





# Material Safety Data Sheet

NFPA	WHMIS	PPE	Transport Symbol
	NOT REGULATED		NOT REGULATED

Preparation Date 15-Aug-2012

Revision Date 09-Oct-2012

Revision Number 1

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name** HPR® Torch Base Sheet, StressPly® IV UV Mineral, StressPly® IV, StressPly® IV Mineral, StressPly® IV Plus, StressPly® IV Plus Mineral, StressPly® IV Plus UV Mineral

**Product Code** 4113, 4380, 4381, 4382, 4383, 4384, 4385

**UN-No** Not available

**Contact Manufacturer**  
 The Garland Company, Inc.  
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 Cleveland, Ohio 44105-2197  
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**Emergency Telephone Number** 1-800-762-8225 (24 Hrs.)

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Combustible material

**Appearance** - Black

**Physical State** - Solid

**Odor** - Asphalt

<b>OSHA Regulatory Status</b>	This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
<b>Mexico - Grade</b>	Not available
<b><u>Potential Health Effects</u></b>	
<b>Acute Effects</b>	All these effects, if they do occur, are usually mild, temporary and can be relieved by ceasing further exposure and seeking fresh air
<b>Eyes</b>	This product is not likely to cause effects to the eyes. When membrane is torch-applied, asphalt fumes can be emitted from the product and cause irritations, redness and conjunctivitis to the eyes. Contact with this product at high temperature can cause thermal burns.
<b>Skin</b>	This product can cause a mechanical irritation of the skin because of its rough surface. When the membrane is torch-applied, asphalt fumes can cause skin irritation. Contact with this product at high temperature can cause thermal burns.
<b>Inhalation</b>	This product is not likely to cause effects on the respiratory system. When membrane is torch-applied, asphalt fumes can be emitted of the product and cause irritations to the nose, the throat and the respiratory tracts, tiredness, headaches, dizziness, nausea and insomnia.
<b>Ingestion</b>	These products may be harmful or fatal if swallowed. They may cause dizziness, incoordination, headache, nausea and vomiting. Small amounts of these products, if aspirated into the lungs, may cause mild to severe pulmonary injury.
<b>Toxicological information</b>	See Section 11 for additional Toxicological information.
<b>Aggravated Medical Conditions</b>	When the product is torch-applied in rare cases individuals with sensitive skin or a petroleum allergy or sensitivity may experience more severe effects such as exacerbation of existing asthma or underlying sinus conditions.
<b>Interactions with Other Chemicals</b>	Not available

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Asphalt	8052-42-4	30 - 60
Calcium Carbonate	1317-65-3	10 - 30
Quartz (Crystalline Silica)	14808-60-7	10 - 30
Magnesium Carbonate	546-93-0	0 - 5
Fiberglass Textile Continuous Reinforcement	65997-17-3	1 - 5
Formaldehyde (within fiberglass)	50-00-0	NF

\*These products contain trace amounts of polynuclear aromatic compounds, some of which are listed as hazardous under various Federal, State, and international laws and regulations.

#### 4. FIRST AID MEASURES

<b>Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes. Do not attempt to remove material from affected area without medical assistance. Consult a physician immediately.
<b>Skin Contact</b>	If there is presence of dust on the skin, wash gently with water and soap. In the event of contact with the product melted, do not try to remove the product of the affected area and rinse the area affected in cold water. Obtain immediate medical attention. At the end of each working day, wash gently with soap and water removing all contaminated clothes and shoes.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	DO NOT induce vomiting. Prevent aspiration of material into lungs. Seek immediate medical attention.
<b>Notes to Physician</b>	Treat symptomatically

#### 5. FIRE-FIGHTING MEASURES

<b>Suitable Extinguishing Media</b>	Foam. Carbon dioxide (CO2). Sand. Dry chemical.
<b>Unsuitable Extinguishing Media</b>	Not available
<b>Hazardous Combustion Products</b>	Black smoke, Hydrogen sulfide, sulfur dioxide.
<b>Explosion Data</b>	
<b>Sensitivity to mechanical impact</b>	Not available
<b>Sensitivity to static discharge</b>	Not available

#### **Specific Hazards Arising from the Chemical**

Asphalt fumes are flammable.

Torch, used to weld waterproofing membranes, can produce temperatures beyond 1100°C (2000°F). Avoid all contact with materials sensitive to these temperatures, as lead or plastic materials. Never use torch(es):

- When substrate(s) have been recently covered by solvent-based products (wait until it is dry).
- Near any combustible materials.
- Close to containers containing flammable liquids or materials (keep open flame at least 3 m [10'] away).
- Directly on combustible substrate or insulation.

#### **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

**NFPA**

**Health 0**

**Flammability 1**

**Instability 0**

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Material is not normally involved in a spill/release scenario.
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<b>Environmental Precautions</b>	No information available.
<b>Methods for Containment</b>	Pick up and dispose of small pieces If, allow enough time to cool completely and remove to a container for disposal
<b>Methods for Cleaning Up</b>	Wash spill area with soap and water.
<b>Other Information</b>	Not applicable

## 7. HANDLING AND STORAGE

<b>Handling</b>	Do not get these materials in your eyes or on your skin and minimize exposure to fumes from heated material. Wash exposed areas thoroughly after handling these products. Keep these products from sparks or open flame. Use these products with adequate ventilation.
<b>Storage</b>	Store upright to prevent creasing. Store away from heat and all ignition sources and open flames in accordance with applicable laws and regulations. Keep out of the reach of children.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV	OSHA PEL	Ontario TWAEV	Mexico	NIOSH IDLH
Asphalt	TWA: 0.5 mg/m <sup>3</sup>	TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 0.5 mg/m <sup>3</sup>	STEL: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	
Calcium Carbonate		TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	STEL: 20 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	
Quartz (Crystalline Silica)	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>	50 µg/m <sup>3</sup>
Magnesium Carbonate		TWA: 15 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	STEL: 20 mg/m <sup>3</sup> TWA: 10 mg/m <sup>3</sup>	
Formaldehyde	Ceiling: 0.3 ppm	TWA: 0.75 ppm STEL: 2 ppm	STEL: 2 ppm STEL: 3 mg/m <sup>3</sup> TWA: 1 ppm TWA: 1.5 mg/m <sup>3</sup>	Ceiling: 3 mg/m <sup>3</sup> Ceiling: 2 ppm	20 ppm

- The component exposure limits are provided for abnormal or emergency circumstances such as heating (above 250F), burning, cutting, sanding and/or grinding when there is a potential for exposure to these components. The limit of exposure is given for reference only.

### Personal Protective Equipment

#### **Eye/face Protection**

Safety glasses with side-shields.

#### **Skin Protection**

Protective gloves.

#### **Respiratory Protection**

If ventilation is not sufficient to control exposures below TLV or PEL, use an appropriate properly fitted NIOSH approved respirator.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Hygiene Measures

If this product is torch-applied, workers may be exposed to asphalt fumes released from the hot asphalt. Although there is no evidence that the fumes and emissions that occur in these operations emanate from the product during torch application operations, precautions should be taken to minimize worker inhalation and dermal exposures to the fumes emanating from the hot asphalt. During these installations roofing contractors and workers should adhere to the engineering controls, work practices and personal protective equipment (including respirator) recommendations published by the National Institute for Occupational Safety and Health (NIOSH). See DHHS (NIOSH) Publication No. 2003-107, entitled "Reducing Roofers' Exposure to Asphalt Fumes". The publication is available on NIOSH's website at: <http://www.cdc.gov/niosh/docs/2003-107/pdfs/2003-107.pdf>.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Fibrous Membrane	
Odor	Petroleum	
Physical State	Solid	
pH	Not available	
Flash Point	Not available	
Autoignition Temperature	Not available	
Boiling Point/Range	Not available	
Freezing Point	Not available	
Flammability Limits in Air	<b>Lower</b> Not available	<b>Upper</b> Not available
Explosive Properties	Not available	
Oxidizing Properties	Not available	
Evaporation Rate	Not available	
Vapor Pressure	Not available	
Vapor Density	Not available	
Specific Gravity	Not available	
Water Solubility	Not available	
Volatiles	Not available	

## 10. STABILITY AND REACTIVITY

Stability	This product is stable.
Conditions to Avoid	Open flames and intense heat.
Incompatible Materials	Acids, strong bases, organic solvents.
Hazardous Decomposition Products	None under normal processing.
Possibility of Hazardous Reactions	None under normal processing

## 11. TOXICOLOGICAL INFORMATION

### Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Asphalt	5000 mg/kg Rat	2000 mg/kg Rabbit	

## 11. TOXICOLOGICAL INFORMATION

Quartz (Crystalline Silica)	500 mg/kg Rat		
Hydrated Alumina	5000 mg/kg Rat		
Formaldehyde	100mg/kg Rat	270mg/kg Rat	0.578 mg/L Rat 4 h 250 ppm Rat 4 h

### Chronic Toxicity

Bronchitis has been reported among workers exposed to asphalt in several human studies. Several animal studies have reported indications of emphysema, bronchiolar dilatation, pneumonitis, and localized bronchitis in guinea pigs, rats, and mice chronically exposed to bitumens during inhalation studies. NIOSH has found the data to be limited, precluding any determination concerning asphalt exposure related chronic pulmonary morbidity.

### **Carcinogenicity**

#### **Component Carcinogenicity**

ACGIH, IARC, OSHA and NTP carcinogen lists were checked for those components with CAS registry numbers.

#### **Petroleum asphalt (8052-42-4)**

ACGIH: A4 – Not Classifiable as a Human Carcinogen (related to Asphalt fumes)

#### **Respirable Crystalline Silica (14808-60-7)**

IARC: Carcinogenic to humans (Group 1)

NTP: Known to be a human carcinogen

ACGIH: Suspected Human Carcinogen (Class A2)

#### **Formaldehyde:**

IARC: Carcinogenic to humans (Group 1)

NTP: Known to be a human carcinogen

ACGIH: Suspected Human Carcinogen (Class A2)

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

No information available.

### **Persistence/Degradability**

This product is not biodegradable.

### **Bioaccumulation/ Accumulation**

No possible bioaccumulation and unlikely bioconcentration in the food chain.

### **Mobility in Environmental Media**

Not available

## 13. DISPOSAL CONSIDERATIONS

### **Waste Disposal Method**

Dispose of in accordance with local, state, and federal regulations

### **Contaminated Packaging**

Empty containers should be taken for local recycling, recovery or waste disposal

### **US EPA Waste Number**

Not regulated

## 14. TRANSPORT INFORMATION

### DOT

Not regulated

## 14. TRANSPORT INFORMATION

<b><u>TDG</u></b>	Not regulated
<b><u>MEX</u></b>	Not regulated
<b><u>ICAO</u></b>	Not regulated
<b><u>IATA</u></b>	Not regulated
<b><u>IMDG/IMO</u></b>	Not regulated

## 15. REGULATORY INFORMATION

### International Inventories

All of the components in the product are on the following Inventory lists:

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	CHINA	KECL	PICCS	AICS
Asphalt	X	X	X	X	X	X	X	X	X	X
Calcium Carbonate	X	X	X	X	X	X	X	X	X	X
Magnesium Carbonate	X	X	X	X	X	X	X	X	X	X
Quartz (Crystalline Silica)	X	X	X	X	X	X	X	X	X	X
Formaldehyde	X	X	X	X	X	X	X	X	X	X

<b>TSCA</b>	Complies
<b>DSL</b>	Complies
<b>NDSL</b>	Complies
<b>EINECS</b>	Complies
<b>ELINCS</b>	Complies
<b>ENCS</b>	Complies
<b>CHINA</b>	Complies
<b>KECL</b>	Complies
<b>PICCS</b>	Complies
<b>AICS</b>	Complies

### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

### Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any HAPs.

### State Regulations

#### California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

#### State Right-to-Know

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Asphalt	X	X	X		X

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Calcium Carbonate	X		X		X
Magnesium Carbonate	X				X
Quartz (Crystalline Silica)	X	X	X		X
Formaldehyde	X	X	X	X	X

**Canada**

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**WHMIS Hazard Class**

Not determined

<b>16. OTHER INFORMATION</b>
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Revision Date 09-Oct-2012

Revision Summary Not available

## Disclaimer

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

**End of MSDS**