



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 IV – Asphalt Coated Roll Roofing

Section I

Manufacturer's Name

GlobalShield, Inc.

Address

GlobalShield
320 Northpoint Pkwy. Suite O
Acworth, GA 30102

Emergency Telephone

800-424-9300 (ChemTrec)

Primary Contact

Technical Services

NFPA

704

Telephone

800-974-7663

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info@globalshield.us

Preparer's Signature

Jerry Solou

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

Boiling Point

>700°F

Melting Point

>200°F

Max VOC (g/l)

0

Vapor Pressure (mm Hg)

N/A

Evaporation Rate (Butyl Acetate=1)

N/A

Max VOC (lbs/gal)

0

Vapor Density (Air=1)

Greater than air

Weight Per Gallon

N/A

% Water Volume

0

Color

Black, gray

Solubility in Water

Non-Dispersible

% Solids Weight

100

Odor

Asphalt odor

Appearance

Dark mat with sand

% Volatile Volume

0

Specific Gravity

Variable

PH

N/A

Section IV Fire and Explosion Hazard Data

Flammability Class

OSHA – none

Flash Point Temperature

N/A

LEL Flammable Limit

N/A

UEL Flammable Limit

N/A

Extinguishing Media

Foam, CO₂, Dry Chemical, Water Fog, Spray (Water)

Fire Fighting Procedures

Firemen should wear MSHA/NIOSH approved self-contained apparatus to protect against inhalation of combustion products.

Additional Procedures

Avoid confined space without proper equipment

Unusual Fire and Explosion Hazards

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 H₂S 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 (H₂S), an extremely toxic gas, may be emitted from heated asphalt and may accumulate in storage tanks and other confined spaces. At low concentrations, H₂S is irritating to the eyes, nose and throat, and at high concentrations (>500ppm) can cause rapid unconsciousness and death. The odor of H₂S 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

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

Section IX Special Precautions for Safe Handling and Storage

Precautions for Handling and Storage
Do not store near flame

Other Precautions
None

Section X Transportation Data

DOT
Not Regulated

IMDG
Not Regulated

IATA
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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