

003 08/02/07 VANWET 9N9 NONYLPEENOL POLYETHYLENE GLYCOL ETHER
PRODUCT NAME: VANWET 9N9 NONYLPHENOL POLYETHYLENE GLYCOL ETHER
MSDS NUMBER: UZNOO24J
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Material Safety Data Sheet

1. Product and Company Identification

Product Name VANNET 9N9 NONYLPEENOL POLYETHYLENE GLYCOL ETHER

Distributed by:

Univar USA Inc.

17425 NE Union Hill Road
Redmond, WA 98052
4258893400

2. Hazards Identification

Emergency Overview

Color: Brown

Physical State: Liquid

Odor: Mild

Hazards of product:

WARNING! Causes eye irritation. Harmful if inhaled. May be harmful if absorbed through skin. May be harmful if swallowed. Aspiration hazard. Can enter lungs and cause damage. Isolate area. Keep up wind of spill.

OSHA Hazard Communication Standard

This product is a Hazardous Chemical as defined by the OSHA Hazard Communication Standard, 29 CER 1910.1200.

Potential Health Effects

Eye Contact: May cause severe eye irritation. May cause severe corneal injury.

Skin Contact: Prolonged contact may cause slight skin irritation with local redness.

Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts. Similar materials have been shown to cause lung effects following contact with the skin of rabbits.

Inhalation: Prolonged excessive exposure may cause serious adverse effects, even death. Vapor may cause irritation of the upper respiratory tract (nose and throat). Mist may cause irritation of upper respiratory tract (nose and throat).

Ingestion: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury. Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

Effects of Repeated Exposure: For this family of materials: In animals, effects have been reported on the following organs: Kidney. Liver.

Birth Defects/Developmental Effects: For this family of materials: Has been toxic to the fetus in lab animals at doses toxic to the mother.

3. Composition Information

<u>Component</u>	<u>CAS #</u>	<u>Amount</u>
Poly (oxy-1, 2-ethanediyl), alpha-(4-nonylphenyl) -omega-hydroxy-branched	127087-87-0	>= 97.0 %
Poly (ethylene oxide)	25322-68-3	<= 3.0 %
Dinonyiphenyl polyoxysthylene	9014-93-1	< 2.0 %

4. First Aid Measures

Eye Contact: Immediately flush eyes with water; remove contact lenses, if present, after the first 5 minutes, then continue flushing eyes for at least 15 minutes. Obtain medical attention without delay, preferably from an ophthalmologist.

Skin Contact: Wash skin with plenty of water.

Inhalation: Move person to fresh air. If not breathing, give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). If breathing is difficult, oxygen should be administered by qualified personnel. Call a physician or transport to a medical facility.

Ingestion: Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

Notes to Physician: Maintain adequate ventilation and oxygenation of the patient. Respiratory symptoms, including pulmonary edema, may be delayed. Persons receiving significant exposure should be observed for 24-48 hours for signs of respiratory distress. The decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire Fighting Measures

Extinguishing Media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Do not use direct water stream. May spread fire. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

Special Protective Equipment for Firefighters: Wear positive-pressure self contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Unusual Fire and Explosion Hazards: Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

6. Accidental Release Measures

Steps to be taken if Material is Released or Spilled: Contain spilled material if possible.

Absorb with materials such as: Sand or Dirt. Collect in suitable and properly labeled containers.

Do not use water for cleanup. See Section 13, Disposal Considerations, for additional information.

Personal Precautions: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Keep upwind of spill. Ventilate area of leak or spill. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection. Refer to Section 7, Handling, for additional precautionary measures.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information.

7. Handling and Storage

General Handling: Avoid contact with eyes, skin, and clothing. Avoid breathing vapor. Do not swallow. Wash thoroughly after handling. Keep container closed. Use with adequate ventilation. See Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION.

Storage:

No specific requirements.

Shelf life: Use within 24 Months. The shelf life given is for unopened containers stored under moderate temperature conditions

8. Exposure Controls / Personal Protection

Exposure Limits

<u>Component</u>	<u>List</u>	<u>Type</u>	<u>Value</u>
Poly (ethylene oxide)	WEEL	TWA Particulate.	10 mg/m ³

Personal Protection

Eye/Face Protection: Use chemical goggles.

Skin Protection: Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

Hand protection: Use gloves chemically resistant to this material

Examples of preferred glove barrier materials include: Butyl rubber. Chlorinated polyethylene. Polyethylene. Ethyl vinyl alcohol laminate (EVAL). Polyvinyl chloride (PVC or vinyl). Styrene/butadiene rubber. Viton.

Examples of acceptable glove barrier materials include: Natural rubber (latex). Neoprene. Nitrile/butadiene rubber (nitrile or NBR). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

Respiratory Protection: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator. In dusty or misty atmospheres, use an approved particulate respirator. The following should be effective types of air-purifying respirators: Organic vapor cartridge with a particulate pre-filter.

Ingestion: Avoid ingestion of even very small amounts; do not consume or store food or tobacco in the work area; wash hands and face before smoking or eating.

Engineering Controls

Ventilation: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

9. Physical and Chemical Properties

Physical State	Liquid
Color	Brown
Odor	Mild
Flash Point - Closed Cup	247 deg C (477 deg F) ASTM D93
Flash Point - Open Cup	282 deg C (540 deg F) ASTM D92
Flammable Limits In Air	Lower: No test data available Upper: No test data available
Auto ignition Temperature	No test data available
Vapor Pressure	< 0.01 mmHg @ 20 deg C Calculated
Boiling Point (760 mmHg)	> 250 deg C (> 482 deg F) Calculated decomposes before boiling.
Vapor Density (air=1)	>1 Calculated
Specific Gravity (H2O=1)	1.057 20 deg C/20 deg C Calculated
Freezing Point	3.8 deg C (38.8 deg F) Calculated
Melting Point	Not applicable to liquids
Solubility in Water (by weight)	completely soluble but some compositions may form gels
pH	No test data available
Molecular Weight	616 g/mol Calculated
Kinematic Viscosity	237 cSt Calculated

10. Stability and Reactivity

Stability/Instability-Thermally stable at typical use temperatures.

Conditions to Avoid: Exposure to elevated temperatures can cause product to decompose.

Incompatible Materials: Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

Hazardous Polymerization-Will not occur.

Thermal Decomposition-Decomposition products depend upon temperature, air supply and the presence of other materials.

11. Toxicological Information

Acute Toxicity

Ingestion

Typical for this family of materials. LD50, Rat 960-3,980 mg/kg

Skin Absorption

Typical for this family of materials. LD50, Rabbit 2,000-2,991 mg/kg

Inhalation

Typical for this family of materials. LD50, 4 h, Aerosol, Rat 1.15 mg/L

Sensitization

Skin

For this family of materials: Did not cause allergic skin reactions when tested in humans.

Repeated Dose Toxicity

For this family of materials: In animals, effects have been reported on the following organs:

Kidney. Liver.

Chronic Toxicity and Carcinogenicity

For this family of materials: Did not cause cancer in laboratory animals.

Developmental Toxicity

For this family of materials: Has been toxic to the fetus in lab animals at doses toxic to the mother. For this family of materials: Did not cause birth defects in laboratory animals.

Genetic Toxicology

For this family of materials: In vitro genetic toxicity studies were negative.

12. Ecological Information

CHEMICAL FATE

Movement & Partitioning-No relevant information found.

Persistence and Degradability

For this family of materials: Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

Chemical Oxygen Demand: 2.09-2.25 mg/mg

Theoretical Oxygen Demand: 2.23-2.35 mg/mg

ECOTOXICITY

For this family of materials: Material is moderately toxic to aquatic organisms on an acute basis (LC50/EC50 between 1 and 10 mg/L in most sensitive species tested)

Fish Acute & Prolonged Toxicity

For this family of materials: LC50, fathead minnow (*Pimephales promelas*): 3.8-6.2 mg/L

Aquatic Invertebrate Acute Toxicity

For this family of materials: LC50, water flea *Daphnia magna*: 9.3-21.4 mg/L

Toxicity to Micro-organisms

For this family of materials: IC50; bacteria, Growth inhibition, 16 h:> 1,000 mg/L

13. Disposal Considerations

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. VENDOR HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device, Waste water treatment system.

14. Transport Information

DOT Non-Bulk NOT REGULATED

DOT Bulk NOT REGULATED

IMDG NOT REGULATED

ICAO/IATA NOT REGULATED

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. Regulatory Information

OSHA Hazard Communication Standard

This product is a Hazardous Chemical as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right to-Know Act of 1986) Sections 311 and 312

Immediate (Acute) Health Hazard Yes

Delayed (Chronic) Health Hazard Yes

Fire Hazard No

Reactive Hazard No

Sudden Release of Pressure Hazard No

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to Know Act of 1986) Section 313

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

Pennsylvania (Worker and Community Right To-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:

To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

WARNING: This product contains a chemical(s) known to the State of California to cause cancer.

Component	CAS #	Amount
1,4-Dioxane	123-91-1	20.0PPM
Ethylene oxide	75-21-8	10.0PPM

California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)

WARNING: This product contains a chemical(s) known to the State of California to cause birth defects or other reproductive harm.

Component	CAS #	Amount
Ethylene oxide	75-21-8	10.0PPM

US. Toxic Substances Control Act

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30

CEPA - Domestic Substances List (DSL)

All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

16. Other Information

Hazard Rating System

NFPA	Health	Fire	Reactivity
	3	1	0

Recommended Uses and Restrictions

Multi-purpose surfactant. NOTICE! NOT TO BE USED AS A BIOCIDES IN INTRAVAGINAL END-USE APPLICATIONS (INCLUDING SPERMICIDES). FOR INDUSTRY USE ONLY. Vendor recommends that you use this product in a manner consistent with the listed use.

Legend

N/A Not available

W/W Weight/Weight

OEL Occupational Exposure Limit

STEL Short Term Exposure Limit

TWA Time Weighted Average

ACGIH American Conference of Governmental Industrial Hygienists, Inc.
DOW IHG Dow Industrial Hygiene Guideline
WEEL Workplace Environmental Exposure Level
HAZ_DES Hazard Designation

Action Level A value set by OSHA that is lower than the PEL which will trigger the need for activities such as exposure monitoring and medical surveillance if exceeded.

***** FOR ADDITIONAL INFORMATION*****

CONTACT: MSDS COORDINATOR UNIVAR USA INC.

DURING BUSINESS HOURS, PACIFIC TIME (425)889-3400

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