

# SAFETY DATA SHEET



Revision Date **22-Jun-2019\*\*\***  
Version / Revision **8**  
Supersedes Version **7.02\*\*\***

product code **TP01**  
Issuing date **22-Jun-2019**

## TOPAS® Cyclic Olefin Copolymers

### SECTION 1: Identification of the substance / mixture and of the company / undertaking

#### 1.1. Product identifier

Identification of the substance/preparation

## TOPAS® Cyclic Olefin Copolymers

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance / Preparation

injection molding articles for optical industry, 3-D Printing, packaging Industry, medical articles.

#### 1.3. Details of the supplier of the safety data sheet

Company/Undertaking Identification

**TOPAS Advanced Polymers GmbH**  
Am Prime Parc 9  
65479 Raunheim  
Germany

Product Information

email: [info@topas.com](mailto:info@topas.com)  
Tel: +49 (0) 69 / 945158 000

#### 1.4. Emergency telephone number

Emergency telephone number

+49 (0)69-305 6418 available 24/7

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

Based on present data no classification and labelling is required according to Directive 1272/2008/EC and its amendments (CLP Regulation)

#### 2.2. Label elements

Not required.

#### 2.3. Other hazards

Contact with product at elevated temperatures can result in thermal burns

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## TOPAS® Cyclic Olefin Copolymers

### SECTION 3: Composition / information on ingredients

#### Chemical characterization

contains ethylene-norbornene copolymer (CAS 26007-43-2)

#### Remarks

The following specific grades of TOPAS are covered by this MSDS:

5013L-10; 5013S-04; 6013M-07; 6013S-04; 6015S-04; 6017S-04; 8007S-04; 8007X10

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General advice

Remove/Take off immediately all contaminated clothing. Wash/Decontaminate removed clothing before reuse.

##### Inhalation

Aerate with fresh air. When symptoms persist or in all cases of doubt seek medical advice.

##### 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. Obtain medical attention.

##### Skin

Cool skin rapidly with cold water after contact with molten polymer. If polymer is 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. When symptoms persist or in all cases of doubt seek medical advice.

##### Ingestion

Do not induce vomiting without medical advice. Obtain medical attention.

##### Protection of First-aiders

No special protective equipment required.

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

##### Main symptoms

None known.

#### 4.3. Indication of any immediate medical attention and special treatment needed

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

### SECTION 5: Firefighting measures

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## TOPAS® Cyclic Olefin Copolymers

### 5.1. Extinguishing media

#### Suitable extinguishing media

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

#### Unsuitable Extinguishing Media

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

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

Under conditions giving incomplete combustion, hazardous gases produced may consist of:

carbon monoxide (CO)

carbon dioxide (CO<sub>2</sub>)

Combustion gases of organic materials must in principle be graded as inhalation poisons

### 5.3. Advice for firefighters

#### Special protective equipment for firefighters

Fire fighter protection should include a self-contained breathing apparatus (NIOSH-approved or EN 133) and full fire-fighting turn out gear.

#### Precautions for firefighting

Cool closed containers exposed to fire with water spray. Keep people away from and upwind of fire. Dike and collect water used to fight fire.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### Personal precautions

Avoid contact with skin and eyes. Do not breathe dust. Keep people away from and upwind of spill/leak.

For emergency responders: Personal protection see section 8.

For non-emergency personnel. no special precautions needed.

### 6.2. Environmental precautions

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

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

#### Methods for containment

Stop the flow of material, if possible without risk.

#### Methods for cleaning up

Sweep up and shovel into suitable containers for disposal. Like most thermoplastic plastics the product can be recycled. Dispose of in accordance with local regulations.

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### 6.4. Reference to other sections

For personal protective equipment see section 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe 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.

#### Hygiene measures

Wash hands before breaks and immediately after handling the product. Take off all contaminated clothing immediately.

#### Advice on the protection of the environment

See Section 8: Environmental exposure controls.

#### Incompatible products

No special restrictions on storage with other products

### 7.2. Conditions for safe storage, including any incompatibilities

#### Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge. Dust can form an explosive mixture in air. Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.

#### Technical measures/Storage conditions

Keep away from direct sunlight. Keep containers tightly closed in a dry, cool and well-ventilated place.

### 7.3. Specific end use(s)

see section 1.2

## SECTION 8: Exposure controls / personal protection

### 8.1. Control parameters

#### Exposure limits European Union

No exposure limits established.

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## TOPAS® Cyclic Olefin Copolymers

### Exposure limits UK

#### EH40 WELs

Component	TWA (mg/m <sup>3</sup> )	TWA (ppm)	STEL (mg/m <sup>3</sup> )	STEL (ppm)
Dust, general threshold limit value (inhalable fraction) CAS: None	10			
Dust, general threshold limit value (respirable fraction) CAS: None	4			

#### DNEL & PNEC

Not required.

## 8.2. Exposure controls

#### **Appropriate Engineering controls**

Ensure adequate ventilation. Provide for appropriate exhaust ventilation and dust collection at machinery.

#### Personal protective equipment

#### **General industrial hygiene practice**

Avoid contact with skin, eyes and clothing. Do not breathe dust or mist. Ensure that eyewash stations and safety showers are close to the workstation location.

#### **Hygiene measures**

Wash hands before breaks and immediately after handling the product. Take off all contaminated clothing immediately.

#### **Eye protection**

Tightly fitting safety goggles.  
Equipment should conform to EN 166

#### **Hand protection**

Heat resistant gloves.

**Suitable material**

leather gloves

#### **Skin and body protection**

Wear face-shield and protective suit for abnormal processing problems.

#### **Respiratory protection**

If the dust exposure limit is exceeded, wear dust mask or respirator with particle filter.

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## TOPAS® Cyclic Olefin Copolymers

### Thermal Hazard

When handling hot material, use heat resistant gloves. Heat only in areas with appropriate exhaust ventilation.

### Environmental exposure controls

According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified. If recycling is not practicable, dispose of in compliance with local regulations.

## SECTION 9: Physical and chemical properties

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

Appearance	granules
Colour	colourless
Odour	odourless
Odour threshold	No data available
pH	No data available
Melting point/range	approx. 75-185 °C
Flash point	Not applicable
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Vapour pressure	< 0.001 mm Hg @25°C (77 F)
Vapour density	No data available
Bulk density	550 - 600 g/l
Method	DIN 53466
Water solubility	insoluble
log Pow	No data available
Autoignition temperature	not applicable
Decomposition temperature	No data available
Viscosity	not applicable
Oxidizing properties	Does not apply, substance is not oxidising. There are no chemical groups associated with oxidizing properties

### 9.2. Other information

VOC Content(%) < 0.5 % (wt/wt)

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

The reactivity of the product corresponds to the typical reactivity shown by the substance group as described in any text book on organic chemistry.

### 10.2. Chemical stability

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## TOPAS® Cyclic Olefin Copolymers

Stable under normal conditions of handling, use and transportation.

### 10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

### 10.4. Conditions to avoid

Avoid temperatures above 350 °C / 662F. Risk of decomposition.

### 10.5. Incompatible materials

oxidizing agents.

### 10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapours.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Note

No toxicology information is available. Handle in accordance with good industrial hygiene and safety practice.

## SECTION 12: Ecological information

### 12.1. Toxicity

No data available

### 12.2. Persistence and degradability

No data available

### 12.3. Bioaccumulative potential

No data available

### 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment

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## TOPAS® Cyclic Olefin Copolymers

Not required

### 12.6. Other adverse effects

No data available

#### Note

No information on ecology is available. According to our experience and to the information provided to us, the product does not have any harmful effects if it is used and handled as specified.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Product Information

Where possible recycling is preferred to disposal or incineration. May be taken to waste disposal site or incineration plant, with household waste. Rules of the local authorities must be observed.

#### Uncleaned empty packaging

Regulations concerning reuse or disposal of used packaging materials must be observed.

## SECTION 14: Transport information

### ADR/RID

Not restricted

### ICAO-TI / IATA-DGR

Not restricted

### IMDG

Not restricted

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### DI 2012/18/EU (Seveso III)

Category

not subject

#### German storage class

Storage Class (TRGS510)

11: Combustible solids



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## TOPAS® Cyclic Olefin Copolymers

### Water hazard class

KBwS Class not water endangering  
KBwS Number 766  
KBwS Classification §6, AwSV

### International Inventories

The products covered by this SDS are permitted under the following inventories:

TSCA (US)  
AICS (AU)  
KECI (KR)  
DSL (CA)  
IECSC (CN)  
EINECS (EU)  
ENCS (JP)  
NZIoC (NZ)  
TCSI (TW)

### 15.2. Chemical safety assessment

Not required

## **SECTION 16: Other information**

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### Training advice

For effective first-aid, special training / education is needed.

### 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 OSHA, ANSI or Annex II, Regulation 1907/2006/EC indicates, that no data meeting these requirements is available.

### Further information for the safety data sheet

For more information, consult the Technical Data Sheet ([www.topas.com](http://www.topas.com)). Changes against the previous version are marked by \*\*\*.

### Disclaimer

This information is based on our present state of knowledge. It shall describe our products regarding safety requirements and shall not be construed as a guarantee or statement of condition and/or quality

*End of Safety Data Sheet*