



**Material Safety Data Sheet – OSHA 174**

**Materials Safety Data Sheet**  
 May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements

**US Department of Labor**  
 Occupational Safety and Health Administration  
 (Non-Mandatory Form)  
 Form Approved OMB No. 1218-0072

H.M.I.S. RATING	
Health	0
Flammability	1
Reactivity	0
Protective Equip.	A

**FlexShield 28 – Asphalt Coated Roll Roofing**

**Section I**

<b>Manufacturer's Name</b> GlobalShield, Inc.	<b>Emergency Telephone</b> 800-424-9300 (ChemTrec)	<b>Telephone</b> 800-974-7663
<b>Address</b> GlobalShield 320 Northpoint Pkwy. Suite O Acworth, GA 30102	<b>Primary Contact</b> Technical Services	<b>Email</b> <a href="mailto:info@globalshield.us">info@globalshield.us</a>
	<b>NFPA</b> 704	<b>Preparer's Signature</b> <i>Jerry Solou</i>

**Section II Hazardous Ingredients / Identity Information**

Hazardous Component	CAS#	OSHA PEL	AGGIH TLV	Other Limits	Percent
Asphalt, oxidized	64742-93-4	0.75 ppm TWA	2 ppm		70 - 75
Crystalline silica	14808-60-7				20 – 25
Continuous filament glass fibers	65997-17-3				1 - 5

\*\*All Chemicals comprising this product are listed on the Toxic Substance Control Act (TSCA) inventory.  
 \*Indicates toxic chemical(s) subject to the reporting requirements of section 313 of title III and of 40 CFR 372.

**Section III Physical / Chemical Characteristics**

<b>Boiling Point</b> >700°F	<b>Melting Point</b> >200°F	<b>Max VOC (g/l)</b> 0
<b>Vapor Pressure (mm Hg)</b> N/A	<b>Evaporation Rate (Butyl Acetate=1)</b> N/A	<b>Max VOC (lbs/gal)</b> 0
<b>Vapor Density (Air=1)</b> Greater than air	<b>Weight Per Gallon</b> N/A	<b>% Water Volume</b> 0
<b>Color</b> Black, gray	<b>Solubility in Water</b> Non-Dispersible	<b>% Solids Weight</b> 100
<b>Odor</b> Asphalt odor	<b>Appearance</b> Dark mat with sand	<b>% Volatile Volume</b> 0
<b>Specific Gravity</b> Variable	<b>PH</b> N/A	

**Section IV Fire and Explosion Hazard Data**

<b>Flammability Class</b> OSHA – none	<b>Flash Point Temperature</b> N/A	<b>LEL Flammable Limit</b> N/A	<b>UEL Flammable Limit</b> N/A
<b>Extinguishing Media</b> Foam, CO2, Dry Chemical, Water Fog, Spray (Water)			
<b>Fire Fighting Procedures</b> Firemen should wear MSHA/NIOSH approved self-contained apparatus to protect against inhalation of combustion products.			
<b>Additional Procedures</b> Avoid confined space without proper equipment			
<b>Unusual Fire and Explosion Hazards</b>			

When heated, fumes may burn if ignition source is provided. Petroleum asphalt fumes can explode if emitted in an enclosed environment and supplied with an ignition source. Burning product will cause thick black smoke.

## Section V Reactivity Data

### Stability

Material is Stable

### Incompatibility (Materials to Avoid)

Strong Oxidants

### Hazardous Polymerization

Will Not Occur

### Conditions to Avoid

Incomplete combustion

### Hazardous Decompositions or Byproducts

Burning of this material will produce thick, black smoke.

### Comments

This product contains asphalt. Some asphalts contain sulfur compounds which may form H<sub>2</sub>S when heated or burned.

## Section VI Health Hazard Data

### Routes of Entry

#### If In Eyes

##### Symptoms

- Eye irritation
- Blurred vision
- Burning of eyes
- Tearing, redness, or swelling

##### Emergency and First Aid Procedures

- Flush gently with large amounts of water for at least 15 minutes lifting upper and lower lids occasionally. Get immediate medical attention

#### If Ingested

##### Symptoms

- May be a health hazard if ingested in large quantities.

##### Emergency and First Aid Procedures

- Get prompt medical attention.

#### If Inhaled

##### Symptoms

- Dizziness, headaches, even unconsciousness or death.
- Coughing.
- Shortness of breath.

##### Emergency and First Aid Procedures

- Remove from vapor immediately and if breathing is difficult, administer oxygen.
- If overcome, call physician.
- If breathing has stopped or is irregular, start resuscitation or administer oxygen, as needed.

#### If on Skin

##### Symptoms

- Possible dermatitis or allergenic reaction on repeated contact.

##### Emergency and First Aid Procedures

- Remove contaminated clothes and wash with waterless hand cleaner or soap and water.

## Section VII Precautions for Safe Handling and Use.

### Steps to be taken in case material is released or spilled:

None

### Waste Disposal Method:

Assure conformity with applicable disposal regulations

### Precautions for Handling and Storage:

Wash after skin contact. Do not handle or store near heat or strong oxidants. Adequate ventilation required.

### Other Precautions:

Hydrogen sulfide (H<sub>2</sub>S), an extremely toxic gas, may be emitted from heated asphalt and may accumulate in storage tanks and other confined spaces. At low concentrations, H<sub>2</sub>S is irritating to the eyes, nose and throat, and at high concentrations (>500ppm) can cause rapid unconsciousness and death. The odor of H<sub>2</sub>S cannot be used as an indicator of exposure, because the gas causes rapid olfactory fatigue, which deadens the sense of smell. Use this product only under well-ventilated working conditions.

## Section VIII Control Measures

### None

### Protective Equipment Required

#### Respirator

Not normally required

#### Gloves

Recommended but not required

<b>Goggles</b>
Recommended but not required
<b>Clothing</b>
If repeated contact is probable use chemical resistant apron.
<b>Work Hygienic Practices</b>
Practice good work hygiene

**Section IX Special Precautions for Safe Handling and Storage**

<b>Precautions for Handling and Storage</b>
Do not store near flame

<b>Other Precautions</b>
None

**Section X Transportation Data**

<b>DOT</b>
Not Regulated

<b>IMDG</b>
Not Regulated

<b>IATA</b>
Not Regulated

**Section XI Regulatory Information**

**OSHA:** Not Regulated

**TSCA (Toxic Substances Control Act) Regulations:** This material or its components are listed on the TSCA Chemical Substance Inventory and is in compliance with all applicable rules and orders. One or more of the components may be exempt from listing on the TSCA Inventory.

**SARA:** This material does not contain any substances in the list on Toxic Chemicals subject to Section 313 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III), in excess of the applicable de minimis concentrations as specified in Section 372.38 (a).

**California Proposition 65:** This product does contain chemicals known to the state of California to cause cancer, birth defects or any other harm.

Crystalline silica is considered a hazard by inhalation. The International Agency for Research on Cancer (IARC) has classified crystalline silica as a Group 1 substance, carcinogenic to humans. This classification is based on the findings of laboratory animal studies (inhalation and implantation) and epidemiological studies that were considered sufficient for carcinogenicity. Excessive exposure to respirable crystalline silica can cause silicosis, a non-cancerous lung disease. Crystalline silica has not been classified by the Occupational Safety and Health Administration (OSHA).

Asphalt: In 1994, IARC reconfirmed its earlier assessment that studies of workers exposed to asphalt provide inadequate evidence of carcinogenicity. IARC had previously classified asphalt as a Group 3 substance. Animal studies in which high concentrations of asphalt fumes were breathed for extended periods of time did not indicate any cancer effects. Bronchitis and pneumonitis were observed. Two studies where condensed fractions of certain asphalt fume condensates were repeatedly applied to the skin of laboratory animals reported the induction of skin cancers. The asphalt fume condensates collected for these studies were subjected to extremely high temperatures (316°C/601°F) and were heated for seven to ten hours while being continually stirred. This is not typical of any asphalt application. Trace amounts of polynuclear aromatic hydrocarbons (PAHs) may be present in some asphalt and can be generated upon excessive heating, which results in thermal cracking of the asphalt compounds. Some of these PAHs have been identified as having potential carcinogenic and reproductive health effects. Exposure to formaldehyde gas (released under conditions of high heat or humidity) may cause eye and upper respiratory irritation, and possible respiratory or skin sensitization (allergy). If sensitization occurs, subsequent exposures to formaldehyde may worsen asthma or their respiratory problems, and cause allergic type reactions. Exposure to formaldehyde gas has been associated with the development of nasal tumors in laboratory animals. Formaldehyde has been classified as a probable human carcinogen, Group 2A, by the International Agency for Research on Cancer (IARC), and the Occupational Safety and Health Administration (OSHA), and National Toxicology Program (NTP) considered formaldehyde to have carcinogenic potential. OSHA specifically regulates formaldehyde under 29 CFR 1910.1048. No chronic health effects are known to be associated with exposure to continuous filament fiberglass. Results from epidemiologic studies have not shown any increases in respiratory disease or cancer. The IARC has classified continuous filament fiberglass as a Group 3 substance, not classifiable as to its carcinogenicity to humans. Because of the large diameter of continuous filament fibers, these products are not considered respirable.

## Section XII Other Information

**Glossary:** ACGIH- American Conference of Governmental Industrial Hygienist  
IARC- International Agency for Research on Cancer  
MSHA- Mine Safety and Health Administration  
NIOSH- National Institute for Occupational Safety and Health  
NTP- National Toxicology Program  
OSHA- Occupational Safety and Health Administration

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