiltchemicals.com for more information.

Notice to reader

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