

SAFETY DATA SHEET

GHS

United States

Section 1. Product and company identification

Product name VANLUBE® 996E In case of emergency

1-203-853-1400

Chemtrec: 1-800-424-9300

Outside US: +1-703-527-3887

Supplier/Manufacturer Vanderbilt Chemicals, LLC

53380

30 Winfield Street Norwalk, CT 06855

Synonym Not available.

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 Not classified.

substance or mixture

Code

GHS label elements

Signal word No signal word.

Hazard statementsNo known significant effects or critical hazards.

Precautionary statements

Prevention
Response
Storage
Disposal
Not applicable.
Not applicable.
Not applicable.
Not applicable.
Not applicable.
Not applicable.

classified

Section 3. Composition/information on ingredients

Substance/mixture Mixture

Ingredient name	CAS number	% by weight
proprietary antioxidant	-	100

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

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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.

Wash out mouth with water. Remove victim to fresh air and keep at rest in a position Ingestion

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

Eve contact No known significant effects or critical hazards.

Inhalation Exposure to decomposition products may cause a health hazard. Serious effects may

be delayed following exposure.

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.

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Section 5. Fire-fighting measures

Hazardous thermal decomposition products

Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides sulfur 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
Advice on general
occupational hygiene

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

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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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

Appropriate engineering controls

Environmental exposure controls

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

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)



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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.

Boiling point Not available.

Flash point Closed cup: 170°C (338°F) [Pensky-Martens]

Burning time

Burning rate

Evaporation rate

Flammability (solid, gas)

Lower and upper explosive

Not applicable.

Not applicable.

Not available.

Not available.

(flammable) limits

Vapor pressureNot available.Vapor densityNot available.DensityNot available.

Relative density 1.06

Solubility Insoluble in the following materials: cold water.

Solubility in water Not available.

Partition coefficient: n- Not applicable.

octanol/water

Auto-ignition temperature

Decomposition temperature

SADT

Not available.

Not available.

Not available.

Not available.

Section 10. Stability and reactivity

ReactivityNo 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.

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Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
sulfur compound	LD50 Dermal LD50 Oral	Rabbit Rat	>2000 mg/kg 16000 mg/kg	-
tolutriazole compound (NJTSR No. 800983-5044P)	LD50 Dermal	Rabbit	>2000 mg/kg	-
,	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
tolutriazole compound (NJTSR No. 800983-5044P)	Eyes - Mild irritant	Rabbit	-	0.5 minutes	-
,	Skin - Mild irritant	Rabbit	-	4 hours	-

Conclusion/Summary

SkinSulfur compound: Non-irritating to the skin. (Rabbit)EyesSulfur compound: Non-irritating to the eyes. (Rabbit)

Sensitization

Product/ingredient name	Route of exposure	Species	Result
sulfur compound tolutriazole compound (NJTSR No. 800983-5044P)	skin skin	Mouse Guinea pig	Not sensitizing Not sensitizing

Mutagenicity

Product/ingredient name	Test	Experiment	Result
sulfur compound	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
	OECD 476	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 473	Experiment: In vitro Subject: Mammalian-Human	Negative
tolutriazole compound (NJTSR No. 800983-5044P)	OECD 471	Experiment: In vitro Subject: Bacteria	Negative
,	OECD 474	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 473	Experiment: In vitro Subject: Mammalian-Human	Negative

Carcinogenicity

Not available.

Reproductive toxicity

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Section 11. Toxicological information

Product/ingredient name	Maternal	Fertility	Development	Species	Dose	Exposure
	toxicity		toxin			
sulfur compound	-	-	-	Rat	Oral: 1000 ppm NOAEL, Adult	-
	-	-	-	Rat	Oral: >20000 ppm NOAEL, Offspring	-

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: Dermal, Eyes.

Potential acute health effects

Eye contactNo known significant effects or critical hazards.InhalationNo known significant effects or critical hazards.Skin contactNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contactNo specific data.InhalationNo specific data.Skin contactNo specific data.IngestionNo specific data.

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

Short term exposure

Potential immediate Not available.

effects

Potential delayed effects Not available.

Long term exposure

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Section 11. Toxicological information

Potential immediate

Not available.

effects

Potential delayed effects Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
sulfur compound tolutriazole compound (NJTSR No. 800983-5044P)	Sub-acute NOAEL Oral Sub-acute NOEL Oral	Rat Rat - Male	1000 ppm 150 mg/kg	- 28 days
, ,	Sub-acute NOEL Oral	Rat - Female	1000 mg/kg	28 days

GeneralNo known significant effects or critical hazards.CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.TeratogenicityNo known significant effects or critical hazards.Developmental effectsNo known significant effects or critical hazards.Fertility effectsNo known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	33333.33 mg/kg
Dermal	16666.67 mg/kg

Other information Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
VANLUBE® 996E	LC50 >500 mg/l	Fish	48 hours

Persistence and degradability

Product/ingredient name	Test	Result		Dose		Inoculum
sulfur compound tolutriazole compound (NJTSR No. 800983-5044P)	OECD 301B -	21 % - Not readily - 28 days - 0 % - 28 days -		-		Activated sludge
Product/ingredient name	Aquatic half-life		Photolysis		Biodeg	radability
sulfur compound	_		_		Not rea	dily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
sulfur compound	8.42	10.86	low

Mobility in soil

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Section 12. Ecological information

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.

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

<u>United States Inventory (TSCA 8b)</u> All components are active or exempted.

U.S. Federal regulations

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

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ Not applicable.

SARA 311/312

Classification Not applicable.

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Section 15. Regulatory information

Composition/information on ingredients

No products were found.

State regulations

MassachusettsNone of the components are listed.New YorkNone of the components are listed.New JerseyNone of the components are listed.PennsylvaniaNone of the components are listed.California Prop. 65None of the components are listed.

International regulations

Australia Inventory (AIIC)

Canada Inventory

All components are listed or exempted.

All components are listed or exempted.

China Inventory (IECSC)

All components are listed or exempted.

Europe inventoryAt least one component is not listed in EINECS but all such components are

listed in ELINCS.

Japan Inventory (CSCL)

Korea inventory (KECI)

All components are listed or exempted.

(NZIoC)

Philippines Inventory (PICCS)
Taiwan Chemical Substances

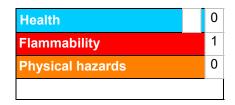
Inventory (TCSI)

All components are listed or exempted.

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.)

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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

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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 = 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

References Not available.

Information contact Vanderbilt Global Services, LLC

Corporate Risk Management

1-203-295-2143

Visit www.vanderbiltchemicals.com for more information.

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