

## 1. Identification

<b>Product identifier</b>	PolyWhey® 2500 Satin
<b>Product type</b>	Liquid
<b>Other means of identification</b>	
<b>Synonyms</b>	None
<b>Product Code</b>	-
<b>Recommended use</b>	No information available.
<b>Recommended restrictions</b>	No information available.

### Manufacturer/Importer/Supplier/Distributor information

<b>Manufacturer/Supplier</b>	Vermont Natural Coatings Box 512 Hardwick, VT 05843 United States
<b>General Assistance</b>	(802) 472-8700
<b>E-Mail</b>	info@vermontnaturalcoatings.com
<b>Contact Person</b>	No information available.
<b>Emergency Telephone</b>	(802) 472-8700

## 2. Hazard(s) Identification

<b>OSHA/HCS status</b>	This material is not considered as 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.
<b>Classification of the substance or mixture</b>	Not classified.
<b>Physical hazards</b>	Not classified
<b>Health hazards</b>	Not classified
<b>GHS Label elements</b>	Not applicable.
<b>Signal word</b>	Not applicable.
<b>Hazard statement</b>	Not applicable.
<b>Precautionary statement</b>	Not applicable.
<b>Hazard(s) not otherwise classified</b>	None known.

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## 3. Composition/information on ingredients

### Mixture

<u>Chemical name</u>	<u>CAS number</u>	<u>%</u>
Dipropylene glycol n-butylether	29911-28-2	>1 - <3
1,2-Propylene glycol	57-55-6	>1 - <3
Silicon dioxide, chemically prepared	112926-00-8	>0.5 - <2
Triethyl amine	121-44-8	>0.1 - <2
Zinc oxide (ZnO)	1314-13-2	>0.1 - <2

## 4. First-aid measures

<b>Inhalation</b>	Remove to fresh air. Administer oxygen if necessary. Seek immediate medical attention.
<b>Skin contact</b>	Wash thoroughly with soap and water. If irritation persists, get medical attention.
<b>Eye contact</b>	Flush with large quantities of water for at least 15 minutes. Seek immediate medical attention.
<b>Ingestion</b>	Do not induce vomiting. Drink 1 or 2 glasses of water to dilute. Obtain medical attention immediately.
<b>Most important symptoms/effects, acute and delayed</b>	No known significant effects or critical hazards.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed. In case of shortness of breath, give oxygen. Keep victim warm.
<b>General information</b>	If exposed or concerned: get medical attention/advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	None known.
<b>Specific hazards arising from the chemical</b>	Closed containers may explode when exposed to extreme heat or fire. Decomposition of burning material may cause toxic gases to form, which may include carbon dioxide and carbon monoxide.
<b>Special protective equipment and Special firefighting procedures</b>	Self contained breathing apparatus and full protective clothing must be worn in case of fire.

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## 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.

## 7. Handling and storage

### Precautions for safe handling

Put on appropriate personal protective equipment (See Section 8).

### 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.

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## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
Silicon dioxide, chemically prepared	PEL(TWA)	80 mg/m <sup>3</sup>
Triethyl amine	PEL(TWA)	25 ppm (100 mg/m <sup>3</sup> )
Zinc oxide (ZnO)	PEL(TWA)	5 mg/m <sup>3</sup> (fume) 15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (resp dust)

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Silicon dioxide, chemically prepared	TWA	80 mg/m <sup>3</sup>
Triethyl amine	TWA	25 ppm (100 mg/m <sup>3</sup> )
Zinc oxide (ZnO)	TWA	5 mg/m <sup>3</sup> (fume) 15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (resp dust)

#### US. OSHA Table Z-2 (29 CFR 1910.1000)

None of the components in this product is listed.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

None of the components in this product is listed.

#### US. ACGIH Threshold Limit Values

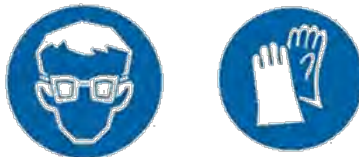
Components	Type	Value
Silicon dioxide, chemically prepared	TLV(TWA)	80 mg/m <sup>3</sup>
Triethyl amine	TLV(TWA) TLV(ST)	0.5 ppm 1 ppm
Zinc oxide (ZnO)	TLV(TWA) TLV(ST)	2 mg/m <sup>3</sup> 10 mg/m <sup>3</sup>

#### US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value
Silicon dioxide, chemically prepared	REL(TWA)	6 mg/m <sup>3</sup>
Triethyl amine	REL(TWA) REL (STEL)	10 ppm 15 ppm
Zinc oxide (ZnO)	REL(TWA) REL(Ceiling)	5 mg/m <sup>3</sup> 15 mg/m <sup>3</sup>

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## Protective Equipment



## Appropriate engineering controls

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

## Individual protection measures, such as personal protective equipment

### 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.

### 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. > 8 hours (breakthrough time): nitrile rubber

#### 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.

#### Other

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.

### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

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.

## 9. Physical and chemical properties

### Appearance

Milky liquid.

### Physical state

Liquid.

### Form

Liquid.

### Color

Milky.

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<b>Odor</b>	Slight odor.
<b>Odor threshold</b>	No information available.
<b>pH</b>	No information available.
<b>Melting point</b>	No information available.
<b>Freezing point</b>	No information available.
<b>Initial boiling point and boiling range</b>	212 °F
<b>Flash point</b>	None.
<b>% Volatile by Volume</b>	No information available.
<b>Evaporation rate (BuOAc=1)</b>	Slower than ether.
<b>Material Volatile Organic Compound (V.O.C.)</b>	No information available.
<b>Coating Volatile Organic Compound (V.O.C.)</b>	135 g/L (maximum)
<b>Flammability (solid, liquid, gas)</b>	None.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit – lower (%)</b>	Not applicable.
<b>Flammability limit – upper (%)</b>	Not applicable.
<b>Explosive limit - lower (%)</b>	No information available.
<b>Explosive limit - upper (%)</b>	No information available.
<b>Vapor pressure (mm Hg)</b>	< 1 mm Hg
<b>Vapor density (Air=1)</b>	Heavier than air.
<b>Relative density (Specific gravity)</b>	1.02
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Dilutable.
<b>Solubility (other)</b>	No information available.
<b>Partition coefficient (n-octanol/water)</b>	No information available.
<b>Auto-ignition temperature</b>	None.
<b>Decomposition temperature</b>	No information available.
<b>Viscosity</b>	No information available.

## 10. Stability and reactivity

<b>Reactivity</b>	Product is stable.
<b>Chemical stability</b>	Stable under recommended handling and storage conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization will not occur.
<b>Conditions to avoid</b>	Elevated temperatures. Contact with oxidizing agent.
<b>Incompatible materials</b>	Oxidizers, acids and bases.
<b>Hazardous decomposition Products</b>	Burning or decomposing film may give off carbon dioxide and or carbon monoxide.

## 11. Toxicological information

### Information on the likely routes of exposure

<b>Ingestion</b>	No specific data.
<b>Inhalation</b>	No specific data.
<b>Skin contact</b>	No specific data.
<b>Eye contact</b>	No specific data.

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**Symptoms related to the physical, chemical and toxicological characteristics** No specific data.

**Delayed and immediate effects and also chronic effects from short- and long-term exposure** No known significant effects or critical hazards.

**Numerical measures of toxicity**

Components	Test	Species	Test Results
Dipropylene glycol n-butylether (CAS 29911-28-2)	Oral LD <sub>50</sub>	Rat	1477 mg/kg
	Dermal LD <sub>50</sub>	Rabbit	5350 mg/kg
	Inhalation LC <sub>50</sub>	Rat	>2.04 mg/l, 4h
1,2-Propylene glycol (CAS 57-55-6)	Oral LD <sub>50</sub>	Rat	22000 mg/kg
	Dermal LD <sub>50</sub>	Rabbit	>2000 mg/kg
Silicon dioxide, chemically prepared (CAS 112926-00-8)	Oral LD <sub>50</sub>	Rat	>5000 mg/kg
	Dermal LD <sub>50</sub>	Rabbit	>5000 mg/kg
	Inhalation LC <sub>50</sub>	Rat	0.69 mg/l, 4h
Triethyl amine (CAS 121-44-8)	Oral LD <sub>50</sub>	Rat	730 mg/kg
	Dermal LD <sub>50</sub>	Rabbit	580 mg/kg
	Inhalation LC <sub>50</sub>	Rat	7.1 mg/l, 4h
Zinc oxide (CAS 1314-13-2)	Oral LD <sub>50</sub>	Rat	>8437 mg/kg
	Dermal LD <sub>50</sub>	Rabbit	>5000 mg/kg

**Skin corrosion/irritation** No information available.

**Serious eye damage/eye irritation** No information available.

**Respiratory or skin sensitization**

**Respiratory sensitization** No information available.

**Skin sensitization** No information available.

**Germ cell mutagenicity** No known significant effects or critical hazards.

**Carcinogenicity** No known significant effects or critical hazards.

**Reproductive toxicity** No known significant effects or critical hazards.

**Specific target organ toxicity - single exposure** No information available.

**Specific target organ toxicity - repeated exposure** Causes damage to kidney, spleen, and blood through prolonged or repeated exposure.

**Aspiration hazard** No information available.

## 12. Ecological information

**Numerical measures of toxicity**

Components	Test	Species	Test Results
Dipropylene glycol n-butylether (CAS 29911-28-2)	Fish LC <sub>50</sub>	Guppy fish ( <i>Poecilia reticulata</i> )	841 mg/l, 96h
	Crustacea EC <sub>50</sub>	Water flea ( <i>Daphnia magna</i> )	>1000 mg/l, 48h
	Algae EC <sub>50</sub>	Green algae ( <i>Selenastrum capricornutum</i> )	33.65 mg/l, 96h

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1,2-Propylene glycol (CAS 57-55-6)	Fish LC <sub>50</sub>	Rainbow trout ( <i>Oncorhynchus mykiss</i> )	40613mg/l, 96h
	Crustacea NOEC	Water flea ( <i>Ceriodaphnia sp.</i> )	13020 mg/l, 7d
	Algae NOEC	Green algae ( <i>Pseudokirchnerella subcapitata</i> )	15000 mg/l, 14d
	Fish LC <sub>50</sub>	Zebra fish ( <i>Brachydanio rerio</i> )	>1000 mg/l, 96h
Silicon dioxide, chemically prepared (CAS 112926-00-8)	Crustacea EC <sub>50</sub>	Water flea ( <i>Daphnia magna</i> )	>1000 mg/l, 24h
	Fish LC <sub>50</sub>	Orange-red killifish ( <i>Oryzias latipes</i> )	24 mg/l, 96h
Triethyl amine (CAS 121-44-8)	Crustacea EC <sub>50</sub>	Water flea ( <i>Daphnia dubia</i> )	17 mg/l, 48h
	Algae EC <sub>50</sub>	Green algae ( <i>Pseudokirchnerella subcapitata</i> )	8 mg/l, 72h
	Fish LC <sub>50</sub>	Fathead minnow ( <i>Pimephales Promelas</i> )	2,246 mg/l, 96h
Zinc oxide (ZnO) (CAS 1314-13-2)	Crustacea EC <sub>50</sub>	Water flea ( <i>Daphnia magna</i> )	24.6 mg/l, 48h

**Persistence and degradability**

No information available.

**Bioaccumulative potential**

No information available.

**Mobility in soil**

No information available.

**Other adverse effects**

No information available.

### 13. Disposal considerations

**Disposal instructions**

Waste from this product is not hazardous as defined under the Resource Conservation and Recovery Act (RCRA) 40 CFR 261. Dispose of in accordance with Federal, State and Local regulations. 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.

### 14. Transport information

In accordance with DOT  
In accordance with IMDG  
In accordance with IATA

Not regulated for transport.  
Not regulated for transport.  
Not regulated for transport.

### 15. Regulatory information



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## US federal regulations

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

## TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None of the chemicals in this product is listed.

## US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Silicon dioxide, chemically prepared (CAS 112926-00-8) Listed

Triethyl amine (CAS 121-44-8) Listed

Zinc oxide (ZnO) (CAS 1314-13-2) Listed

## CERCLA Hazardous Substance List (40 CFR 302.4)

Triethyl amine (CAS 121-44-8) Listed

## Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard	-	No
	Delayed Hazard	-	No
	Fire Hazard	-	No
	Pressure Hazard	-	No
	Reactivity Hazard	-	No

## SARA 302/304 Extremely hazardous substance

None of the chemicals in this product is listed.

## SARA 311/312 Hazardous chemical

No

## SARA 313 (TRI reporting)

Chemical Name	CAS number	% by wt
Triethyl amine	121-44-8	>0.1 - <1

## Other federal regulations

### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Triethyl amine (CAS 121-44-8)

### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

None of the chemicals in this product is listed.

### Safe Drinking Water Act (SDWA)

Triethyl amine (CAS 121-44-8)

## US State regulations

### US. New Jersey Worker and Community Right-to-Know Act

1,2-Propylene glycol (CAS 57-55-6)

Silicon dioxide, chemically prepared (CAS 112926-00-8)

Triethyl amine (CAS 121-44-8)

Zinc oxide (ZnO) (CAS 1314-13-2)

### US. Pennsylvania Worker and Community Right-to-Know Law

1,2-Propylene glycol (CAS 57-55-6)

Triethyl amine (CAS 121-44-8)

Zinc oxide (ZnO) (CAS 1314-13-2)

### US. California Proposition 65

#### US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT):

None of the chemicals in this product is listed.

# SAFETY DATA SHEET

## International Inventories

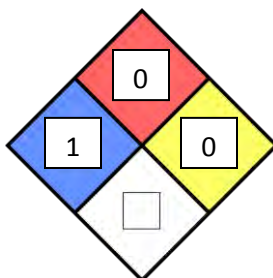
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non- Domestic Substances List (NDSL)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

## 16. Other information, including date of preparation or last revision

**Issue date** 01-10-2014  
**Revision date** 01-14-2016  
**Version #** -  
**NFPA rating**



### Key to abbreviations

ACGIH: Documentation of the Threshold Limit Values and Biological Exposure indices  
 GHS : Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA :International Air Transport Association  
 IMDG : International Maritime Dangerous Goods  
 NIOSH: The National Institute for Occupational Safety and Health  
 OSHA: Occupational Safety and Health Administration

### Disclaimer

The information, recommendations, and suggestions presented in this SDS are based upon test results and data believed to be reliable. The end user of the product has the responsibility for evaluating the adequacy of the data under the conditions of use, determining the safety, toxicity and suitability of the product under these conditions, and obtaining additional or clarifying information where uncertainty exists. No guarantee expressed or implied is made as to the effects of such use, the results to be obtained, or the safety and toxicity of the product in any specific application. Furthermore, the information herein is not represented as absolutely complete, since it is not practicable to provide all the scientific and study information in the format of this document, plus additional information may be necessary under exceptional conditions of use, or because of applicable laws or government regulations. All materials may present unknown hazards and should be used with caution.