

1. Identification

Product identifier	PolyWhey® EZ-PRO
Product type	Liquid
Other means of identification	
Synonyms	None
Product Code	-
Recommended use	No information available. No
Recommended restrictions	information available.

Manufacturer/Importer/Supplier/Distributor information

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

2. Hazard(s) Identification

OSHA/HCS status	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.
Classification of the substance or mixture	Not classified.
Physical hazards	Not classified
Health hazards	Not classified
GHS Label elements	Not applicable.
Signal word	Not applicable.
Hazard statement	Not applicable.
Precautionary statement	Not applicable.
Hazard(s) not otherwise classified	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

Inhalation	Remove to fresh air. Administer oxygen if necessary. Seek immediate medical attention.
Skin contact	Wash thoroughly with soap and water. If irritation persists, get medical attention.
Eye contact	Flush with large quantities of water for at least 15 minutes. Seek immediate medical attention.
Ingestion	Do not induce vomiting. Drink 1 or 2 glasses of water to dilute. Obtain medical attention immediately.
Most important symptoms/effects, acute and delayed	No known significant effects or critical hazards.
Indication of immediate medical attention and special treatment needed	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.
General information	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

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	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.
Special protective equipment and Special firefighting procedures	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 ³
Triethyl amine	PEL(TWA)	25 ppm (100 mg/m ³)
Zinc oxide (ZnO)	PEL(TWA)	5 mg/m ³ (fume) 15 mg/m ³ (total dust) 5 mg/m ³ (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 ³
Triethyl amine	TWA	25 ppm (100 mg/m ³)
Zinc oxide (ZnO)	TWA	5 mg/m ³ (fume) 15 mg/m ³ (total dust) 5 mg/m ³ (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 ³
Triethyl amine	TLV(TWA) TLV(ST)	0.5 ppm 1 ppm
Zinc oxide (ZnO)	TLV(TWA) TLV(ST)	2 mg/m ³ 10 mg/m ³

US. NIOSH: Pocket Guide to Chemical Hazards

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

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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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Odor	Slight odor.
Odor threshold	No information available.
pH	No information available.
Melting point	No information available.
Freezing point	No information available.
Initial boiling point and boiling range	212 °F
Flash point	None.
% Volatile by Volume	No information available.
Evaporation rate (BuOAc=1)	Slower than ether.
Material Volatile Organic Compound (V.O.C.)	No information available.
Coating Volatile Organic Compound (V.O.C.)	210 g/L (maximum)
Flammability (solid, liquid, gas)	None.
Upper/lower flammability or explosive limits	
Flammability limit – lower (%)	Not applicable.
Flammability limit – upper (%)	Not applicable.
Explosive limit - lower (%)	No information available.
Explosive limit - upper (%)	No information available.
Vapor pressure (mm Hg)	< 1 mm Hg
Vapor density (Air=1)	Heavier than air.
Relative density (Specific gravity)	1.02
Solubility(ies)	
Solubility (water)	Dilutable.
Solubility (other)	No information available.
Partition coefficient (n-octanol/water)	No information available.
Auto-ignition temperature	None.
Decomposition temperature	No information available.
Viscosity	No information available.

10. Stability and reactivity

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

11. Toxicological information

Information on the likely routes of exposure

Ingestion	No specific data.
Inhalation	No specific data.
Skin contact	No specific data.
Eye contact	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 ₅₀	Rat	1477 mg/kg
	Dermal LD ₅₀	Rabbit	5350 mg/kg
	Inhalation LC ₅₀	Rat	>2.04 mg/l, 4h
1,2-Propylene glycol (CAS 57-55-6)	Oral LD ₅₀	Rat	22000 mg/kg
	Dermal LD ₅₀	Rabbit	>2000 mg/kg
Silicon dioxide, chemically prepared (CAS 112926-00-8)	Oral LD ₅₀	Rat	>5000 mg/kg
	Dermal LD ₅₀	Rabbit	>5000 mg/kg
	Inhalation LC ₅₀	Rat	0.69 mg/l, 4h
Triethyl amine (CAS 121-44-8)	Oral LD ₅₀	Rat	730 mg/kg
	Dermal LD ₅₀	Rabbit	580 mg/kg
	Inhalation LC ₅₀	Rat	7.1 mg/l, 4h
Zinc oxide (CAS 1314-13-2)	Oral LD ₅₀	Rat	>8437 mg/kg
	Dermal LD ₅₀	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 ₅₀	Guppy fish (<i>Poecilia reticulata</i>)	841 mg/l, 96h
	Crustacea EC ₅₀	Water flea (<i>Daphnia magna</i>)	>1000 mg/l, 48h
	Algae EC ₅₀	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 ₅₀	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 ₅₀	Zebra fish (<i>Brachydanio rerio</i>)	>1000 mg/l, 96h
Silicon dioxide, chemically prepared (CAS 112926-00-8)	Crustacea EC ₅₀	Water flea (<i>Daphnia magna</i>)	>1000 mg/l, 24h
	Fish LC ₅₀	Orange-red killifish (<i>Oryzias latipes</i>)	24 mg/l, 96h
Triethyl amine (CAS 121-44-8)	Crustacea EC ₅₀	Water flea (<i>Daphnia dubia</i>)	17 mg/l, 48h
	Algae EC ₅₀	Green algae (<i>Pseudokirchnerella subcapitata</i>)	8 mg/l, 72h
	Fish LC ₅₀	Fathead minnow (<i>Pimephales Promelas</i>)	2,246 mg/l, 96h
Zinc oxide (ZnO) (CAS 1314-13-2)	Crustacea EC ₅₀	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 Listed
(CAS 112926-00-8)

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.

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International Inventories

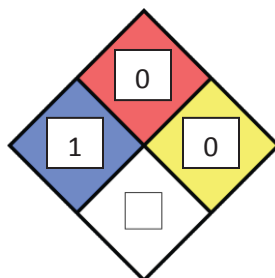
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non- Domestic Substances List (NDSL)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
United 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.