

Revision Date 18-May-2015

Version 1

## 1. IDENTIFICATION

**Product identifier**

**Product Name** Permaflex Elastomeric W/B

**Other means of identification**

**Product Code** MC-1531  
**SKU(s)** None

**Recommended use of the chemical and restrictions on use**

**Recommended Use** No information available.  
**Uses advised against** No information available

**Details of the supplier of the safety data sheet**

**Manufacturer Address**

Diamond Vogel Paint  
 1020 Albany Place SE  
 Orange City, IA 51041  
 Phone: 712-737-4993  
 Fax: 712-737-4997

**Emergency telephone number**

**Emergency Telephone** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

**Classification**

**OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin sensitization	Category 1
Carcinogenicity	Category 1A

**Emergency Overview**

**Danger**

**Hazard statements**

May cause an allergic skin reaction  
 May cause cancer



**Appearance** No information available

**Physical state** liquid

**Odor** No information available

**Precautionary Statements - Prevention**

Obtain special instructions before use  
 Do not handle until all safety precautions have been read and understood  
 Use personal protective equipment as required  
 Avoid breathing dust/fume/gas/mist/vapors/spray  
 Contaminated work clothing should not be allowed out of the workplace  
 Wear protective gloves

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation or rash occurs: Get medical advice/attention  
 Wash contaminated clothing before reuse

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)****Other Information**

- Toxic to aquatic life with long lasting effects
- Unknown acute toxicity 26.52% of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%	Trade Secret
Calcium carbonate	1317-65-3	10 - 30	*
Titanium dioxide	13463-67-7	3 - 7	*
Zinc oxide, as Zn (fume)	1314-13-2	1 - 5	*
Ethylene Glycol	107-21-1	1 - 5	*
Crystalline Silica	14808-60-7	0.1 - 1	*
Chorothalonil	1897-45-6	0.1 - 1	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**Description of first aid measures**

<b>General advice</b>	If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.
<b>Eye contact</b>	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician.
<b>Skin Contact</b>	Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
<b>Inhalation</b>	Remove to fresh air. Call a physician. If breathing is irregular or stopped, administer artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.
<b>Ingestion</b>	Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

No information available.

**Explosion data**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** None.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Use personal protective equipment as required.

**Environmental precautions**

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Cover liquid spill with sand, earth or other non-combustible absorbent material. Use personal protective equipment as required. Dam up. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.

**Incompatible materials** None known based on information supplied.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control parameters**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium carbonate 1317-65-3	-	TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction	TWA: 10 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable dust
Titanium dioxide 13463-67-7	TWA: 10 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> total dust (vacated) TWA: 10 mg/m <sup>3</sup> total dust	IDLH: 5000 mg/m <sup>3</sup>
Zinc oxide, as Zn (fume) 1314-13-2	STEL: 10 mg/m <sup>3</sup> respirable fraction TWA: 2 mg/m <sup>3</sup> respirable fraction	TWA: 5 mg/m <sup>3</sup> fume TWA: 15 mg/m <sup>3</sup> total dust TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) TWA: 5 mg/m <sup>3</sup> fume (vacated) TWA: 10 mg/m <sup>3</sup> total dust (vacated) TWA: 5 mg/m <sup>3</sup> respirable fraction (vacated) STEL: 10 mg/m <sup>3</sup> fume	IDLH: 500 mg/m <sup>3</sup> Ceiling: 15 mg/m <sup>3</sup> dust TWA: 5 mg/m <sup>3</sup> dust and fume STEL: 10 mg/m <sup>3</sup> fume
Ethylene Glycol 107-21-1	Ceiling: 100 mg/m <sup>3</sup> aerosol only	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m <sup>3</sup>	-
Crystalline Silica 14808-60-7	TWA: 0.025 mg/m <sup>3</sup> respirable fraction	(vacated) TWA: 0.1 mg/m <sup>3</sup> respirable dust : (30)/( %SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA total dust : (250)/( %SiO <sub>2</sub> + 5) mppcf TWA respirable fraction : (10)/( %SiO <sub>2</sub> + 2) mg/m <sup>3</sup> TWA respirable fraction	IDLH: 50 mg/m <sup>3</sup> respirable dust TWA: 0.05 mg/m <sup>3</sup> respirable dust

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Other Information**

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

**Appropriate engineering controls**

**Engineering Controls**

Showers  
Eyewash stations  
Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

Tight sealing safety goggles.

**Skin and body protection**

No special technical protective measures are necessary.

**Respiratory protection**

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**

When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

**Physical state**

liquid

**Appearance**

No information available

**Odor**

No information available

**Color**

No information available

**Odor threshold**

No information available

**Property**

**Values**

**Remarks • Method**

**pH**

9.0±0.2

<b>Melting point/freezing point</b>	No information available
<b>Boiling point / boiling range</b>	>= 100 °C / 212 °F
<b>Flash point</b>	> 94 °C / > 201 °F
<b>Evaporation rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Specific Gravity</b>	1.35
<b>Water solubility</b>	No information available
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**Other Information**

<b>Softening point</b>	No information available
<b>Molecular weight</b>	No information available
<b>VOC Content (%)</b>	No information available
<b>Density</b>	11.24 lbs/gal
<b>Bulk density</b>	No information available
<b>Percent solids by weight</b>	58.6%
<b>Percent volatile by weight</b>	2.5%
<b>Percent solids by volume</b>	45.1%
<b>Actual VOC (lbs/gal)</b>	0.3
<b>Actual VOC (grams/liter)</b>	33.2
<b>EPA VOC (lbs/gal)</b>	0.6
<b>EPA VOC (grams/liter)</b>	69.2
<b>EPA VOC (lb/gal solids)</b>	0.6

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known based on information supplied.

**Hazardous Decomposition Products**

None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**

<b>Product Information</b>	No data available
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<b>Inhalation</b>	No data available.
<b>Eye contact</b>	No data available.
<b>Skin Contact</b>	No data available.
<b>Ingestion</b>	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Titanium dioxide 13463-67-7	> 10000 mg/kg ( Rat )	-	-
Zinc oxide, as Zn (fume) 1314-13-2	> 5000 mg/kg ( Rat )	-	-
Ethylene Glycol 107-21-1	= 4700 mg/kg ( Rat )	= 10600 mg/kg ( Rat ) = 9530 µL/kg ( Rabbit )	-
Crystalline Silica 14808-60-7	= 500 mg/kg ( Rat )	-	-
Chorothalonil 1897-45-6	= 10 g/kg ( Rat ) > 10000 mg/kg ( Rat )	> 10 g/kg ( Rabbit ) > 2500 mg/kg ( Rat )	= 0.1 mg/L ( Rat ) 4 h = 0.31 mg/L ( Rat ) 1 h

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.

**Germ cell mutagenicity** No information available.

**Carcinogenicity** No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7	-	Group 2B	-	X
Crystalline Silica 14808-60-7	A2	Group 1	Known	X
Chorothalonil 1897-45-6	-	Group 2B	-	X

ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not classifiable as a human carcinogen

NTP (National Toxicology Program)

Known - Known Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

**Reproductive toxicity** No information available.

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Target Organ Effects** Central nervous system, Eyes, lungs, Respiratory system, Skin.

**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document mg/kg mg/l

**12. ECOLOGICAL INFORMATION****Ecotoxicity**

Toxic to aquatic life with long lasting effects

33.91% of the mixture consists of component(s) of unknown hazards to the aquatic environment

Chemical Name	Algae/aquatic plants	Fish	Crustacea

Ethylene Glycol 107-21-1	6500 - 13000: 96 h Pseudokirchneriella subcapitata mg/L EC50	41000: 96 h Oncorhynchus mykiss mg/L LC50 14 - 18: 96 h Oncorhynchus mykiss mL/L LC50 static 27540: 96 h Lepomis macrochirus mg/L LC50 static 40761: 96 h Oncorhynchus mykiss mg/L LC50 static 40000 - 60000: 96 h Pimephales promelas mg/L LC50 static 16000: 96 h Poecilia reticulata mg/L LC50 static	46300: 48 h Daphnia magna mg/L EC50
Chorothalonil 1897-45-6	0.57: 72 h Desmodesmus subspicatus mg/L EC50 0.0068: 72 h Pseudokirchneriella subcapitata mg/L EC50 static	0.012: 96 h Oncorhynchus mykiss mg/L LC50 semi-static 0.0076: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 0.0221 - 0.032: 96 h Lepomis macrochirus mg/L LC50 flow-through 0.045 - 0.057: 96 h Lepomis macrochirus mg/L LC50 static	0.0342 - 0.143: 48 h Daphnia magna mg/L EC50 Static

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

Chemical Name	Partition coefficient
Ethylene Glycol 107-21-1	-1.93
Chorothalonil 1897-45-6	2.9

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status
Zinc oxide, as Zn (fume) 1314-13-2	Toxic

**14. TRANSPORT INFORMATION**

**DOT**

Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

<b>TSCA</b>	Complies
<b>DSL/NDSL</b>	Complies *
<b>EINECS/ELINCS</b>	Does not comply *
<b>ENCS</b>	Does not comply *
<b>IECSC</b>	Complies *
<b>KECL</b>	Complies *
<b>PICCS</b>	Complies *
<b>AICS</b>	Complies *

\* This product contains an unknown chemical, therefore, this product's compliance to the inventory list is NOT DETERMINED

**Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Zinc oxide, as Zn (fume) - 1314-13-2	1.0
Ethylene Glycol - 107-21-1	1.0
Chorothalonil - 1897-45-6	0.1

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	No
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**CWA (Clean Water Act)**

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc oxide, as Zn (fume) 1314-13-2	-	X	-	-

**CERCLA**

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ethylene Glycol 107-21-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

**US State Regulations****California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Titanium dioxide - 13463-67-7	Carcinogen
Crystalline Silica - 14808-60-7	Carcinogen



Chorothalonil - 1897-45-6	Carcinogen
Lead Oxide - 1317-36-8	Carcinogen Developmental

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Calcium carbonate 1317-65-3	X	X	X
Titanium dioxide 13463-67-7	X	X	X
Zinc oxide, as Zn (fume) 1314-13-2	X	X	X
Ethylene Glycol 107-21-1	X	X	X
Crystalline Silica 14808-60-7	X	X	X
Chorothalonil 1897-45-6	X	X	X
Diethylene Glycol Butyl Ether 112-34-5	X	-	X
Ammonia (anhydrous) 7664-41-7	X	X	X
Lead Oxide 1317-36-8	X	X	X

**U.S. EPA Label Information**

**EPA Pesticide Registration Number** Not applicable

**Hazardous air pollutants (HAPS) content**

LIST OF HAZARDOUS AIR POLLUTANTS SUBJECT TO THE PROVISIONS OF THE CLEAN AIR ACT, TITLE I SECTION 112 'National Emission Standards for Hazardous Air Pollutants':

Chemical Name	Weight % of HAPS in Product	Pounds HAPS / Gal Product
Ethylene Glycol 107-21-1	2.29%	0.26

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

<b>NFPA</b>	Health hazards 2	Flammability 1	Instability 0	Physical and Chemical Properties -
<b>HMIS</b>	Health hazards 2 *	Flammability 1	Physical hazards 0	Personal protection X

Chronic Hazard Star Legend            \* = Chronic Health Hazard

**Revision Date** 18-May-2015

**Revision Note**  
No information available

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Shipping information may vary based upon container size and shipping destination. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent employee exposures, property damage, or release to the environment. The manufacturer assumes no responsibility for injury to the recipient or third persons, or for any damages to any property resulting from misuse of the product.

**End of Safety Data Sheet**