

Telephone in Canada: 613-796-1606



SAFETY DATA SHEET

Section 1: Identification

1.1 Product identifier:

Vesmody® U505

1.2 Recommended use:

Identified uses: Rheology modifier for waterborne coating.

Restrictions on use: Industrial uses only.

1.3 Supplier:

Wanhua Chemical (America) Co., Ltd. 3803 West Chester Pike, Suite 240 Newtown Square, PA 19073

Customer service telephone: 610-566-5297

www.whchem.com

1.4 Emergency telephone number:

North America: Chemtrec 800-424-9300 (domestic)

+1-703-527-3887 (international, collect calls accepted)

Europe: +31 20 20 65132/65130 (08:30-17:30) +44 780 183 7343

Section 2: Hazard Identification

2.1 Classification:

Classified according to US Hazard Communication Standard (HCS 2012) and Canada Hazardous Products Regulations (WHMIS 2015).

Eye irritation Cat. 2A; H319

2.2 Label elements:



Warning

Causes serious eye irritation.

Prevention

Wash hands and exposed skin thoroughly after handling

Wear protective gloves and face protection.

Response

 $\begin{tabular}{l} \textbf{IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue is the contact lenses of the con$

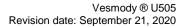
If eye irritation persists: Get medical attention.

2.3 Other hazards:

Not available

Section 3: Composition/Information on Ingredients

Chemical Name	CAS RN®	<u>Wt.%</u>	GHS Classification
Diethylene glycol butyl ether	112-34-5	20	Eye irrit. 2; H319
Polyurethane copolymer	Not available	40	Not classified
Water	7723-18-5	40	Not classified





Section 4: First-aid Measures

4.1 Description of first-aid measures:

Inhalation: Remove source of exposure or move to fresh air. Get medical advice if you feel unwell or are concerned.

Skin contact: Rinse with lukewarm, gently flowing water for 5 minutes. If skin irritation occurs get medical advice.

Eye contact: Rinse the contaminated eye(s) with lukewarm, gently flowing water for several minutes, while holding the eyelid(s) open. If eye irritation persists, get medical attention.

Ingestion: Call a Poison Centre or doctor if you feel unwell or are concerned.

4.2 Most important symptoms and effects, acute and delayed:

See Section 11 of this SDS where additional symptoms and important health effects are described.

Liquid causes serious eye irritation.

Swallowing may cause nausea, vomiting and diarrhea. Prolonged or repeated skin contact may cause mild irritation.

4.3 Indication of any immediate medical attention and special treatment needed:

None known

Section 5: Fire-fighting Measures

5.1 Extinguishing media:

Water fog or fine spray, alcohol-resistant foam, carbon dioxide or dry chemical (BC powder).

Use water spray to cool fire-exposed containers.

Unsuitable extinguishing media: None known

5.2 Special hazards arising from the chemical:

Product may burn if involved in a fire, once the water has evaporated.

Combustion products may include toxic carbon monoxide, hydrogen cyanide, nitrogen oxides, aldehydes and carbon dioxide. If involved in a fire, closed containers may rupture.

5.3 Special protective equipment and precautions for firefighters:

As for any fire, evacuate the area and fight the fire from a safe distance. Firefighters must wear full protective equipment including self-contained breathing apparatus with chemical protection clothing when firefighters are exposed to decomposition products from this material.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Isolate the area; keep all unprotected people away from the spill area. Ventilate the area.

Wear protective gloves or protective clothing and eye protection or face protection (See Section 8).

Ensure clean-up is conducted by trained personnel only.

Do not touch or walk through the spilled material. Spilled material may pose a slipping hazard.

Do not release to drains, risk of blockage from solidified polymer material.

6.2 Environmental precautions:

Avoid releases to the environment and prevent material from entering confined areas, domestic sewers/drains, natural waterways, or storm water management systems.

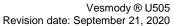
6.3 Methods and material for containment and cleaning up:

Stop the spill if it is safe to do so. Contain the spill with earth, sand or other suitable non-combustible absorbent. Clean up spills immediately.

<u>Small spills</u>: Cover spilled liquid with a non-combustible absorbent (eg. sand, diatomaceous earth, universal binding agent). Scoop up spilled product and any contaminated absorbents into appropriate, labeled containers. Contaminated absorbent may pose the same hazards as the spilled product.

Large liquid spills: Pump spilled liquid into suitable containers.

Flush the area with water and collect wash-water for proper disposal.





Section 7: Handling and Storage

7.1 Precautions for safe handling:

Wear eye protection, protective gloves, clothing and other equipment required for the workplace.

Wash hands and exposed skin thoroughly, immediately after exposure to product and at the end of the work-shift.

Do not breathe fumes or spray.

Do not eat, drink or smoke while handling this product.

7.2 Conditions for safe storage:

Store at temperatures between 5-35°C. Protect from freezing.

Keep containers tightly closed when not in use.

Store in original container.

Store in a well-ventilated place protected from direct sunlight.

Store away heat and ignition sources.

Store away from strong acids, strong bases, oxidizing agents and other incompatible materials (see Section 10).

Store away from food and feed.

Section 8: Exposure Controls / Personal Protection

8.1 Control parameters:

Occupational Exposure Limits: Consult local authorities for acceptable exposure limits.

Ingredient	ACGIH® TLV®	U.S. OSHA PEL	Other Exposure Limits
Diethylene glycol butyl ether	10 ppm TWA	Not established	SCOEL (EU): 10 ppm (67.5 mg/m ³) TWA SCOEL (EU): 15 ppm (101.2 mg/m ³) STEL
Polyurethane copolymer	Not established	Not established	Not established

8.2 Exposure controls:

Exposure control measures: Facilities utilizing or storing this material should be equipped with good general ventilation or local exhaust ventilation, eyewash facilities and a safety shower. Local exhaust ventilation may be required for operations involving heating or spraying.

8.3 Individual protection measures:

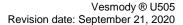
Eye/Face protection: Wear safety glasses or chemical safety goggles. Wear a face-shield or full-face respirator when needed to prevent exposure to fumes.

Skin protection: Wear chemical protective gloves. Impervious glove materials include: butyl rubber, nitrile rubber. Wear clean, body-covering, protective coveralls to prevent skin exposure.

Resistance of specific materials can vary from product to product; evaluate resistance under conditions of use and maintain clothing carefully. Contact safety supplier for specifications. Dispose of contaminated gloves.

Respiratory protection: If fume or spray concentrations in air exceed any occupational exposure limits, wear respiratory protection. Respiratory protection may be necessary if the product is heated to release fume or if a mist is created. If airborne fume or mist exposure is likely wear an approved, chemical cartridge respirator with cartridges to protect against organic vapor (e.g. NIOSH air-purifying respirator).

A respiratory protection program that meets the regulatory requirement, such as OSHA's 29 CFR 1910.134 or Canadian Standards Association (CSA) Standard Z94.4, must be followed whenever workplace conditions warrant a respirator's use.





Section 9: Physic	al and Chemica	l Properties
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9.1 Information on basic physical and chemical properties:			
Appearance:	Liquid. Clear to opaque.		
Odor:	Faint odor		
Odor threshold:	Not available		
pH:	6 - 7		
Melting point/freezing point:	Not available		
Initial boiling point and boiling range:	Similar to water ~100°C		
Flash point:	Not available		
Evaporation rate:	Not available		
Flammability:	Not available		
Upper/lower flammability or explosive limits:	Not available		
Evaporation rate:	Not available		
Vapor pressure:	Not available		
Vapor density:	Not available (air = 1)		
Relative density:	1.04 – 1.05 @ 20°C (water = 1)		
Solubility (ies):	Miscible in water		
Partition coefficient (n-octanol/water):	Not available		
Auto-ignition temperature:	Not available		
Decomposition temperature:	Not available		
Viscosity:	3 - 8 Pa.s @ 25°C (dynamic)		

Section 10: Stability and Reactivity

10.1 Reactivity:

Not reactive under recommended conditions of use.

10.2 Chemical stability:

Stable under recommended conditions of handling and storage.

10.3 Possibility of hazardous reactions:

Not available

10.4 Conditions to avoid:

Avoid high temperatures (≥35°C) and freezing (≤5°C). Avoid exposure to sunlight and other light sources.

10.5 Incompatible materials:

Avoid contact with strong acids, strong bases and electrolyte solutions.

10.6 Hazardous decomposition products:

Thermal decomposition at temperatures greater than 200°C may produce irritating or toxic fumes containing aldehydes. Prolonged exposure to air may result in the formation of reactive peroxides; Light and heat increase the rate of peroxide formation.

Section 11: Toxicological Information

11.1 Information on toxicological effects:

Likely routes of exposure:

Inhalation of spray. Skin contact. Eye contact. Ingestion.

11.2 Information on acute health effects:

Inhalation: Data not available for the mixture.

Skin: Data not available for the mixture.

Ingestion: Data not available for the mixture.





11.2 Information on acute health effects: Acute Toxicity Data

Ingredient	<u>LD₅₀ Oral</u>	LD ₅₀ Dermal	<u>LC₅₀ Inhalation</u> <u>4-hour</u>
Diethylene glycol butyl ether	5660 mg/kg (rat)	2700 mg/kg (rabbit)	Not available
Polyurethane copolymer	Not available	Not available	Not available

Skin corrosion / irritation

Data not available for the mixture.

Serious eye damage / irritation

Data not available for the mixture.

Diethylene glycol butyl ether caused mild to moderate eye irritation in animal tests.

STOT (Specific Target Organ Toxicity) - Single exposure

Data not available. Fumes from thermal decomposition may cause irritation to the respiratory tract.

Aspiration hazard

Data not available.

11.3 Information on delayed and chronic health effects:

STOT (Specific Target Organ Toxicity) - Repeated exposure

Data not available for the mixture.

Sensitization - respiratory and/or skin

Data not available for the mixture.

Carcinogenicity

Component substances are not evaluated for carcinogenicity by the International Agency for Research on Cancer (IARC), the American Conference of Governmental Industrial Hygienists (ACGIH®) or the US National Toxicology Program (NTP). Product does not meet the criteria for classification in the hazard class Carcinogenicity.

Reproductive toxicity

Data not available for the mixture.

Germ cell mutagenicity

Data not available.

Interactive effects

Data not available

Section 12: Ecological Information

12.1 Toxicity:

Data not available for the mixture. No component substances are classified as hazardous to the aquatic environment.

12.2 Persistence and degradability:

Data not available for the mixture.

12.3 Bioaccumulative potential:

Data not available for the mixture.

12.4 Mobility in soil:

Data not available for the mixture.

Section 13: Disposal Considerations

13.1 Disposal methods:

Do NOT discard into any sewers, on the ground or into any body of water.

Store material for disposal as indicated in Section 7 Handling and Storage.

Dispose of waste in accordance with relevant national, regional and local environmental control provisions.





Section 14: Transport Information

14.1 U.S. Hazardous Materials Regulation (DOT 49CFR):

Not regulated

14.2 Shipping name:

Not applicable

14.3 Transport hazard class(es):

Not applicable

14.4 Packing group:

Not applicable

14.5 Environmental hazards:

Not applicable

14.6 Special precautions for user:

Not available

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

Not available

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

USA

TSCA Status: Substances are listed on the TSCA Inventory and designated as "Active" in U.S. Commerce.

Canada

NSNR Status: Substances are listed on the DSL (Domestic Substances List).

International Inventories:

Australia: Substances are listed on the Inventory of Chemical Substances (AICS).

China: Substances are listed on the Inventory of Existing Chemical Substances (IECSC).

European Union: Diethylene glycol butyl ether is listed on EINECS 203-961-6

Japan: Diethylene glycol butyl ether is listed on Existing and New Chemical Substances (ENCS).

Korea: Substances are listed on the Existing Chemicals Inventory (KECI/KECL).

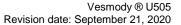
Mexico: Diethylene glycol butyl ether is listed on National Inventory Chemical Substances (INSQ).

New Zealand: Substances are listed on the Inventory of Chemicals (NZIoC).

Philippines: Substances are listed on the Inventory of Chemicals and Chemical Substances (PICCS).

Taiwan: Substances are listed on the Taiwan Chemical Substance Inventory (TCSI).

Vietnam: Polyurethane copolymer substance is listed on the National Chemicals Inventory (NCI).





Section 16: Other Information

Revision date:

September 21, 2020

Revision summary:

Not applicable

References and sources for data:

CCOHS, Cheminfo

ECHA European Chemicals Agency, Information on chemicals

HSDB® Hazardous Substances Data Bank, US National Library of Medicine

IARC monographs on the evaluation of carcinogenic risks to humans.

NIOSH Pocket Guide to Chemical Hazards

RTECS, Registry of Toxic Effects of Chemical Substances

Legend to abbreviations:

ACGIH® - American Conference of Governmental Industrial Hygienists

GHS- Globally Harmonized System for Classification and Labeling.

LD50- Median lethal dose; the dose causing 50 % lethality NIOSH-National Institute for Occupational Safety and Health

OSHA - Occupational Safety and Health Administration

TLV® - Threshold Limit Value

WHMIS - Workplace Hazardous Materials Information System.

Supplier Note:

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.