




Material Safety Data Sheet

chemusa

Section I. Chemical Product and Company Identification			
Product Name/ Trade Name	VANCIDE® 51	Code	47808
		CAS#	Mixture.
Supplier	R.T. VANDERBILT COMPANY, INC. 30 WINFIELD STREET NORWALK, CT 06855	In case of Emergency	Call: (203) 853-1400
			
Synonym	Not available.		
Chemical Name	Not applicable.		
Chemical Family	Not available.		
Chemical Formula	Not applicable.		
Material Uses	Industrial applications: Preservative.		
TSCA Status	TSCA 8(b) inventory: Ingredients listed ; Product exempt under FIFRA		

Section II. Composition and Information on Ingredients			
	Name	CAS #	% by Weight
1)	sodium dimethyldithiocarbamate	128-04-1	27.6
2)	sodium 2-mercaptobenzothiazole	2492-26-4	2.4
3)	water	7732-18-5	70

Section III. Hazards Identification	
Emergency Overview	Pale yellowish-green liquid. May cause eye and skin irritation.

Section IV. First Aid Measures	
Eye Contact	If in eyes, hold eyelids open and flush with a gentle stream of water for 15 minutes. Call a physician.
Skin Contact	If on skin, immediately flush with plenty of water for at least 15 minutes.
Inhalation	If inhaled, remove victim to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. Get medical attention.
Ingestion	If swallowed, drink promptly a large quantity of milk, egg whites, gelatin solution, or if these are not available, drink large quantities of water. Do not give liquids to an unconscious person. Get medical attention.

Continued on Next Page

Section V. Fire and Explosion Data

Flammability of the Product	Not available.
Auto-Ignition Temperature	Not available.
Flash Points	Not available.
Flammable Limits	Not available.
Products of Combustion	These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ ...), sulfur oxides (SO ₂ , SO ₃ ...).
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Special Remarks on Fire Hazards	Release of carbon disulfide in acid media may result in a flammable mixture in the headspace.
Special Remarks on Explosion Hazards	Not available.

Section VI. Accidental Release Measures

Small Spill	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and state regulations.
Large Spill	Prevent entry into sewers, basements or confined areas; dike if needed. Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and state regulations.

Section VII. Handling and Storage

Storage	Store in a cool dry place. Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited. Do not reuse empty container.
Handling Procedures and Equipment	Do not allow product to freeze. Avoid contact with skin and eyes. After handling, always wash hands thoroughly with soap and water.

Section VIII. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Personal Protection	Splash goggles. Lab coat. Gloves.
TLV / PEL	Not available.

Section IX. Physical and Chemical Properties

Appearance	Pale yellowish-green. Liquid.
Molecular Weight	Not applicable.
pH (1% soln/water)	Not available.
Boiling/Condensation Point	The lowest known value is 100°C (212°F) (water).
Melting/Sublimation Point	May start to solidify at 0°C (32°F) based on data for: water.
Specific Gravity	1.14 (Water = 1)
Density	Not available.
Vapor Pressure	Not available.
Vapor Density	Not available.
Volatility	Not available.
Odor / Odor Threshold	Faint amine like.
Evaporation rate	Not available.
Viscosity	Not available.
Water/Oil Dist. Coeff.	The product is much more soluble in water.
Solubility	Easily soluble in cold water, methanol, acetone. Very slightly soluble in diethyl ether. Insoluble in n-octanol.

Section X. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Not available.
Incompatibility with Various Substances	acids
Corrosivity	Not available.
Special Remarks on Reactivity	Carbon disulfide will be released in acid media, or in buffered systems below pH 8. In a closed system, complete decomposition could produce carbon disulfide concentrations at or above the lower explosion limit (LEL = 10,000 ppm).

Section XI. Toxicological Information


Routes of Entry	Absorbed through skin. Eye contact. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 3120 mg/kg [Rat]. Acute dermal toxicity (LD50): >2000 mg/kg [Rabbit]. Acute inhalation toxicity (LC50), 4 hour: 2.05 mg/l [Rat].
Special Remarks on Toxicity to Animals	Eye irritation: Moderate irritant to ocular tissue Primary skin irritation index: 1.67 (slight)
Acute Effects	
Eye contact	This product is an eye irritant.

Continued on Next Page

Skin Contact	Mild skin irritant.
Sensitization	Non-sensitizer for skin.
Ingestion	Slightly hazardous in case of ingestion.
Inhalation	Non-irritant for lungs. Non-sensitizer for lungs.
Remarks	Not available.
Chronic Effects on Humans	<p>CARCINOGENIC EFFECTS: Not available.</p> <p>MUTAGENIC EFFECTS: 40% aqueous sodium dimethyldithiocarbamate showed a positive response in tester strains TA100, TA1535 and TA1537, with and without metabolic activation. A positive response did not occur for tester strains TA98 and TA1538, with or without metabolic activation.</p> <p>40% aqueous sodium dimethyldithiocarbamate showed no evidence of clastogenic activity in vitro cytogenetic test.</p> <p>TERATOGENIC EFFECTS: Not available.</p> <p>DEVELOPMENTAL TOXICITY: Maternal Marginal Effect Level = 5 mg/k in rats. No developmental toxicity in rats at oral dose levels which produced significant evidence of maternal toxicity.</p>
Remarks	Not available.

Section XII. Ecological Information	
Ecotoxicity	96 Hr LC50 2.7 ug/l (Mysid shrimp)
BOD5 and COD	The COD is 425000 mg/l[day(s)].
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.
Special Remarks on the Products of Biodegradation	Not available.

Section XIII. Disposal Considerations	
Waste information	RCRA Hazardous Waste: Sodium dimethyldithiocarbamate, U382.
Waste stream	Not available.

Section XIV. Transport Information	
DOT	Not a DOT controlled material (United States). 
Remarks	Not applicable.
Maritime transportation	Not available.

Section XV. Other Regulatory Information and Pictograms

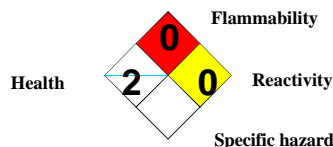
Classifications	HCS (USA)	Not controlled under the HCS (United States).
Federal and State Regulations		SARA 302/304/311/312 hazardous chemicals: sodium dimethyldithiocarbamate SARA 311/312 MSDS distribution - chemical inventory - hazard identification: sodium dimethyldithiocarbamate: delayed health hazard SARA 313 toxic chemical notification and release reporting: sodium dimethyldithiocarbamate 27.6%

Remarks Registered under EPA FIFRA. EPA Registration Number 1965-8

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

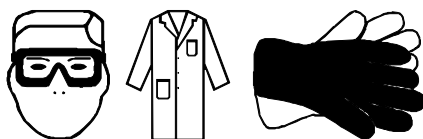
Health Hazard	2
Fire Hazard	0
Reactivity	0
Personal Protection	j

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



Other regulatory specifications EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.
CEPA DSL: VANCIDE® 51

Protective Clothing (Pictograms)



Section XVI. Other Information

References Not available.

Other Special Considerations Not available.

Validated by Erin A. Bendig on 3/1/2000.

Verified by Erin A. Bendig.

Printed 3/2/2000.

Information Contact David Bower, Ph.D. (203) 853-1400 ext. 233
Corporate Risk Management

Notice to Reader

Information presented herein has been compiled from sources considered to be dependable and is accurate and reliable to the best of our knowledge and belief but is not guaranteed to be so. Nothing herein is to be construed as recommending any practice or any product in violation of any patent or in violation of any law or regulation. It is the user's responsibility to determine for himself the suitability of any material for a specific purpose and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and, since conditions of use are not under our control, we must necessarily disclaim all liability with respect to the use of any material supplied by us.