

# SAFETY DATA SHEET

Sustainion® E-28 Grade T Membrane

Version 1  
SDS DATE: 10/14/2021

## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Sustainion® E-28 Grade T Membrane

**MANUFACTURER:** Dioxide Materials  
**ADDRESS:** 3998 FAU Boulevard #300  
**City, State, Zip:** Boca Raton, FL 33431

**EMERGENCY PHONE:** (217) 239-1400  
**TECHNICAL PHONE:** (217) 239-1400  
**E-MAIL:** info@dioxidematerials.com

## SECTION 2: HAZARDS IDENTIFICATION



### PICTOGRAM

#### Classification of the substance or mixture

#### GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H225  
Acute toxicity, Oral (Category 4), H302  
Acute toxicity, Inhalation (Category 3), H331  
Acute toxicity, Dermal (Category 4), H312  
Skin corrosion (Category 1B), H314  
Serious eye damage (Category 1), H318  
Short-term (acute) aquatic hazard (Category 3), H402  
Long-term (chronic) aquatic hazard (Category 3), H412

#### GHS Label elements, including precautionary statements:

Pictogram

Signal word                      Danger

#### Hazard statement(s)

H225                                      Highly flammable liquid and vapour.  
H302 + H312                            Harmful if swallowed or in contact with skin.  
H314                                      Causes severe skin burns and eye damage.  
H331                                      Toxic if inhaled.  
H412                                      Harmful to aquatic life with long lasting effects.

#### Precautionary statement(s)

P210                                      Keep away from heat/sparks/open flames/hot surfaces. No smoking.  
P233                                      Keep container tightly closed.  
P240                                      Ground/bond container and receiving equipment.  
P241                                      Use explosion-proof electrical/ ventilating/ lighting equipment.  
P242                                      Use only non-sparking tools.  
P243                                      Take precautionary measures against static discharge.  
P261                                      Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.  
P264                                      Wash skin thoroughly after handling.  
P270                                      Do not eat, drink or smoke when using this product.  
P271                                      Use only outdoors or in a well-ventilated area.  
P273                                      Avoid release to the environment.  
P280                                      Wear protective gloves/ protective clothing/ eye protection/ face protection.  
P301 + P312 + P330                    IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.  
P301 + P330 + P331                    IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303 + P361 + P353                    IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P304 + P340 + P310                    IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.  
P305 + P351 + P338 + P310            IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.  
P363                                      Wash contaminated clothing before reuse.  
P370 + P378                              In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.  
P403 + P233                              Store in a well-ventilated place. Keep container tightly closed.  
P403 + P235                              Store in a well-ventilated place. Keep cool.  
P405                                      Store locked up.  
P501                                      Dispose of contents/ container to an approved waste disposal plant.

#### EMERGENCY OVERVIEW:

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Stable.

May irritate eyes and/or skin. May be harmful if swallowed and/or inhaled.

To the best of our knowledge, the chemical, physical & toxicological properties have not been thoroughly investigated.

A similar compound, Colestyramine, has been shown to cause constipation when swallowed, and in rare cases intestinal obstruction, or hyperchloremic metabolic acidosis

For additional information on toxicity, please refer to Section 11.

## SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<b>INGREDIENT:</b>	<b>CAS NO.</b>	<b>PERCENT</b>	<b>SARA 313</b>
N-methylpiperidine, compd. with 1-(chloromethyl)-4-ethenylbenzene polymer with diethenylbenzene and ethenylbenzene	2067233-09-2	>80%	N/A
Ethylene Glycol	107-21-1	<10%	Y
N-methylpiperidine	606-68-7-5	<5%	N
Polytetrafluoroethylene	9002-84-0	12%	N

**SYNONYMS: PSTMIM-CI**

**CHEMICAL FORMULA:**

## SECTION 4: FIRST AID MEASURES

### GENERAL ADVICE

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of danderous area.

### IN CASE OF EYES CONTACT:

In case of contact with eyes, flush thoroughly with plenty of water for at least 15 mintues. Assure adequated flushing by separating the eyelids with fingers. Call a physician.

### IN CASE OF SKIN CONTACT:

In case of skin contact, wash off with soap and plenty of water for at least 15 minutes. Remove contaminated clothing and shows. Call a physician.

### IF SWALLOWED:

Never give anything by mouth to an unconscious person. If swallowed, rinse mouth with water. Call a physician immediately.

### IF INHALED:

If inhaled, remove person into fresh air. If not breathing, give artificial respiration. Consult a physician.

### INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

No data available

## SECTION 5: FIRE-FIGHTING MEASURES

**AUTOIGNITION TEMPERATURE:** data not available

### NFPA HAZARD CLASSIFICATION:

(estimated) **HEALTH: 1** **FLAMMABILITY: 1** **REACTIVITY: 0**

### HMIS HAZARD CLASSIFICATION:

(estimated) **HEALTH: 2** **FLAMMABILITY: 1** **REACTIVITY: 0**

### EXTINGUISHING MEDIA:

#### SUITABLE EXTINGUISHING MEDIA

Water spray. Carbon dioxide, dry chemical powder, or alcohol-resistant foam

### FIRE FIGHTING:

### SPECIFIC HAZARD(S) ARISING FROM THE SUBSTANCE OR MIXTURE

Carbide oxides, combustible

### ADVICE FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes if necessary.

### FURTHER INFORMATION

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No data available

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## SECTION 6: ACCIDENTAL RELEASE MEASURES

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### PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL

Evacuate area

### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Wear disposable coveralls and discard them after use. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

### ENVIRONMENTAL PRECAUTIONS

Do not let product enter drains.

### METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Ventilate area and wash spill site after material pickup is complete.

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## SECTION 7: HANDLING AND STORAGE

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### PRECAUTIONS FOR SAFE HANDLING:

Avoid contact with skin and eyes. Do not breath dust. Provide appropriate exhaust ventilation at places where dust or mist is formed.

### CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Storage class (TRGS 510): 10: Combustible liquids

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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### ENGINEERING CONTROLS:

Hand in accordance with good industrial hygiene and safety practice. Washing hands before breaks and at the end of the workday.

### RESPIRATORY PROTECTION:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

### SKIN PROTECTION:

Handle with Compatible chemical-resistant gloves. Gloves must be inspected prior to use. Use proper glove removal techniques (without touching glove's outer surface) to avoid skin contact with this product. Disposed of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### EYE PROTECTION:

Chemical safety goggles with side-shields conforming to EN 166 use equipment for eye protection tested and approved under appropriate government standards such as NIOSH(US) or EN 166 (EU).

### WORK HYGIENIC PRACTICES:

Wash contaminated clothing before reuse. Wash thoroughly after handling.

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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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### PHYSICAL STATE:

Solid

### COLOR:

translucent white

### FORM:

solid film

### ODOR:

no data available

### ODOR THRESHOLD

no data available

### pH:

no data available

### BOILING POINT:

no data available

### MELTING POINT:

no data available

### FREEZING POINT:

no data available

### VAPOR PRESSURE (mmHg):

no data available

### VAPOR DENSITY (AIR = 1):

no data available

### SPECIFIC GRAVITY (H<sub>2</sub>O = 1):

no data available

### EVAPORATION RATE:

no data available

### SOLUBILITY IN WATER:

Not soluble in water, polymer portion soluble in ethanol, isopropanol

### DECOMPOSITION TEMP:

no data available

### PARTITION COEFFICIENT:

no data available

### FLASH POINT °F:

no data available

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FLASH POINT °C: no data available  
EXPLOSION PEROPERTIES: no data available  
OXIDIZING PROPERTIES: no data available  
FLAMMABILITY: no data available  
AUTOIGNITION TEMP: no data available  
VISCOSITY: no data available

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## SECTION 10: STABILITY AND REACTIVITY

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REACTIVITY: no data available  
CHEMICAL STABILITY: no data available  
INCOMPATIBILITY (MATERIAL TO AVOID): strong oxidizing agents.  
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: no data available  
HAZARDOUS POLYMERIZATION: will not occur

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## SECTION 11: TOXICOLOGICAL INFORMATION

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TOXICOLOGICAL INFORMATION:  
ACUTE TOXICITY: no data available  
SKIN CIRROSION/IRRITATION: no data available  
SERIOUS EYE IRRITATION/EYE DAMAGE: no data available  
INHALATION: no data available  
REPRODUCTIVE TOXICITY: no data available  
TARGET ORGAN(S) or SYSTEM(S): no data available  
RTECS: not available  
CARCINOGENITY: no data available. Note 2-methyl-imidazole and 4-methyl imidazole have been shown to lead to increased incidence of lung and liver cancer in rats at doses of 230 mg/kg

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## SECTION 12: ECOLOGICAL INFORMATION

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TOXICITY: no data available  
PERSISTENCE AND DEGRADABILITY: no data available  
BIOACCUMULATIVE POTENTIAL: no data available  
MOBILITY IN SOIL: no data available  
OTHER ADVERSE EFFECTS: no data available

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## SECTION 13: DISPOSAL CONSIDERATIONS

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WASTE DISPOSAL METHOD:  
Contact a licensed professional waste disposal service to dispose of this material.  
Observe all federal, state and local environmental regulations.  
CONTAMINATED PACKAGING: dispose of as unused product.

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## SECTION 14: TRANSPORTATION INFORMATION

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U.S. DEPARTMENT OF TRANSPORTATION  
PROPER SHIPPING NAME: None  
NON-HAZARDOUS FOR TRANSPORT: This substance is considered to be nonhazardous for transport.

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## WATER TRANSPORTATION

**PROPER SHIPPING NAME:** None

**NON-HAZARDOUS FOR WATER TRANSPORT:** This substance is considered to be nonhazardous for water transport.

## AIR TRANSPORTATION

**PROPER SHIPPING NAME:** None

**NON-HAZARDOUS FOR AIR TRANSPORT:** This substance is considered to be nonhazardous for air transport.

**Quantities less than 100 lbs: Quantities 100 lbs or more in a single package:**

**DOT SHIPPING DESCRIPTION:** Not Regulated

**DOT HAZARD CLASSIFICATION:** Not Regulated

**DOT LABELS REQUIRED:** None

**DOT MARKING REQUIRED:** None

**UN NUMBER:** Not Applicable

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## SECTION 15: REGULATORY INFORMATION

### SARA 302 COMPONENTS

SARA 302: no chemicals in this materials are subject to the reporting requirement of SARA Title III, Section 302.

### SARA 313 COMPONENTS

The following components are subject to reporting levels established by SARA Title III, Section 313:

Ethylene glycol	CAS-No. 107-21-1	Revision Date 2007-07-01
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### SARA 311/312 Hazards

Acute Health Hazard, Chronix Health Hazard

### STATE REGULATIONS:

Pennsylvania Right To Know Components

Ethylene glycol	CAS-No. 107-21-1	Revision Date 2007-07-01
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**INTERNATIONAL REGULATIONS:** no data available

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## SECTION 16: OTHER INFORMATION

**DISCLAIMER:** For R&D use only.

**SDS CREATION DATE:** October 14, 2021