

# Material Safety Data Sheet



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<b>Product name</b>	TOPAS Toner		EMNA/EN
<b>MSDS number</b>	TP06	<b>Revision Date</b>	19.Jun.2006
<b>Revision Number</b>	2	<b>Issuing date</b>	25.Jun.2006

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## 1. Product and company identification

**Product name**

**Topas® Cyclic Olefin Copolymers**

**Manufacturer, importer, supplier**

Topas Advanced Polymers, Inc.  
8040 Dixie Hwy.  
Florence, KY 41042  
United States

**Transportation emergency phone numbers:**

In USA, call 800 424 9300  
Outside USA, call 703 527 3887, collect calls accepted

**End use:**

inks and paints

## 2. Hazards identification

### **Emergency Overview**

This product is considered non-hazardous under the OSHA Hazard Communication Standard (29CFR1910.1200)

### **Product Description**

**Appearance**

<b>Form</b>	granules
<b>Odour</b>	almost odourless
	characteristic
<b>Colour</b>	colourless

### **Potential health effects**

**Routes of exposure**

Skin, eyes, inhalation.

**Immediate effects**

**Inhalation**

No information available May cause respiratory tract irritation Overheating in processing may generate hazardous, irritating vapours

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## Skin

No information available Hot or molten material has the potential to cause thermal burns Polymer particles may cause mechanical irritation

## Eyes

No information available Hot or molten material has the potential to cause thermal burns Resin particles, like other inert materials, are mechanically irritating to eyes

## Ingestion

No information available Essentially non-toxic based on biological activity of high molecular weight polymers

## Delayed / long-term effects

No information available

### 3. Composition/information on ingredients

**Chemical characterization** contains ethylene-norbornene copolmer (CAS 26007-43-2)

**Remarks** The following specific grades of Topas are covered by this MSDS:  
Toner TB; Toner TM

### 4. First aid measures

#### General Information

Wash contaminated clothing before re-use.

#### Inhalation

Move to fresh air. If symptoms persist, call a physician.

#### Skin

Cool skin rapidly with cold water after contact with molten polymer. Obtain medical attention. If polymer ist stuck to skin, do not remove. Allow adhered polymer to come off naturally. Removal of adhered polymer may result in more tissue damages than if polymer is allowed to come off over time.

#### Eyes

Resin particles, like other inert materials, are mechanically irritating to eyes. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

#### Ingestion

If swallowed, seek medical advice immediately and show this container or label. If conscious, drink plenty of water. Do not induce vomiting without medical advice.

#### Note to physician:

This product is essentially inert and non-toxic Under conditions of thermal decomposition irritant gases may be formed Exposed patients may need to have their arterial blood gases and carboxyhemoglobin levels checked

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## 5. Fire-fighting measures

**NFPA:**      **Health:** 1                                      **Flammability:** 1                                      **Instability:** 0

### **Suitable extinguishing media**

water spray, foam, dry powder, carbon dioxide (CO<sub>2</sub>)

### **Extinguishing media which must not be used for safety reasons**

Do not use a solid water stream as it may scatter and spread fire.

### **Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases**

Under conditions giving incomplete combustion, hazardous gases produced may consist of  
carbon monoxide  
carbon dioxide (CO<sub>2</sub>)  
Combustion gases of organic materials must in principle be graded as inhalation poisons

### **Special protective equipment for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

### **Environmental precautions**

Dike and collect water used to fight fire.

### **Other Information**

Cool containers / tanks with water spray. Keep people away from and upwind of fire.

## 6. Accidental release measures

### **Environmental precautions**

Not readily biodegradable. Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

### **Methods for cleaning Up**

Shovel or sweep up. Like most thermoplastic plastics the product can be recycled. Keep in suitable and closed containers for disposal. Dispose of in accordance with local regulations.

## 7. Handling and storage

### **Handling**

#### **Advice on safe handling**

Do not handle hot or molten material without appropriate protective equipment. Do not exceed recommended process temperatures to minimize release of decomposition products. .

#### **Protection - fire and explosion:**

Keep away from sources of ignition - No smoking. Take necessary action to avoid static electricity discharge. Avoid dust formation.

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## Storage

### Technical measures/Storage conditions

Keep away from direct sunlight.

### Material storage

Keep in a dry, cool and well-ventilated place.

### Incompatible products

No special restrictions on storage with other products

## 8. Exposure controls / personal protection

### OSHA Exposure Limits

Components	TWA
Total Dust	15 mg/m <sup>3</sup>
Respirable Dust	5 mg/m <sup>3</sup>

### ACGIH Exposure Limits

Components	TWA
Total Dust	10 mg/m <sup>3</sup>
Respirable Dust	3 mg/m <sup>3</sup>

## Exposure controls

### Engineering measures

Provide adequate ventilation Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction

### Personal protective equipment

#### Protective Equipment

A safety shower and eyebath should be readily available.

#### General advice

Avoid contact with skin and eyes. Remove and wash contaminated clothing before re-use.

#### Respiratory protection

Based on workplace contaminant level and working limits of the respirator, use a respirator approved by NIOSH.

#### Skin protection:

Wear impervious clothing and gloves when there is a reasonable chance for skin contact. When thermal or melt processing, wear well insulated gloves

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## Eye/face protection:

safety glasses with side-shields.

## Comments:

Operations involving grinding and machining of parts should be reviewed to assure that particulate levels are kept below recommended standards

## 9. Physical and chemical properties

### Appearance

<b>Form</b>	granules
<b>Colour</b>	colourless
<b>Odour</b>	almost odourless, characteristic.
<b>Softening point</b>	> 60 °C / 140 F
<b>Specific Gravity</b>	1.0 - 1.1
<b>Vapour pressure</b>	< 0.001 mm Hg
<b>Water solubility</b>	insoluble
<b>VOC Content(%)</b>	< 0.5 % (wt/wt)

## 10. Stability and reactivity

### Stability

Stable under normal conditions of handling, use and transportation.

### Conditions to avoid

Avoid temperatures above 350°C / 662F Product decomposes at elevated temperatures

### Materials to avoid

oxidizing agents

### Hazardous reactions

Hazardous polymerisation does not occur

## 11. Toxicological information

Toxicological data are not available. Observe the usual hygienic measures for handling chemicals.

## 12. Ecological information

Ecotoxicological data are not available. According to experience, the material has no harmful effect on the environment.

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## **13. Disposal considerations**

### **Disposal Considerations:**

Recycling is encouraged. Dispose of in accordance with local regulations. This product as shipped is not a RCHA hazardous waste under present EPA regulations

## **14. Transport information**

**US Department of Transportation** Not regulated

**ICAO/IATA** Not restricted

**IMDG** Not regulated

## **15. Regulatory Information**

### **U.S. FEDERAL REGULATIONS**

This product complies with U.S. Toxic Substance Control Act (TSCA).

### **SARA 313 Chemicals**

Contains no substances at or above the reporting threshold under Section 313.

## **16. Other information**

### **Prepared by:**

Health, Safety and Environment Department

NFPA:	Health: 1	Flammability: 1	Instability: 0
HMIS:	Health: 0	Flammability: 1	Physical hazard: 0

For more information, consult the Technical Data Sheet ([www.topas.com](http://www.topas.com))

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## Sources of key data used to compile the datasheet

Information contained in this safety data sheet is based on Topas owned data and public sources deemed valid or acceptable. The absence of data elements required by ANSI or 2001/58/EC indicates, that no data meeting these requirements is available.

## Other Information:

Changes against the previous version are marked by \*\*\*

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