



# HELMIFAST 778

Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

Revision Date: 06/20/2018

Version: 1.1

## SECTION 1: IDENTIFICATION

### Product Identifier

**Product Form:** Mixture

**Product Name:** HELMIFAST 778, HELMIFAST 778GR

### Intended Use of the Product

**Use of the Substance/Mixture:** No use is specified.

### Name, Address, and Telephone of the Responsible Party

#### **Company**

Helmitin Inc.

99 Shorncliffe Rd

Toronto, Ontario, M8Z 5K7

877.823.2624

11110 Airport Road

Olive Branch, MS 38654

Phone: 877.823.2624

www.helmitin.com

### Emergency Telephone Number

**Emergency Number** : CANUTEC 613-996-6666 / CHEMTREC 1-800-424-9300

## SECTION 2: HAZARDS IDENTIFICATION

### Classification of the Substance or Mixture

**Classification (GHS-US)**

Not classified

### Label Elements

**GHS-US Labeling** No labeling applicable

### Other Hazards

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions. If heated to the point of fume generation, zinc fumes may cause metal fume fever. Otherwise, zinc is non-toxic.

**Unknown Acute Toxicity (GHS-US)** Not available

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

### Mixture

Name	Product Identifier	% (w/w)
Zinc oxide*	(CAS No) 1314-13-2	1 - 5

\*This product contains a material that may be hazardous when present as an airborne dust. Since this product is in a liquid form, the material is not able to become airborne and cannot be inhaled. Thus, the hazards usually associated with this material are not applicable to this product.

## SECTION 4: DESCRIPTION OF FIRST AID MEASURES

**General:** Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**Inhalation:** Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**Skin Contact:** Remove contaminated clothing. Rinse affected area with water for at least 5 minutes. Wash contaminated clothing before reuse. Obtain medical attention if irritation persists.

**Eye Contact:** Rinse cautiously with water for at least 5 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if redness, pain, or irritation occurs.

**Ingestion:** Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor/physician.

### Most Important Symptoms and Effects Both Acute and Delayed

**General:** None expected under normal conditions of use.

**Inhalation:** Prolonged exposure to liquid may cause a mild irritation.

# HELMIFAST 778

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

**Skin Contact:** Prolonged exposure may cause skin irritation.

**Eye Contact:** Repeated or prolonged contact will cause mechanical irritation.

**Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** None expected under normal conditions of use.

### **Indication of Any Immediate Medical Attention and Special Treatment Needed**

If you feel unwell, seek medical advice (show the label where possible).

## **SECTION 5: FIRE-FIGHTING MEASURES**

### **Extinguishing Media**

**Suitable Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

**Unsuitable Extinguishing Media:** Do not use a heavy water stream. Use of heavy stream of water may spread fire.

### **Special Hazards Arising From the Substance or Mixture**

**Fire Hazard:** Not considered flammable but may burn at high temperatures.

**Explosion Hazard:** Product is not explosive.

**Reactivity:** Hazardous reactions will not occur under normal conditions.

### **Advice for Firefighters**

**Precautionary Measures Fire:** Exercise caution when fighting any chemical fire.

**Firefighting Instructions:** Use water spray or fog for cooling exposed containers.

**Protection During Firefighting:** Do not enter fire area without proper protective equipment, including respiratory protection.

**Hazardous Combustion Products:** Carbon oxides (CO, CO<sub>2</sub>). Oxides of zinc.

### **Reference to Other Sections**

Refer to section 9 for flammability properties.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### **Personal Precautions, Protective Equipment and Emergency Procedures**

**General Measures:** Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapor, mist, spray).

#### **For Non-Emergency Personnel**

**Protective Equipment:** Use appropriate personal protection equipment (PPE).

**Emergency Procedures:** Evacuate unnecessary personnel.

#### **For Emergency Personnel**

**Protective Equipment:** Equip cleanup crew with proper protection.

**Emergency Procedures:** Stop leak if safe to do so. Ventilate area.

### **Environmental Precautions**

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

### **Methods and Material for Containment and Cleaning Up**

**For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

**Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

### **Reference to Other Sections**

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

## **SECTION 7: HANDLING AND STORAGE**

### **Precautions for Safe Handling**

**Hygiene Measures:** Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### **Conditions for Safe Storage, Including Any Incompatibilities**

**Technical Measures:** Comply with applicable regulations.

**Storage Conditions:** Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

### **Specific End Use(s)**

No use is specified.

# HELMIFAST 778

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

### SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Control Parameters

For substances listed in section 3 that are not listed here, there are no established Exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), OSHA (PEL), Canadian provincial governments, or the Mexican government

<b>Zinc oxide* (1314-13-2)</b>		
<b>USA ACGIH</b>	ACGIH TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (respirable fraction)
<b>USA ACGIH</b>	ACGIH STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (respirable fraction)
<b>USA OSHA</b>	OSHA PEL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (fume) 15 mg/m <sup>3</sup> (total dust) 5 mg/m <sup>3</sup> (respirable fraction)
<b>USA NIOSH</b>	NIOSH REL (TWA) (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (dust and fume)
<b>USA NIOSH</b>	NIOSH REL (STEL) (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (fume)
<b>USA NIOSH</b>	NIOSH REL (ceiling) (mg/m <sup>3</sup> )	15 mg/m <sup>3</sup> (dust)
<b>USA IDLH</b>	US IDLH (mg/m <sup>3</sup> )	500 mg/m <sup>3</sup>
<b>Alberta</b>	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (respirable)
<b>Alberta</b>	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (respirable)
<b>British Columbia</b>	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (respirable)
<b>British Columbia</b>	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (respirable)
<b>Manitoba</b>	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (respirable fraction)
<b>Manitoba</b>	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (respirable fraction)
<b>New Brunswick</b>	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (fume)
<b>New Brunswick</b>	OEL TWA (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (particulate matter containing no Asbestos and <1% Crystalline silica, dust) 5 mg/m <sup>3</sup> (fume)
<b>Newfoundland &amp; Labrador</b>	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (respirable fraction)
<b>Newfoundland &amp; Labrador</b>	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (respirable fraction)
<b>Nova Scotia</b>	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (respirable fraction)
<b>Nova Scotia</b>	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (respirable fraction)
<b>Nunavut</b>	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (fume)
<b>Nunavut</b>	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (fume) 5 mg/m <sup>3</sup> (dust, respirable mass) 10 mg/m <sup>3</sup> (total mass-dust)
<b>Northwest Territories</b>	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (fume)
<b>Northwest Territories</b>	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (fume) 5 mg/m <sup>3</sup> (dust, respirable mass) 10 mg/m <sup>3</sup> (total mass-dust)
<b>Ontario</b>	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (respirable)
<b>Ontario</b>	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (respirable)
<b>Prince Edward Island</b>	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (respirable fraction)
<b>Prince Edward Island</b>	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (respirable fraction)
<b>Québec</b>	VECD (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (fume)
<b>Québec</b>	VEMP (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (containing no Asbestos and <1% Crystalline silica-total dust) 5 mg/m <sup>3</sup> (fume)
<b>Saskatchewan</b>	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (dust and fume, respirable fraction)
<b>Saskatchewan</b>	OEL TWA (mg/m <sup>3</sup> )	2 mg/m <sup>3</sup> (dust and fume, respirable fraction)
<b>Yukon</b>	OEL STEL (mg/m <sup>3</sup> )	10 mg/m <sup>3</sup> (fume)
<b>Yukon</b>	OEL TWA (mg/m <sup>3</sup> )	5 mg/m <sup>3</sup> (fume) 30 mppcf (dust) 10 mg/m <sup>3</sup> (dust)

# HELMIFAST 778

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According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

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### Exposure Controls

**Appropriate Engineering Controls:** Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

**Personal Protective Equipment:** Protective goggles. Gloves. Protective clothing. Insufficient ventilation: wear respiratory protection.



**Materials for Protective Clothing:** Chemically resistant materials and fabrics.

**Hand Protection:** Wear chemically resistant protective gloves.

**Eye Protection:** Chemical safety goggles.

**Skin and Body Protection:** Wear suitable protective clothing.

**Respiratory Protection:** Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

**Environmental Exposure Controls:** Do not allow the product to be released into the environment.

**Consumer Exposure Controls:** Do not eat, drink or smoke during use

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

Physical State	: Liquid
Appearance	: White / Green
Odor	: Mild
Odor Threshold	: Not available
pH	: $\approx 9$
Evaporation Rate	: 1.0 [Ref Std: Water = 1.0]
Melting Point	: Not applicable
Freezing Point	: Product may be irreversibly damaged below 5 °C (41 °F)
Boiling Point	: 100 °C (212 °F) (aqueous phase)
Flash Point	: Not applicable
Auto-ignition Temperature	: Not applicable
Decomposition Temperature	: Not available
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not applicable
Upper Flammable Limit	: Not applicable
Vapor Pressure	: 17.5mm Hg @ 20 °C (68 °F)
Relative Vapor Density at 20 °C	: Not available
Relative Density	: 1.07 g/mL
Specific Gravity	: 1.07
Solubility	: Moderately soluble in water
Partition Coefficient: N-Octanol/Water	: Not available
Viscosity	: 5,000 – 7,000 centipoise @ 25 °C (77 °F)
Solids Content	: 52 ± 2%
Explosion Data – Sensitivity to Mechanical Impact	: Not expected to present an explosion hazard due to mechanical impact.
Explosion Data – Sensitivity to Static Discharge	: Not expected to present an explosion hazard due to static discharge.
VOC Content (SCAQMD Rule 1168)	: 0 g/L (0 lbs/gal)
VHAP Content	: 0.0 lbs/lb solids

# HELMIFAST 778

## Safety Data Sheet

According To Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules And Regulations

### SECTION 10: STABILITY AND REACTIVITY

**Reactivity:** Hazardous reactions will not occur under normal conditions.

**Chemical Stability:** Stable under recommended handling and storage conditions (see section 7).

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.

**Conditions to Avoid:** Direct sunlight. Extremely high or low temperatures. Incompatible materials.

**Incompatible Materials:** Strong acids. Strong bases. Strong oxidizers.

**Hazardous Decomposition Products:** Carbon oxides (CO, CO<sub>2</sub>). Oxides of zinc.

### SECTION 11: TOXICOLOGICAL INFORMATION

#### Information on Toxicological Effects - Product

**Acute Toxicity:** Not classified

**LD50 and LC50 Data:** Not available

**Skin Corrosion/Irritation:** Not classified

**pH:** ≈ 11

**Serious Eye Damage/Irritation:** Not classified

**pH:** ≈ 11

**Respiratory or Skin Sensitization:** Not classified

**Germ Cell Mutagenicity:** Not classified

**Teratogenicity:** Not classified

**Carcinogenicity:** Not classified

**Specific Target Organ Toxicity (Repeated Exposure):** Not classified

**Reproductive Toxicity:** Not classified

**Specific Target Organ Toxicity (Single Exposure):** Not classified

**Aspiration Hazard:** Not classified

**Symptoms/Injuries After Inhalation:** Prolonged exposure to liquid may cause a mild irritation.

**Symptoms/Injuries After Skin Contact:** Prolonged exposure may cause skin irritation.

**Symptoms/Injuries After Eye Contact:** Repeated or prolonged contact will cause mechanical irritation.

**Symptoms/Injuries After Ingestion:** Ingestion is likely to be harmful or have adverse effects.

**Chronic Symptoms:** None expected under normal conditions of use.

#### Information on Toxicological Effects - Ingredient(s)

**LD50 and LC50 Data:**

Zinc oxide (1314-13-2)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 2000 mg/kg

### SECTION 12: ECOLOGICAL INFORMATION

#### Toxicity

**Ecology - General:** Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Zinc oxide (1314-13-2)	
LC50 Fish 1	780 µg/l (Exposure time: 96 h - Species: Pimephales promelas)
EC50 Daphnia 1	0.122 mg/l
NOEC chronic fish	0.026 mg/l (Species: Jordanella floridae)

**Persistence and Degradability** Not available

#### Bioaccumulative Potential

**Mobility in Soil** Not available

#### Other Adverse Effects

**Other Information:** Avoid release to the environment.

### SECTION 13: DISPOSAL CONSIDERATIONS

**Waste Disposal Recommendations:** Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

# HELMIFAST 778

## Safety Data Sheet

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**Ecology – Waste Materials:** Avoid release to the environment.

### SECTION 14: TRANSPORT INFORMATION

**In Accordance with DOT** Not regulated for transport

**In Accordance with IMDG** Not regulated for transport

**In Accordance with IATA** Not regulated for transport

**In Accordance with TDG** Not regulated for transport


### SECTION 15: REGULATORY INFORMATION

#### US Federal Regulations

##### Zinc oxide (1314-13-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

#### US State Regulations

**Proposition 65** –  **WARNING:** Cancer - [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

##### Zinc oxide (1314-13-2)

U.S. - Massachusetts - Right To Know List

U.S. - New Jersey - Right to Know Hazardous Substance List

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

U.S. - Pennsylvania - RTK (Right to Know) List

#### Canadian Regulations

##### Zinc oxide (1314-13-2)

Listed on the Canadian DSL (Domestic Substances List)

Listed on the Canadian IDL (Ingredient Disclosure List)

IDL Concentration 1 %

WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
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This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by CPR.

### SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

**Revision Date** : 06/20/2018

**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

#### GHS Full Text Phrases:

*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.*

North America GHS US 2012 & WHMIS 2015