



## Safety Data Sheet

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### SECTION 1: Identification

#### 1.1. Product identifier

3M™ Solar Encapsulant Film EVA9120B

#### Product Identification Numbers

70-0066-8782-9, XI-0038-5243-5  
7010300442

#### 1.2. Recommended use and restrictions on use

##### Recommended use

Film

#### 1.3. Supplier's details

**MANUFACTURER:** 3M  
**DIVISION:** Electrical Markets Division  
**ADDRESS:** 3M Center, St. Paul, MN 55144-1000, USA  
**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

### SECTION 2: Hazard identification

#### 2.1. Hazard classification

Not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

#### 2.2. Label elements

##### Signal word

Not applicable.

##### Symbols

Not applicable.

##### Pictograms

Not applicable.

#### Supplemental Information:

May cause thermal burns.

**SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
Carbonoperoxoic acid, OO-(1,1-dimethylethyl) O-(2-ethylhexyl) ester	34443-12-4	0.1 - 1 Trade Secret *
Octabenzene	1843-05-6	< 0.5 Trade Secret *
Trimethylolpropane Triacrylate	15625-89-5	< 0.5 Trade Secret *
EVA Copolymer	24937-78-8	> 90 Trade Secret *

\*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation:**

Remove person to fresh air. If you feel unwell, get medical attention.

**Skin Contact:**

Immediately flush skin with large amounts of cold water for at least 15 minutes. DO NOT ATTEMPT TO REMOVE MOLTEN MATERIAL. Cover affected area with a clean dressing. Get immediate medical attention.

**Eye Contact:**

Immediately flush eyes with large amounts of water for at least 15 minutes. DO NOT ATTEMPT TO REMOVE MOLTEN MATERIAL. Get immediate medical attention.

**If Swallowed:**

Rinse mouth. If you feel unwell, get medical attention.

**4.2. Most important symptoms and effects, both acute and delayed**

No critical symptoms or effects. See Section 11.1, information on toxicological effects.

**4.3. Indication of any immediate medical attention and special treatment required**

Not applicable.

**SECTION 5: Fire-fighting measures****5.1. Suitable extinguishing media**

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

**5.2. Special hazards arising from the substance or mixture**

None inherent in this product.

**5.3. Special protective actions for fire-fighters**

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

**6.2. Environmental precautions**

Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**

Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Avoid skin contact with hot material. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Keep away from reactive metals (eg. Aluminum, zinc etc.) to avoid the formation of hydrogen gas that could create an explosion hazard.

**7.2. Conditions for safe storage including any incompatibilities**

Protect from sunlight. Store away from acids. Store away from strong bases. Store away from oxidizing agents.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

<b>Ingredient</b>	<b>C.A.S. No.</b>	<b>Agency</b>	<b>Limit type</b>	<b>Additional Comments</b>
Trimethylolpropane Triacrylate	15625-89-5	AIHA	TWA:1 mg/m3	SKIN

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

**8.2. Exposure controls****8.2.1. Engineering controls**

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

**8.2.2. Personal protective equipment (PPE)****Eye/face protection**

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Full Face Shield

Indirect Vented Goggles

**Skin/hand protection**

No chemical protective gloves are required.

**Respiratory protection**

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

#### Thermal hazards

Wear heat insulating gloves when handling hot material to prevent thermal burns.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Appearance

Physical state

Solid

Color

White

Specific Physical Form:

Film

Odor

Mild Odor

Odor threshold

*No Data Available*

pH

*Not Applicable*

Melting point

*No Data Available*

Boiling Point

*No Data Available*

Flash Point

500 °F [*Test Method:*Closed Cup]

Evaporation rate

*Not Applicable*

Flammability (solid, gas)

Not Classified

Flammable Limits(LEL)

*No Data Available*

Flammable Limits(UEL)

*No Data Available*

Vapor Pressure

*Not Applicable*

Vapor Density

*Not Applicable*

Density

0.93 - 0.97 g/ml

Specific Gravity

0.93 - 0.97 [*Ref Std:*WATER=1]

Solubility In Water

*No Data Available*

Solubility- non-water

*No Data Available*

Partition coefficient: n-octanol/ water

*No Data Available*

Autoignition temperature

*No Data Available*

Decomposition temperature

*No Data Available*

Viscosity

*No Data Available*

Average particle size

*No Data Available*

Bulk density

*No Data Available*

Hazardous Air Pollutants

*No Data Available*

Molecular weight

*No Data Available*

Volatile Organic Compounds

*No Data Available*

Percent volatile

*No Data Available*

Softening point

*No Data Available*

VOC Less H2O & Exempt Solvents

*No Data Available*

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

### 10.2. Chemical stability

Stable.

**10.3. Possibility of hazardous reactions**

Hazardous polymerization will not occur.

**10.4. Conditions to avoid**

Sparks and/or flames

Light

**10.5. Incompatible materials**

Strong acids

Strong bases

Strong oxidizing agents

Reactive metals

No Data Available

**10.6. Hazardous decomposition products****Substance**

Carbon monoxide

Carbon dioxide

**Condition**

Oxidation, heat or reaction

Oxidation, heat or reaction

**SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

**11.1. Information on Toxicological effects****Signs and Symptoms of Exposure**

Based on test data and/or information on the components, this material may produce the following health effects:

**Inhalation:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

**Skin Contact:**

During heating: Thermal Burns: Signs/symptoms may include intense pain, redness and swelling, and tissue destruction.

**Eye Contact:**

During heating: Thermal Burns: Signs/symptoms may include severe pain, redness and swelling, and tissue destruction.

**Ingestion:**

Physical Blockage: Signs/symptoms may include cramping, abdominal pain, and constipation.

**Carcinogenicity:**

<b><u>Ingredient</u></b>	<b><u>CAS No.</u></b>	<b><u>Class Description</u></b>	<b><u>Regulation</u></b>
Trimethylolpropane Triacrylate	15625-89-5	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

**Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity**

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
EVA Copolymer	Dermal		LD50 estimated to be > 5,000 mg/kg
EVA Copolymer	Ingestion	Rat	LD50 > 1,000 mg/kg
Octabenzene	Dermal	Rabbit	LD50 > 10,000 mg/kg
Octabenzene	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 20 mg/l
Octabenzene	Ingestion	Rat	LD50 > 10,000 mg/kg
Trimethylolpropane Triacrylate	Dermal	Rabbit	LD50 5,170 mg/kg
Trimethylolpropane Triacrylate	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
EVA Copolymer	Professional judgment	No significant irritation
Octabenzene	Rabbit	No significant irritation
Trimethylolpropane Triacrylate	Rabbit	Mild irritant

**Serious Eye Damage/Irritation**

Name	Species	Value
EVA Copolymer	Professional judgment	No significant irritation
Octabenzene	Rabbit	No significant irritation
Trimethylolpropane Triacrylate	Rabbit	Corrosive

**Skin Sensitization**

Name	Species	Value
Octabenzene	Guinea pig	Sensitizing
Trimethylolpropane Triacrylate	Guinea pig	Sensitizing

**Respiratory Sensitization**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Germ Cell Mutagenicity**

Name	Route	Value
Octabenzene	In Vitro	Not mutagenic
Trimethylolpropane Triacrylate	In vivo	Not mutagenic
Trimethylolpropane Triacrylate	In Vitro	Some positive data exist, but the data are not sufficient for classification

**Carcinogenicity**

Name	Route	Species	Value
Trimethylolpropane Triacrylate	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification

**Reproductive Toxicity****Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Octabenzene	Ingestion	Not classified for female reproduction	Rat	NOAEL 614 mg/kg/day	4 generation
Octabenzene	Ingestion	Not classified for male reproduction	Rat	NOAEL 524 mg/kg/day	4 generation
Octabenzene	Ingestion	Not classified for development	Rat	NOAEL 614 mg/kg/day	4 generation

### Lactation

Name	Route	Species	Value
Octabenzene	Ingestion	Rat	Not classified for effects on or via lactation

### Target Organ(s)

#### Specific Target Organ Toxicity - single exposure

For the component/components, either no data are currently available or the data are not sufficient for classification.

#### Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
EVA Copolymer	Ingestion	liver	Not classified	Rat	NOAEL 4,000 mg/kg/day	90 days
Octabenzene	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 80 mg/kg/day	90 days
Octabenzene	Ingestion	endocrine system   hematopoietic system	Not classified	Rat	NOAEL 2,000 mg/kg/day	90 days
Octabenzene	Ingestion	liver	Not classified	Dog	NOAEL 300 mg/kg/day	2 years
Trimethylolpropane Triacrylate	Dermal	immune system	May cause damage to organs though prolonged or repeated exposure	Mouse	NOAEL 50 mg/kg/day	16 days
Trimethylolpropane Triacrylate	Dermal	heart   hematopoietic system   kidney and/or bladder   respiratory system	Not classified	Mouse	NOAEL 12 mg/kg/day	28 weeks

### Aspiration Hazard

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

## SECTION 12: Ecological information

### Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

### Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

## SECTION 13: Disposal considerations

**13.1. Disposal methods**

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

**EPA Hazardous Waste Number (RCRA):** Not regulated

**SECTION 14: Transport Information**

For Transport Information, please visit <http://3M.com/Transportinfo> or call 1-800-364-3577 or 651-737-6501.

**SECTION 15: Regulatory information****15.1. US Federal Regulations**

Contact 3M for more information.

**EPCRA 311/312 Hazard Classifications:****Physical Hazards**

Not applicable

**Health Hazards**

Not applicable

**15.2. State Regulations**

Contact 3M for more information.

**15.3. Chemical Inventories**

The components of this product are in compliance with the new substance notification requirements of CEPA.

The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information.

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

**15.4. International Regulations**

Contact 3M for more information.

**This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.**

**SECTION 16: Other information****NFPA Hazard Classification**

**Health:** 1 **Flammability:** 1 **Instability:** 0 **Special Hazards:** None



National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

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