



**Biflex Cap, HPR Aqua Shield, StressBase 120, StressBase 80, StressPly, StressPly E, StressPly EUV, StressPly IV, StressPly IV Plus, StressPly Max, StressPly Plus, OptiMax, VersiPly 60, VersiPly 80**

**Safety Data Sheet**

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

Revision Date: N/A

Date of issue: 6/16/2016

## SECTION 1: IDENTIFICATION

### Product Identifier

**Product Form:** Rolled Good

**Product Name:** Biflex Cap, HPR Aqua Shield, StressBase 120, StressBase 80, StressPly, StressPly E, StressPly EUV, StressPly IV, StressPly IV Plus, StressPly Max, StressPly Plus, OptiMax, VersiPly 60, VersiPly 80

**Product Code:** 4131, 4141, 4350, 4356, 4360, 4376, 4381, 4383, 4393, 4701, 4363-60-G, 4363-G, 4411-120, 4411-80,

### Intended Use of the Product

Rolled good

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

#### **Manufacturer**

The Garland Company, Inc.  
3800 East 91<sup>st</sup> Street  
Cleveland, Ohio 44105-2197  
T-800-762-8225  
F-216-641-0633  
www.garlandco.com

#### **Supplier**

The Garland Company, Inc.  
3800 East 91<sup>st</sup> Street  
Cleveland, Ohio 44105-2197  
T-800-762-8225  
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Garland Canada, Inc.  
209 Carrier Drive  
Toronto, Ontario M9W 5Y8  
T-416-747-7995  
F-416-747-1980  
www.garlandco.com

### Emergency Telephone Number

**Emergency Number:** 1-800-262-8200 (CHEMTREC)

## SECTION 2: HAZARDS IDENTIFICATION

**This is a voluntary SDS.** Under normal use this product is not expected to create any health or environmental hazards. This product meets the requirements of OSHA definition of an "Article" under 29 CFR 1910.1200(c) and does not require a Safety Data Sheet (MSDS) as indicated under 29 CFR 1010.1200(b)(6)(v).

Under United States Regulations (29 CFR 1900.1200 – OSHA Hazard Communication Standard) the product listed above is exempt as an article under normal conditions of use. In Canada, this product is considered a manufactured article under the Workplace Hazardous Materials Information System (WHMIS) and is exempt. Under normal conditions of use the product listed in this SDS is not expected to pose a physical hazard or health risk to humans. These products do not contain any form of asbestos materials. The component exposure limits and other information in this document 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.

### Classification of the Substance or Mixture

#### **Classification (GHS-US)**

Flam. Liq. 2	H225
Acute Tox. Oral 4	H302
Irr. Skin 2	H315
Corr. Eye 2A	H319
Damage Eye 2B	H320
Carc. 1	H350
Carc. 2	H351
STOT RE 1	H372

### Label Elements

#### **GHS-US Labeling**

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**Hazard Pictograms (GHS-US)**



**Signal Word (GHS-US)**

: Warning  
H225 - Highly flammable liquid and vapor

**Hazard Statements (GHS-US)**

: H302 - Harmful if swallowed  
H315 - Causes skin irritation  
H319 – Causes serious eye irritation  
H320 - Causes eye irritation  
H350 - May cause cancer by route of exposure if conclusively proven that no other route applies  
H351 – Causes damage to organs through prolonged or repeated exposure by route of exposure if conclusively proven that no other route applies suspected of causing cancer  
H372 - Causes damage to organs through prolonged or repeated exposure by route of exposure if conclusively proven that no other route applies

**Precautionary Statements (GHS-US)**

: P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P233 - Keep container tightly closed.  
P240 - Ground/bond container and receiving equipment.  
P241 - Use explosion-proof electrical/ventilating/lighting/equipment.  
P242 - Use only non-sparking tools.  
P243 - Take precautionary measures against static discharge.  
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 - Wash face, hands and any exposed skin thoroughly after handling.  
P270 - Do not eat, drink or smoke when using this product.  
P280 – Wear protective gloves/protective clothing/eye protection/face protection.  
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.  
P303 + P361 + P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P314 - Get medical advice/attention if you feel unwell.  
P321 - Specific treatment (see supplemental instructions on the administration of antidotes on this label).  
P330 - Rinse mouth.  
P332 + P313 - If skin irritation occurs: Get medical advice/attention.  
P362 - Take off contaminated clothing and wash before reuse.  
P370 + P378 - In case of fire: Use for extinction.  
P403 + P235 - Store in a well-ventilated place. Keep cool.  
P501 – Dispose of contents/container to hazardous or special waste collection point.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**Component**

Name	Product Identifier	% (w/w)	Classification (GHS-US)
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Asphalt	(CAS No) 8052-42-4	30-60	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 Carc. 2, H351
<b>Fiber Glass Mat</b> <sup>1</sup> <b>Contains:</b> Fibrous Glass (Oxides of Silicon, Aluminum, Iron, Calcium, Potassium, Titanium, Magnesium, Sodium)	(CAS No) 65997-17-3	5-10	Carc. 1, H350
<b>Sand &amp; Colored Granules</b> <sup>2</sup> <b>Contains:</b> Crystalline Silica (Quartz)	(CAS No) 14808-60-7	0-0.1	Carc. 1, H350 STOT RE 1, H372
Calcium Carbonate	(CAS No) 1317-65-3	10-30	Acute Tox. Oral 4, H302 Skin Corr. Irr. 2, H315 Eye Irr. 2B, H320 STOT RE 1, H372

1. The exposure to the substance above the limits of exposure is not likely to occur considering its form (incorporated in the mixture) and/or the provided use. The limit of exposure is given for reference only.

2. A proportion of crystalline silica can be present in the sand sprinkled on the top of some membranes. The crystalline silica contained in the sand is not likely to be found in the ambient air in concentration above the limit of exposure since the sand adheres to the surface of the membrane.

## **SECTION 4: FIRST AID MEASURES**

### **Description of First Aid Measures**

**General:** If you feel unwell, seek medical advice (show the label where possible). 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. Discard any shoes or clothing items that cannot be decontaminated.

**Inhalation:** Remove to fresh air.

**Skin Contact:** Wash gently with soap and water with soap and plenty of water removing all contaminated clothes and shoes.

**Eye Contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**Ingestion:** DO NOT induce vomiting. Prevent aspiration of material into lungs. Seek immediate medical attention.

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

In case of ingestion, the decision of whether or not to induce vomiting should be made by the attending physician. Certain pre-existing conditions may make workers particularly susceptible to the effects of this chemical: asthma, allergies, impaired pulmonary function.

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

### **Extinguishing Media**

**Suitable Extinguishing Media:** Foam. Carbon dioxide (CO<sub>2</sub>). Sand. Dry chemical.

**Unsuitable Extinguishing Media:** Not available.

### **Hazardous Combustion Products**

Black smoke, Hydrogen sulfide, sulfur dioxide.

### **Advice for Firefighters**

**Precautionary Measures Fire:** Not available

**Special 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

**Specific Methods:** Keep product and empty container away from heat and sources of ignition

### **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:** Material is not normally involved in a spill/release scenario.

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**For Non-Emergency Personnel**

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

**For Emergency Personnel**

**Environmental Precautions**

No information available.

**Methods and Materials for Containment and Cleaning Up**

Wash spill area with soap and water.

**SECTION 7: HANDLING AND STORAGE**

**Precautions for Safe Handling**

Avoid contact with skin, eyes and clothing

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

Store upright to prevent creasing. Keep out of the reach of children.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Control Parameters**

Chemical Name	ACGIH TLV	OSHA PEL	Ontario TWAEV	Mexico
Asphalt	TWA: 0.5 mg/m3	TWA: 15 mg/m3 TWA: 5 mg/m3	TWA: 0.5 mg/m3	STEL: 10 mg/m3 TWA: 5 mg/m3
Crystalline Silica (Quartz)	TWA: 0.025 mg/m3	TWA: 0.1 mg/m3	TWA: 0.1 mg/m3	TWA: 0.1 mg/m3
Calcium Carbonate	TWA: 15 mg/m3 TWA: 5 mg/m3	TWA: 10 mg/m3	STEL: 20 mg/m3 TWA: 10 mg/m3	
Chemical Name	NIOSH IDLH			
Crystalline Silica (Quartz)	50 µg/m3			

1. Because the substances listed above are incorporated into the product in a solid stable mixture, exposures exceeding the exposure limits are not likely to occur under normal conditions of use. 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 Respiratory Protection**

Protective gloves. Long pant and long sleeve shirt.

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



**Hygiene Measures**

If this product is hot-applied with asphalt or an asphalt based adhesive, 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 hot 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".

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**Information on Basic 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:** 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

**SECTION 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

**SECTION 11. TOXICOLOGICAL INFORMATION**

Chemical Name	LD50 Oral	LD50 Dermal
Asphalt	5000 mg/kg Rat	2000 mg/kg Rabbit
Quartz (Crystalline Silica)	500 mg/kg Rat	

**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 Asphalt:**

While this product presents no hazard in its normal and intended use; FOR INSTALLATIONS THAT UTILIZE HOT APPLIED OXIDIZED ASPHALT (CAS # 64742-93-4): Chronic toxicity of asphalt fumes arise from hot asphalt. When this article is installed with a "cold application", defined as the use of asphaltic or non-asphaltic solvent or non-solvent borne adhesives, and used as directed; it is unlikely to create hazardous levels of asphalt emissions. As a result of the following conclusions, care must be taken in the use of hot applied oxidized asphalt systems. The International Agency for Research on Cancer (IARC) has determined that "occupational exposure to oxidized bitumens and their emissions during roofing" are classified as "probably carcinogenic to humans" (Group 2A). IARC's determination was based primarily on a finding of "sufficient" evidence of carcinogenicity of in animals for extracts and fume condensates from oxidized asphalt. IARC's review of studies in humans concluded that the evidence on the carcinogenicity of oxidized asphalt emissions in roofers is "limited" because of potential confounding by exposures to carcinogens such as coal-tar and tobacco smoking could not be ruled out. The National Institute for Occupational Safety and Health (NIOSH) has determined that roofing asphalt fumes are a "potential occupational carcinogen." In support of this finding, NIOSH determined that data from experimental studies in animals and cultured mammalian cells indicate that laboratory-generated roofing asphalt fume condensates are genotoxic and cause skin tumors in mice when applied dermally. Like IARC, NIOSH concluded that he results from epidemiologic

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studies indicate that roofers exposed to asphalt fumes are at an increased risk of lung cancer, but it is uncertain whether this increase can be attributed to asphalt and/or to other exposures such as coal tar or asbestos.

**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)

**SECTION 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

**SECTION 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

**Waste Disposal Recommendations:** Dispose of contents/container in accordance with local/regional/national/international regulations. When this product as supplied is to be discarded as waste, it does not meet the definition of a RCRA waste under 40 CFR 261.

**Unused and Contaminated Product:** Offer rinsed packaging material to local recycling facilities.

**SECTION 14: TRANSPORT INFORMATION**

**DOT:** Not regulated

**TDG:** Not regulated

**MEX:** Not regulated

**ICAO:** Not regulated

**IATA:** Not regulated

**IMDG/IMO:** Not regulated

**SECTION 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
Fibrous Glass (Oxides of Silicon, Aluminum, Calcium)	X	X	X	X	X	X	X	X	X	X
Crystalline Silica (Quartz)	X	X	X	X	X	X	X	X	X	X
Calcium Carbonate	X	X	X	X	X	X	X	X	X	X

**TSCA:** Complies

**DSL:** Complies

**NDSL:** Complies

**EINECS:** Complies

**ELINCS:** Complies

**ENCS:** Complies

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**CHINA:** Complies

**KECL:** Complies

**PICCS:** Complies

**AICS:** 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.

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	Category	Type
Quartz (Crystalline Silica)	14808-60-7	Carcinogen	

**State Right-to-Know**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Asphalt	X	X	X		X
Crystalline Silica (Quartz)	X	X	X		X
Calcium Carbonate	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

**SECTION 16: OTHER INFORMATION**

**Revision Date** : 06/15/2016  
**Other Information** : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.  
**Party Responsible for the Preparation of This Document** : The Garland Company, Inc.  
3800 East 91<sup>st</sup> Street  
Cleveland, Ohio 44105-2197  
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*This information is based on our knowledge as of the Revision Date and is intended to describe the product only for the purposes of health, safety and environmental requirements as of the Revision Date. It should not therefore be construed as guaranteeing any specific property of the product nor as providing any warranty, expressed or implied. The user assumes all responsibility, liability, risk of loss, damage, or expense arising out of, or in any way connected with, the handling, storage, use, or disposal of the product.*