

MATERIAL SAFETY DATA SHEET

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TUFF-GARD MEMBRANE EMULSION PART A & PART B (CATALYST)

COMPANY IDENTIFICATION

Tuff-Gard Seamless Membrane Systems Inc.
1766-A Midland Avenue,
Scarborough, ON M1P 3C2

EMERGENCY TELEPHONE NUMBERS

Health (416) 410-9155
Transportation (416) 410-9155

PRODUCT INFORMATION: MSDS Requests (416) 410-9155
Environmental, Safety & Health Info: (416) 410-9155
Product Information: (416) 410-9155

COMPOSITION/INFORMATION ON INGREDIENTS

100.0% TUFF-GARD MEMBRANE EMULSION

CONTAINING

COMPONENTS	AMOUNT	LIMIT/QTY	AGENCY/TYPE
ASPHALT Chemical Name: ASPHALT CAS8052424	<65.0%	5 mg/m3	ACGIH TWA
WATER Chemical Name WATER CAS7732185	<34.0%		
COPOLYMERS	<20.0%		
ADDITIVES	<5.0%		

COMPOSITION COMMENT:

All the components of this material are on the Toxic Substances Control Act Chemical Substances Inventory.
TLV - Threshold Limit Value
STEL - Short-term Exposure Limit
RQ - Reportable Quantity
C - Ceiling Limit
AI-5 - Appendix A Categories
TWA - Time Weighted Average
TPQ - Threshold Planning Quantity
PEL - Permissible Exposure Limit
CAS - Chemical Abstract Service Number
() - Chemical Has Been Proposed

Prepared according to the OSHA Hazard Communication
Standard (29CFR 191 0.1200) and the ANSI MSDS Standard (Z400. 1)
Rev. 13/07/16

HAZARDS IDENTIFICATION

***** **EMERGENCY OVERVIEW** *****

Dark to tan liquid.

- PROLONGED OR REPEATED BREATHING OF FUMES OR VAPORS OR CONTACT WITH SKIN CAN BE HARMFUL.
- MATERIALS PRESENT IN ASPHALT HAVE CAUSED CANCER IN LABORATORY ANIMALS.
- KEEP OUT OF REACH OF CHILDREN.

POTENTIAL HEALTH EFFECTS

EYE:

This substance is not expected to cause prolonged or significant eye irritation. This hazard evaluation is based on the data from similar materials.

SKIN:

Expected to cause not more than minor skin irritation, but prolonged or frequently repeated skin contact may be harmful. The systemic toxicity of this substance has not been determined. However, it should be practically non-toxic to internal organs if it gets on the skin. This hazard evaluation is based on data from similar materials.

INGESTION:

The systemic toxicity of this substance has not been determined. However, it should be practically non-toxic to internal organs. This hazard evaluation is based on data from similar materials.

INHALATION:

If inhaled, this substance is considered practically non-toxic to internal organs. This hazard evaluation is based on data from similar materials.

FIRST AID MEASURES

EYE:

No first aid procedures are required. However, as a precaution, flush eyes with fresh water for 15 minutes. Remove contact lenses if worn.

SKIN:

Remove contaminated clothing and wash skin thoroughly with soap and water. DO NOT use solvents or thinners to remove materials from skin. Asphalt can be removed with vegetable oil or mineral oil. Discard contaminated non-waterproof shoes and boots. Wash contaminated clothing.

INGESTION:

If swallowed, give water or milk to drink and telephone for medical advice. DO NOT make person vomit unless directed to do so by medical personnel. If medical advice cannot be obtained, then take the person and product container to the nearest medical emergency treatment center or hospital.

INHALATION:

Since this material is not expected to be an immediate inhalation problem, no first aid procedures are required.

FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: NA

AUTOIGNITION: NA

FLAMMABILITY LIMITES (% by volume in air): Lower: NA; Upper NA

EXTINGUISHING MEDIA: CO₂, Dry chemical, Foam and Water Fog.

NFPA RATINGS: Health 0; Flammability 1; Reactivity 0.

FIRE FIGHTING INSTRUCTIONS:

For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

COMBUSTION PRODUCTS:

Normal combustion forms carbon dioxide, water vapor and may produce oxides of sulfur.

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Rev. 13/07/16

ACCIDENTAL RELEASE MEASURES

TUFF-GARD SEAMLESS MEMBRANES EMERGENCY NUMBER (416) 831 – 4774

ACCIDENTAL RELEASE MEASURES:

Clean up small spills using appropriate techniques such as sorbet materials or pumping. Where feasible and appropriate, remove contaminated soil. Follow prescribed procedures for reporting and responding to larger releases.

HANDLING AND STORAGE

READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.

Smoking, eating and drinking, etc. should be prohibited when skin contact with the product or fume condensate is possible. Workers should clean hands and face before smoking, eating and drinking, etc. Do not use solvents to clean hands and face. Use vegetable oils or mineral oil, followed by a thorough washing with soap and water.

DO NOT weld, heat or drill container. Replace cap or bung. Emptied container still contains hazardous or explosive vapor of liquid.

CAUTION! Do not use pressure to empty drum or drum may rupture with explosive force.

EXPOSURE CONTROLS/PERSONAL PROTECTION

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION:

No special eye protection is usually necessary.

SKIN PROTECTION:

Avoid contact with skin or clothing. Skin contact should be minimized by wearing protective clothing, including gloves.

RESPIRATORY PROTECTION:

This material may have an inhalation hazard and, unless ventilation is adequate, the use of approved respiratory protection is recommended.

ENGINEERING CONTROLS:

Use this material only in well-ventilated areas.

PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL DESCRIPTION:

Dark to tan liquid.

PH:	7-10
VAPOR PRESSURE:	60 MM Hg@ 100°F
VAPOR DENSITY (AIR=1):	NA
BOILING POINT:	212°F (100°C)
MELTING POINT:	30°F Freezes
SOLUBILITY:	Readily dispersible in water
SPECIFIC GRAVITY:	1.05 @ 75°F
EVAPORATION RATE:	NA
VISCOSITY:	50 cp @ 75°F
PERCENT VOLATILE (VOL):	NA

STABILITY AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS: NDA

CHEMICAL STABILITY: Stable.

CONDITIONS TO AVOID: No data available.

INCOMPATIBILITY WITH OTHER MATERIALS:

May react with strong oxidizing agents, such as chlorates, nitrates, peroxides, etc.

HAZARDOUS POLYMERIZATION:

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

EYE EFFECTS:

No product toxicology data available. The hazard evaluation was based on data from similar materials.

SKIN EFFECTS:

No product toxicology data available. The hazard evaluation was based on data from similar materials.

ACUTE ORAL EFFECTS:

No product toxicology data available. The hazard evaluation was based on data from similar materials.

ACUTE INHALATION EFFECTS:

No product toxicology data available. The hazard evaluation was based on data from similar materials.

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CHRONIC EFFECTS/CARCINOGENICITY:

There is concern about the carcinogenicity of chemical compounds found in asphalts. The International Agency for Research on Cancer (IARC) reviewed the carcinogenic potential of asphalts in 1986 and again in 1987. At that time, they concluded there was inadequate evidence to decide that asphalts were carcinogenic to humans. Overall, findings from health monitoring studies of asphalt workers are not conclusive. However, asphalt fume condensates and certain chemical components of asphalt fume have been shown to cause Cancer in mice when repeatedly applied to the skin and allowed to remain on the skin for a prolonged period of time. In addition, asphalt fume condensates have been shown to be weakly positive in Ames mutagenicity tests. Skin contact and breathing of fumes, mists and vapors should be reduced to a minimum.

ECOLOGICAL INFORMATION

ECOTOXICITY:

This material may be toxic to aquatic organisms and should be kept out of sewage and drainage systems and all bodies of water.

ENVIRONMENTAL FATE: No data available.

DISPOSAL CONSIDERATIONS

DISPOSAL CONSIDERATIONS:

Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations. Contact local environmental or health authorities for approved disposal of this material.

TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49 CFR, or appropriate Dangerous Goods Regulations, for additional description requirements (e.g. technical name) and mode-specific or quantity-specific shipping requirements.

DOT SHIPPING NAME: NOT DESIGNATED AS A HAZARDOUS MATERIAL BY THE FEDERAL DOT
DOT HAZARD CLASS NOT APPLICABLE
DOT IDENTIFICATION NUMBER: NOT APPLICABLE
DOT PACKING GROUP: NOT APPLICABLE

REGULATORY INFORMATION

REGULATORY INFORMATION

SARA 311 CATEGORIES:

1. Immediate (Acute) Health Effects: NO
2. Delayed (Chronic) Health Effects: YES
3. Fire Hazard: NO
4. Sudden Release of Pressure Hazard: NO
5. Reactivity Hazard: NO

REGULATORY LISTS SEARCHED:

- | | | |
|-------------------------|-------------------------|----------------------|
| 01=SARA 313 | 11=NJ RTK | 21=TSCA Sect 5(a)(2) |
| 02=MASS RTK | 12=CERCLA 302.4 | 22=TSCA Sect 5 |
| 03=NTP Carcinogen | 13=MN RTK | 23=TSCA Sect 12(b) |
| 04=CA Prop 65-Carcin | 14=ACGIH TWA | 24=TSCA Sect 8(a) |
| 05=CA Prop 55-Repro Tox | 15=ACGIH STEL | 25=TSCA Sect 8(d) |
| 06=IARC Group 1 | 16=ACGIH Calc TLV | 26=TACA Sect 4(a) |
| 07=IARC Group 2A | 17=OSMA PEL | 27=Canadian WHMIS |
| 08=IARC Group 2B | 18=DOT Marine Pollutant | 28=OSHA CEILING |
| 09=SARA 302/304 | 19=Chevron TWA | |
| 10=PA RTK | 20=EPA Carcinogen | |

The following components of this material are found on the regulatory lists indicated.

ASPHALT is found on lists: 01, 10, 11, 13, 14.

OTHER INFORMATION

NFPA RATINGS: Health 0; Flammability 1; Reactivity 0;

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(Least-D, Slight-1, Moderate-2, High-3, Extreme-4), These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association (NFPA) or the National Paint and Coating Association (for HMIS ratings).

PREPARATION STATEMENT:

This Material Safety Data sheet has been revised to comply with the ANSI Z400.1 Standard.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modification of the information, we do not assume any responsibility for the result of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.