

GS TPO

**TPO
MEMBRANE**

MATERIAL SAFETY DATA SHEET



GreenShield

Heatshielding & Waterproofing Your Roof

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

MATERIAL NAME	GreenShield (GS) TPO Membrane (SP, SP FR, RF, RF FR, RF BG S, RF BG S RF, RF BG D); Non-Reinforced Flashing, TPO termination profile, accessories constructed from membrane including Coverstrip, Corners, Pipe Seals, etc.
SYNONYMS	Membrane, Tapes and Accessories
PRODUCT USE	Waterproofing and Heat Shielding Membrane
MANUFACTURER INFORMATION	GREENSHIELD CONSTROCHEM PVT. LTD. Opp. Mercedes Benz, GAT No. 278/1/A – Shed 4, MIDC Chakan Phase III, Nighoje, Pune – 410501, Maharashtra, INDIA. Emergency Phone #: +91 255-1230149

SECTION 2: HAZARD IDENTIFICATION

As defined in the OSHA Hazard Communication Standard, 29 CFR 1910.1200, the products listed above are considered articles and do not require an SDS. In addition, articles are not included in the scope of the Globally Harmonization System (GHS). As such, the GHS labeling elements are not included on this SDS. All components listed for this product are bound within the product. When handled as intended and under normal conditions of use, there is no evidence that any of the ingredients are released in amounts that pose a significant health risk. Although these products are not subject to the OSHA Standard or GHS labeling elements, GreenShield would like to disclose as much health and safety information as possible to ensure that this product is handled and used properly. This SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and be made available for employees and other users of this product. In addition, the recommendations for handling and use of these products should be included in worker training programs.

Primary Route of Exposure	NONE	
Signs & Systems of Exposure	Eyes	Not Applicable
	Skin	Minimize contact particularly at high ambient temperatures
	Ingestion	Not Applicable
	Inhalation	Not Applicable
	Acute Health Hazard	Not Applicable
	Chronic Health Hazard	Not Applicable
	Carcinogenicity	Not Applicable

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

CAS	COMPONENT NAME	PERCENTAGE
TRADE SECRET	PROPYLENE ETHYLENE COPOLYMER	>50
TRADE SECRET	FLAME RETARDANTS	0 - >15
TRADE SECRET	STABILIZERS	>5



SECTION 4: FIRST AID MEASURES

Inhalation	Inhalation of vapour from this product during heat welding may cause respiratory tract irritation
Skin	Exposure to hot surfaces during heat welding may cause thermal burns
Eyes	Vapour from this product during heat welding may irritate eyes.
Ingestion	Cannot be ingested under normal circumstances
Note to Physicians	Not Applicable

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Use dry chemical, carbon dioxide, or water spray.
Unsuitable Extinguishing Media	None reported.
Special Hazards Arising from the Chemical	Oil bleeds from material when burning.
Hazardous Combustion Products	Toxic gases or vapors, such as carbon monoxide and other organic compounds may be released in a fire.
Advice for fire-fighters	Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full-face piece operated in pressure-demand or positive-pressure mode.
Fire Fighting Measures	Standard procedures for Class A fires. Use self-contained breathing apparatus (SCBA) and protective clothing for structural fire fighting.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures	Wear personal protective clothing and equipment, see Section 8.
Methods and Materials for Containment and Cleaning Up	Sweep up and dispose in accordance with all applicable regulations.
Environmental Precautions	Provide adequate ventilation during heat welding.

SECTION 7: HANDLING & STORAGE

Precautions for Safe Handling	None Known. Suggest wearing protective gloves. Wash hands thoroughly after handling. KEEP OUT OF REACH OF CHILDREN
Conditions for Safe Storage	This product may react with strong oxidizing agents and should not be stored near such materials. Best to store rolls in areas protected by automatic sprinklers. Store product below 60oC (140oF) to prevent roll sticking at installation.



SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits	No known exposure limits.
Biological limit value	There are no biological limit values for any of this product's components.
Engineering Controls	Provide adequate ventilation. Ensure compliance with applicable exposure limits.
Individual Protection Measures, such as Personal Protective Equipment Eye/face protection	Sunglasses which filter out ultraviolet light are strongly recommended since the white surface is highly reflective to sunlight.
Skin Protection	Work boots and work clothing recommended.
Respiratory Protection	A respiratory protection program that meets OSHA 1910.134, ANSI Z88.2 and / or CSA Z94.4-93 requirements must be followed whenever workplace conditions warrant use of a respirator.
Glove Recommendations	Wear protective gloves.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE & ODOR	Thin sheet in roll form, various colors. Negligible odor.		
FLASH POINT	No Data	LOWER EXPLOSIVE LIMIT	No Data
METHOD USED:	No Data	UPPER EXPLOSIVE LIMIT:	No Data
EVAPORATION RATE:	No Data	BOILING POINT:	No Data
pH (undiluted product):	No Data	MELTING POINT:	350° F
SOLUBILITY IN WATER:	Insoluble	SPECIFIC GRAVITY:	0.9 – 1.2
VAPOR DENSITY:	No Data	PERCENT VOLATILE:	No Data
VAPOR PRESSURE:	No Data	MOLECULAR WEIGHT:	No Data
VOC WITH WATER (LBS/GAL):	No Data	WITHOUT WATER (LBS/GAL):	No Data

SECTION 10: STABILITY & REACTIVITY

Reactivity	No reactivity hazard is expected
Chemical Stability	Stable under normal conditions of use.
Possibility of Hazardous Reactions	Hazardous polymerization will not occur.
Conditions to Avoid	Keep away from heat, sparks or open flame
Incompatible Materials	None known
Hazardous decomposition products	Gases or vapors such as carbon monoxide, carbon dioxide, or oxides of nitrogen, and other organic compounds may be released in a fire.



SECTION 11: TOXICOLOGICAL INFORMATION

Inhalation, Ingestion	Unlikely under normal conditions
Skin, Eye Contact	Unlikely under normal conditions
Acute and Chronic Toxicity	No data available
Immediate & Delayed Effects	No immediate and delayed effects known.
Irritation/Corrosivity Data	My cause skin irritation with repeated contact. No other effects known.
Respiratory Sensitization	No data available.
Dermal Sensitization	No data available.
Component Carcinogenicity	No data available.
Germ Cell Mutagenicity	No data available.
Reproductive Toxicity	No data available.
Specific Target Organ Toxicity - Single Exposure	No data available.
Specific Target Organ Toxicity - Repeated Exposure	No data available.
Aspiration hazard	No data available.
Medical Conditions Aggravated by Exposure	No data available.
Additional Data	No additional information available.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	No data available
Component Analysis – Aquatic Toxicity	No data available
Persistence and Degradability	No information available for the product
Bioaccumulative Potential	No information available for the product
Mobility	No information available for the product
Other Toxicity	No additional information available

SECTION 13: DISPOSAL CONSIDERATION

DISPOSAL METHODS:	(1) Recycle / reprocess; (2) Incineration including energy recovery of waste material in a permitted facility in accordance with local, state or federal regulations; (3) Landfilling in a licensed facility in accordance with local, state or federal regulations.
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SECTION 14: TRANSPORT INFORMATION

Land Transport	Not Regulated
Air Transport	Not Regulated
Sea Transport	Not Regulated
Label Statement	Not Regulated

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

Finished product is not hazardous. Other country/state regulations may apply. Check individual country/state requirements.

SECTION 16: OTHER INFORMATION

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. This information relates to the specific material designated and may not be valid for such material used on combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee, expressed or implied, is made as to its accuracy, reliability, or completeness. It is the user’s responsibility to satisfy himself as to the suitability and completeness of such information for his particular use. We do not accept liability for any loss or damage that may occur from the use of this information.