VE-B

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 01/12/2016

SECTION 1: Identification

1.1. Identification

Product form : Mixture

Product name : VE-B

Product code : VE-B

1.2. Relevant identified uses of the substance or mixture and uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Protective Industrial Polymers
7875 Bliss Parkway
North Ridgeville, Ohio 44039 - USA-Ohio
T 440-327-0015
www.protectpoly.com

1.4. Emergency telephone number

Emergency number : Chemtrec: 800-427-9300 (Outside USA) 703-527-3887

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Flammable liquids Category 4	H227
Organic Peroxide Category F	H242
Acute toxicity (oral) Category 4	H302
Acute toxicity (dermal) Category 2	H310
Acute toxicity (inhalation) Category 2	H330
Acute toxicity (inhalation:dust,mist) Category 4	H332
Skin corrosion/irritation Category 1B	H314
Serious eye damage/eye irritation Category 1	H318
Carcinogenicity Category 1B	H350
Specific target organ toxicity (single exposure) Category 3	H336
Specific target organ toxicity (repeated exposure) Category 2	H373
Aspiration hazard Category 1	H304
Hazardous to the aquatic environment - Chronic Hazard Category 2	H411

Full text of H statements : see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :

GHS02 GHS05 GHS06 GHS07 GHS08 GHS09

Signal word (GHS-US) : Danger

Contains : 2Phenylisopropanol; 2-hydroperoxypropan-2-ylbenzene

Hazard statements (GHS-US) : H227 - Combustible liquid
H242 - Heating may cause a fire
H302+H332 - Harmful if swallowed or if inhaled
H304 - May be fatal if swallowed and enters airways
H310+H330 - Fatal in contact with skin or if inhaled
H314 - Causes severe skin burns and eye damage
H336 - May cause drowsiness or dizziness
H350 - May cause cancer
H373 - May cause damage to organs through prolonged or repeated exposure

H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (GHS-US) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P210 - Keep away from sparks. - No smoking
P220 - Keep/Store away from combustibles
P234 - Keep only in original container
P260 - Do not breathe vapors
P261 - Avoid breathing vapors
P262 - Do not get in eyes, on skin, or on clothing
P264 - Wash hands, forearms and face thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P271 - Use only outdoors or in a well-ventilated area
P273 - Avoid release to the environment
P280 - Wear protective clothing
P284 - In case of poor ventilation
P301+P310 - If swallowed: Immediately call a POISON CENTER
P301+P312 - If swallowed: Call a POISON CENTER if you feel unwell
P301+P330+P331 - If swallowed: rinse mouth. Do NOT induce vomiting
P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P308+P313 - If exposed or concerned: Get medical advice/attention
P310 - Immediately call a doctor if symptoms persist
P312 - Call a doctor if you feel unwell
P314 - Get medical advice/attention if you feel unwell
P320 - Specific treatment is urgent (see a doctor if symptoms persist. on this label)
P321 - Specific treatment (see on this label)
P330 - Rinse mouth
P331 - Do NOT induce vomiting
P361 - Take off immediately all contaminated clothing
P363 - Wash contaminated clothing before reuse
P370+P378 - In case of fire: Use carbon dioxide (CO2) to extinguish
P391 - Collect spillage
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P403+P235 - Store in a well-ventilated place. Keep cool
P405 - Store locked up
P410 - Protect from sunlight
P420 - Store away from other materials
P501 - Dispose of contents/container to in accordance with local regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
2-hydroperoxypropan-2-ylbenzene	(CAS No) 80-15-9	80 - 84	Flam. Liq. 4, H227 Acute Tox. 4 (Oral), H302 Acute Tox. 2 (Dermal), H310 Acute Tox. 4 (Inhalation:dust,mist), H332
prop-2-ylbenzene 2-phenylpropane	(CAS No) 98-82-8	10 - 25	Flam. Liq. 3, H226 Carc. 2, H351
2Phenylisopropanol	(CAS No) 617-94-7	2.5 - 10	Acute Tox. 4 (Oral), H302

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a physician immediately.

First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Call a physician immediately. Call a doctor.

First-aid measures after skin contact : Remove/Take off immediately all contaminated clothing. Call a physician immediately. Rinse skin with water/shower.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Call a physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries : May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Burns.

Symptoms/injuries after eye contact : Serious damage to eyes.

Symptoms/injuries after ingestion : Burns. Risk of lung edema.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid.

Reactivity : The product is non-reactive under normal conditions of use, storage and transport.

5.3. Advice for firefighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures : No open flames, no sparks, and no smoking. Do not breathe vapors. Only qualified personnel equipped with suitable protective equipment may intervene.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wear personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe vapors. Use only outdoors or in a well-ventilated area. Do not get in eyes, on skin, or on clothing.

Hygiene measures : Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

2Phenylisopropanol (617-94-7)
Not applicable

2-hydroperoxypropan-2-ylbenzene (80-15-9)
Not applicable

prop-2-ylbenzene 2-phenylpropane (98-82-8)		
ACGIH	ACGIH TWA (ppm)	50 ppm (Cumene; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
ACGIH	Remark (ACGIH)	Eye, skin, & URT irr; CNS impair
OSHA	OSHA PEL (TWA) (mg/m³)	245 mg/m³
OSHA	OSHA PEL (TWA) (ppm)	50 ppm

8.2. Exposure controls

Appropriate engineering controls : Ensure good ventilation of the work station.
Hand protection : Protective gloves.
Eye protection : Safety glasses.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : Wear respiratory protection.
Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : Colourless to light yellow
Odor : aromatic Pungent
Odor threshold : No data available
pH : 5 - 6
Melting point : Not applicable
Freezing point : No data available
Boiling point : 127 °F
Flash point : 174 °F
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : No data available
Explosion limits : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Vapor pressure : No data available
Relative density : No data available
Relative vapor density at 20 °C : No data available
Solubility : Water: Solubility in water of component(s) of the mixture :
• : 0.71 g/100ml • : < 0.001 g/100ml • : 0.005 g/100ml
Log Pow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed. Dermal: Fatal in contact with skin. Inhalation: Fatal if inhaled. Inhalation:dust,mist: Harmful if inhaled.

VE-B	
ATE US (oral)	439.391 mg/kg body weight
ATE US (dermal)	158.333 mg/kg body weight
ATE US (gases)	100.000 ppmV/4h
ATE US (vapors)	0.500 mg/l/4h
ATE US (dust, mist)	0.050 mg/l/4h

2Phenylisopropanol (617-94-7)	
LD50 oral rat	1300 mg/kg (Rat)
LD50 dermal rabbit	4300 mg/kg (Rabbit)
ATE US (oral)	1300.000 mg/kg body weight
ATE US (dermal)	4300.000 mg/kg body weight

2-hydroperoxypropan-2-ylbenzene (80-15-9)	
LD50 oral rat	382 mg/kg (Rat; Weight of evidence)
LD50 dermal rat	1200-1520,Rat; Weight of evidence
LD50 dermal rabbit	133 mg/kg body weight (Rabbit; Weight of evidence)
LC50 inhalation rat (mg/l)	1.37 mg/l/4h (Rat; Weight of evidence)
LC50 inhalation rat (ppm)	220 ppm/4h (Rat; Weight of evidence)
ATE US (oral)	382.000 mg/kg body weight
ATE US (dermal)	133.000 mg/kg body weight
ATE US (gases)	220.000 ppmV/4h
ATE US (vapors)	1.370 mg/l/4h
ATE US (dust, mist)	1.370 mg/l/4h

prop-2-ylbenzene 2-phenylpropane (98-82-8)	
LD50 oral rat	> 2000 mg/kg (Rat; Other; Literature study; 4000 mg/kg bodyweight; Rat; Other; Inconclusive, insufficient data)
LD50 dermal rabbit	10578 mg/kg (Rabbit; Literature study; Other)
LC50 inhalation rat (mg/l)	40 mg/l/4h (Rat; Literature study)
LC50 inhalation rat (ppm)	8000 ppm/4h (Rat; Literature study)
ATE US (dermal)	10578.000 mg/kg body weight
ATE US (gases)	8000.000 ppmV/4h
ATE US (vapors)	40.000 mg/l/4h
ATE US (dust, mist)	40.000 mg/l/4h

Skin corrosion/irritation : Causes severe skin burns and eye damage.
pH: 5 - 6

Serious eye damage/irritation : Causes serious eye damage.
pH: 5 - 6

Respiratory or skin sensitization : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : May cause cancer.

VE-B	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	3 - Reasonably anticipated to be Human Carcinogen

prop-2-ylbenzene 2-phenylpropane (98-82-8)	
IARC group	2B - Possibly carcinogenic to humans

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : May cause drowsiness or dizziness.

Specific target organ toxicity (repeated exposure) : May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard : May be fatal if swallowed and enters airways.

Symptoms/injuries after skin contact : Burns.

Symptoms/injuries after eye contact : Serious damage to eyes.

Symptoms/injuries after ingestion : Burns. Risk of lung edema.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

2-hydroperoxypropan-2-ylbenzene (80-15-9)	
LC50 fish 2	3.9 mg/l (LC50; OECD 203: Fish, Acute Toxicity Test; 96 h; Oncorhynchus mykiss; Semi-static system; Fresh water; Experimental value)

prop-2-ylbenzene 2-phenylpropane (98-82-8)	
EC50 Daphnia 1	2.14 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 48 h; Daphnia magna; Static system; Fresh water; Experimental value)

12.2. Persistence and degradability

2Phenylisopropanol (617-94-7)	
Persistence and degradability	Inherently biodegradable. Forming sediments in water.
ThOD	0.94 g O_2/g substance

2-hydroperoxypropan-2-ylbenzene (80-15-9)	
Persistence and degradability	Not readily biodegradable in water. Highly mobile in soil.

prop-2-ylbenzene 2-phenylpropane (98-82-8)	
Persistence and degradability	Inherently biodegradable. Not readily biodegradable in water. Biodegradable in the soil. Low potential for adsorption in soil.
Biochemical oxygen demand (BOD)	1.28 g O_2/g substance
Chemical oxygen demand (COD)	2.42 g O_2/g substance
ThOD	3.20 g O_2/g substance
BOD (% of ThOD)	0.40

12.3. Bioaccumulative potential

2Phenylisopropanol (617-94-7)	
Log Pow	1.95 (Estimated value)
Bioaccumulative potential	Bioaccumable.

2-hydroperoxypropan-2-ylbenzene (80-15-9)	
BCF other aquatic organisms 1	9 (BCF; BCFWIN)
Log Pow	1.6 (Experimental value; OECD 117: Partition Coefficient (n-octanol/water), HPLC method; 25 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

prop-2-ylbenzene 2-phenylpropane (98-82-8)	
BCF fish 1	35.5 (BCF)

prop-2-ylbenzene 2-phenylpropane (98-82-8)	
BCF other aquatic organisms 1	94.69 (BCF; BCFBAF v3.00)
Log Pow	3.66 (Experimental value; 3.55; Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 23 °C)
Bioaccumulative potential	Low potential for bioaccumulation (BCF < 500).

12.4. Mobility in soil

2-hydroperoxypropan-2-ylbenzene (80-15-9)	
Surface tension	0.028 N/m (-9 °C)
Log Koc	log Koc,OECD 121: Estimation of the Adsorption Coefficient (Koc) on Soil and on Sewage Sludge using High Performance Liquid Chromatography (HPLC); 1.6; Experimental value; GLP

prop-2-ylbenzene 2-phenylpropane (98-82-8)	
Log Koc	Koc,884; Calculated value; log Koc; 2.946; Calculated value

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Transport document description : UN3109 Organic peroxide type F, liquid (2 hydroperoxypropan-2-ylbenzene), 5.2, II

UN-No.(DOT) : UN3109

Proper Shipping Name (DOT) : Organic peroxide type F, liquid
2 hydroperoxypropan-2-ylbenzene

Class (DOT) : 5.2 - Class 5.2 - Organic Peroxide 49 CFR 173.128

Hazard labels (DOT) : 5.2 - Organic peroxide

Packing group (DOT) : II - Medium Danger

Dangerous for the environment : Yes

Marine pollutant : Yes

DOT Packaging Non Bulk (49 CFR 173.xxx) : 225

DOT Packaging Bulk (49 CFR 173.xxx) : 225

DOT Symbols : G - Identifies PSN requiring a technical name

DOT Special Provisions (49 CFR 172.102) : IP5 - IBCs must have a device to allow venting. The inlet to the venting device must be located in the vapor space of the IBC under maximum filling conditions

DOT Packaging Exceptions (49 CFR 173.xxx) : 152

DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 10 L

DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 25 L

DOT Vessel Stowage Location	:	D - The material must be stowed ''on deck only'' on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers or one passenger per each 3 m of overall vessel length, but the material is prohibited on passenger vessels in which the limiting number of passengers is exceeded
DOT Vessel Stowage Other	:	12 - Keep as cool as reasonably practicable,25 - Shade from radiant heat,52 - Stow ''separated from'' acids,53 - Stow ''separated from'' alkaline compounds
Emergency Response Guide (ERG) Number	:	145
Other information	:	No supplementary information available.

TDG

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

VE-B	
Listed on the United States TSCA (Toxic Substances Control Act) inventory	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard Delayed (chronic) health hazard Fire hazard Reactive hazard

2Phenylisopropanol (617-94-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

2-hydroperoxypropan-2-ylbenzene (80-15-9)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	10 lb

prop-2-ylbenzene 2-phenylpropane (98-82-8)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
CERCLA RQ	5000 lb

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

National regulations

prop-2-ylbenzene 2-phenylpropane (98-82-8)
Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

prop-2-ylbenzene 2-phenylpropane (98-82-8)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
Yes	No	No	No	

2-hydroperoxypropan-2-ylbenzene (80-15-9)
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

prop-2-ylbenzene 2-phenylpropane (98-82-8)
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of H-phrases:

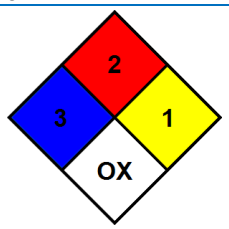
H226	Flammable liquid and vapor
H227	Combustible liquid
H242	Heating may cause a fire
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H310	Fatal in contact with skin
H314	Causes severe skin burns and eye damage
H318	Causes serious eye damage
H330	Fatal if inhaled
H332	Harmful if inhaled
H336	May cause drowsiness or dizziness
H350	May cause cancer
H351	Suspected of causing cancer
H373	May cause damage to organs through prolonged or repeated exposure
H411	Toxic to aquatic life with long lasting effects

NFPA health hazard : 3 - Short exposure could cause serious temporary or residual injury even though prompt medical attention was given.

NFPA fire hazard : 2 - Must be moderately heated or exposed to relatively high temperature before ignition can occur.

NFPA reactivity : 1 - Normally stable, but can become unstable at elevated temperatures and pressures or may react with water with some release of energy, but not violently.

NFPA specific hazard : OX - This denotes an oxidizer, a chemical which can greatly increase the rate of combustion/fire.



HMIS III Rating

Health : 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is given

* - Chronic (long-term) health effects may result from repeated overexposure

Flammability : 2 Moderate Hazard - Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)

Physical : 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

SDS US (GHS HazCom 2012)

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