

**Safety Data Sheet**

May be used to comply with OSHA Hazard Communication Standard, 29 CFR 1910 1200. Standard must be consulted for specific requirements.

U. S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form)
Form Approved
OMB No. 1218-0072

Note: Blank spaces are not permitted. If any item is not applicable or no information is available, the space must be marked to indicate that.

Section 1 PRODUCT AND COMPANY IDENTIFICATION

Product Name: GSE High Density Polyethylene Geomembrane
Supplier: GSE Environmental, LLC
19103 Gundle Road
Houston, Texas 77073
www.gseworld.com
Telephone Number: 800-435-2008
Fax Number: 281-875-6010
In case of emergency: CHEMTREC: 800-424-9300
Manufacturer: GSE Environmental, LLC
19103 Gundle Road
Houston, Texas 77073
www.gseworld.com
Telephone Number: 800-435-2008
Validation Date: May 7, 2014
Print Date: May 7, 2014
Product Type: Sheet

Section 2 COMPOSITION/INFORMATION ON INGREDIENTS

High Density Polyethylene Geomembrane

MATERIAL OR COMPONENT	CAS NUMBER	ACGIH-TLV-TWA	OSHA PEL-TWA
2 - 3% Carbon Black	1333864	None	3.50%
Approximately 0.5% antioxidants and heat stabilizers	N/A	None	None

Section 3 HAZARDS IDENTIFICATION

MATERIAL OR COMPONENT	CAS NUMBER	ACGIH-TLV-TWA	OSHA PEL-TWA
Carbon Black	1333864	None	3.50%
Approximately 0.5% antioxidants and heat stabilizers	N/A	None	None

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4 FIRST AID MEASURES

Inhalation: Under normal conditions, first aid procedures are not required.

Skin: Under normal conditions, first aid procedures are not required. Treat as thermal burn if contact is with molten material.

Eyes: In case of contact, immediately flush eyes with plenty of clean water for at least 15 minutes and get medical attention if irritation persists.

Ingestion: Under normal conditions, first aid procedures are not required.

Note to Physicians: Treat symptomatically.

No hazardous components in geotextile fabrics

Section 5 FIRE FIGHTING MEASURES

Flash Point/Range (F): >600° (F)

Auto ignition Temperature (F): Not determined

Auto ignition Temperature (C): Not determined

Flammability Limits in Air-Lower (%): Not determined

Flammability Limits in Air-Upper (%): Not determined

Fire Extinguishing Media: ABC Fire extinguisher

Special Exposure Hazards: None

Special Protective Equipment for Fire-Fighters: Use self-contained breathing apparatus when fire fighting in confined areas

Unusual Fire and Explosion Hazards: Treat as a solid that can burn. Generally burns slowly with low smoke density and flaming drips. Burns with high smoke density under certain conditions.

Section 6 ACCIDENTAL RELEASE MEASURES

Personal precautions: No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering.

Environmental precautions: None known

Section 7 HANDLING AND STORAGE

Handling: No special handling procedures required

Storage: No special storage procedures required

Section 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure control measures: None known

Engineering measures: None known

Hygiene measures: None known

Personal protection

Respiratory: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the respirator.

Hands: None known

Eyes: None known

Skin: None known

Section 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Solid

Color: Various

Odor: Odorless

Specific gravity (H₂O = 1): 0.9 - 0.905

Boiling point/range (F): Not determined

Boiling point/range (C): Not determined

Freezing point/range (F): Not determined

Freezing point/range (C): Not determined

Melting point: 120 - 170° C

Vapor pressure at 20 c (mm Hg): Not determined

Vapor density (Air = 1): Not determined

Percent volatiles: Not determined

Evaporation rate (Butyl Acetate = 1): Not determined

Solubility in water (g/100ml): Insoluble

Solubility in solvents (g/ml): Not determined

Solubility in sea water (g/ml): Insoluble

VOCs (lb./gallon): Not determined

Viscosity, dynamic at 20 C (centipoise): Not determined

Viscosity, Kinematic at 20 C (centistoke): Not determined

Partition Coefficient/n-Octanol/water: Not determined

Molecular weight (g/mole): Not determined

Section 10 STABILITY AND REACTIVITY

Stability: Stable

Hazardous Polymerization: Will not occur

Conditions to avoid: None anticipated

Incompatibility (Materials to avoid): None anticipated

Hazardous Decomposition Products: None anticipated

Additional Guidelines: Not applicable

Section 11 TOXICOLOGICAL INFORMATION

Potential chronic health effects: None known

Section 12 ECOLOGICAL INFORMATION

Environmental effects: No known significant effects or critical hazards

Section 13 DISPOSAL INFORMATION

Waste disposal: Bury in a licensed landfill according to federal, state and local regulations.

Contaminated Packaging: Follow all applicable federal, state and local regulations.

Section 14 TRANSPORTATION INFORMATION

Not Regulated

Section 15 REGULATORY INFORMATION

U.S. Federal Regulations:

United States inventory (TSCA 8b) - All components are listed or exempted
SARA 302/304/311/312 extremely hazardous substances - No products were found
SARA 302/304 emergency planning and notification - No products were found
SARA 302/304/311/312 hazardous chemicals - No products were found
SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
Clean Water Act (CWA) 307 - No products were found
Clean Water Act (CWA) 311 - No products were found
Clean Air Act (CAA) 112 accidental release prevention - No products were found
SARA 313 - Form R - Reporting requirements - No products were found

SARA 313 - Form R - Reporting Requirements:

No products were found

State Regulations:

No products were found

United States inventory (TSCA 8b):

All components are listed or exempted

Section 16 OTHER INFORMATION

SDS Preparation Date: May 7, 2014

Each of these products is classified as an "ARTICLE" according to Title 29 of the Code of Federal Regulations, OSHA Part 1916.12000 c They are formed to a specific shape of design during manufacturing, have end use functions dependent upon their shape or design, and do not release any hazardous chemicals under normal conditions.

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