

SAFETY DATA SHEET

GHS United States

Section 1. Product and company identification

Product name	VANLUBE® 981	<u>In case of emergency</u> 1-203-853-1400
Code Supplier/Manufacturer	52840 Vanderbilt Chemicals, LLC 30 Winfield Street Norwalk, CT 06855	Chemtrec: 1-800-424-9300 Outside US: +1-703-527-3887
Synonym Material uses	Dithiocarbamate derivative. Lubricant additives	

Section 2. Hazards identification

Liquid.

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	Not classified.
substance or mixture	
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

Product type

Substance

dithiocarbamate derivative - 100	Ingredient name	CAS number	% by weight
	dithiocarbamate derivative	-	100

2/1/2017

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.	
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/sympton	<u>15</u>
Eye contact	No specific data.
Inhalation	No specific data.
Skin contact	No specific data.
Ingestion	No specific data.
Indication of immediate medica	l 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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

<u>Extinguishing media</u>		
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.	
Hazardous thermal decomposition products	No specific data.	
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the incident there is a fire. No action shall be taken involving any personal risk or without suita training.	
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Section 5. Fire-fighting measures

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 cor	tainment 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	Ston leak if without risk. Move containers from spill area. Prevent entry into sewers	

arge spillStop 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.
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.

Section 8. Exposure controls/personal protection

Control parameters

Осси	national	l exposure	limits
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None.

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.
Respiratory protection	Use a properly fitted, air-purifying or air-fed 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.
Personal protective equipment (Pictograms)	



Section 9. Physical and chemical properties

Appearance	
Physical state	Liquid.
Color	Amber.
Odor	Not available.
Odor threshold	Not available.
рН	Not available.
Melting point	<250°C (<482°F)

Section 9. Physical and chemical properties

Boiling point	Not available.
Flash point	Closed cup: 120°C (248°F) [Pensky-Martens.]
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	1.03 g/cm³ [15.6°C (60.1°F)]
Relative density	1.03
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: 0.06 cm ² /s (6 cSt) [100°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

Product/ingredient name	Result	Species	Dose	Exposure
dithiocarbamate derivative	LD50 Oral	Rat	>2000 mg/kg	-

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
dithiocarbamate derivative	Eyes - Mild irritant	Rabbit	-	0.1 mL	1 hours

Conclusion/Summary

Non-irritating to the skin. (Rabbit)

Sensitization

Skin

Not available.

Conclusion/Summary

Skin

Produced an 11% (1/9) sensitization rate and was classified as a mild sensitizer to Guinea Pig skin.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
dithiocarbamate derivative	-	Subject: Bacteria	Negative

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

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 entry anticipated: Oral, Dermal. routes of exposure

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.

Section 11. Toxicological information

No specific data.
No specific data.
No specific data.

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

Not available.
Not available.
Not available.
Not available.
<u>2</u>
No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	2500 mg/kg

Other information

Not available.

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
dithiocarbamate derivative	-	23 % - Not readily - 28 days		-		-
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
dithiocarbamate derivative	-		-		Not rea	adily

Bioaccumulative potential

Not available.

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Section 12. Ecological information

<u>Mobility in soil</u> Soil/water partition

coefficient (Koc)

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. 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.

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.	-	-	-		-

Section 14. Transport information

PG* : Packing group

Section 15. Regulatory information

United States inventory (TSCA 8b)

All components are listed or exempted.

This material is subject to a Final Significant New Use Rule (SNUR) under Section (5)(a) of TSCA regarding release to water. The requirements of 40 CFR 721.10314 must be followed.

This material contains a chemical which requires export notification under Section 12(b) of TSCA.

U.S. Federal regulations

TSCA 5(a)2 final significant new use rules: dithiocarbamate derivative

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

TSCA 12(b) annual export notification: dithiocarbamate derivative

SARA 302/304

Section 15. Regulatory information

Composition/information on	ingredients

No products were found.

SARA 304 RQ	Not applicable.
<u>SARA 311/312</u>	
Classification	Not applicable.
Composition/information on	<u>ingredients</u>
No products were found.	
State regulations	
Massachusetts	None of the components are listed.
New York	None of the components are listed.
New Jersey	None of the components are listed.
Pennsylvania	None of the components are listed.
California Prop. 65	None of the components are listed.

International regulations	
Australia inventory (AICS)	Not determined.
Canada inventory	Not determined.
China inventory (IECSC)	All components are listed or exempted.
Europe inventory	At least one component is not listed in EINECS but all such components are listed in ELINCS. Please contact your supplier for information on the inventory status of this material.
	EINECS: European Inventory. This product contains the following chemical(s) for which one or more Pre-Market Notifications have been filed. Should you wish to export products containing this product into an EC country, contact Product Risk Manager at Vanderbilt Global Services, LLC at 203-295-2143 for more information.
	Chemical name: dithiocarbamate derivative
Japan inventory (ENCS)	All components are listed or exempted.
Korea inventory (KECI)	Not determined.
New Zealand Inventory of Chemicals (NZIoC)	All components are listed or exempted.
Philippines inventory (PICCS)	Not determined.
Taiwan Chemical Substances	Not determined.

Section 16. Other information



Inventory (TCSI)

Section 16. Other information

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.)



History

Date of printing	10/3/2017
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Date of previous issue	2/1/2017
Version	3
Key to abbreviations	ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate 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
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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