



product code	TP01	Version / Revision	10.2
Revision date	16.9.25	Supersedes Version	10.1

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name

Topas® Cyclic Olefin Copolymers

CAS-No. 26007-43-2
EC-No. -
Registration number -

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

Identified uses

Injection moulding of articles. 3-D Printing. packaging Industry. medical articles.

Uses advised against

Implantable medical devices.

1.3 Details of the supplier of the safety data sheet

Topas Advanced Polymers GmbH

Am Prime Parc 9
65479 Raunheim
Germany

Product information. email: info@topas.com
Tel: +49 (0)69/945158 000

1.4 Emergency telephone number +49 (0)69/305 6700 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.

PBT and vPvB assessment

not required.

Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

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.

This product contains >95% microplastics.***

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Wash contaminated clothing before re-use.

Inhalation

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

Eye contact

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 contact

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

This product is essentially inert and non-toxic. Product dust generated may cause respiratory irritation in case of excessive inhalation exposure.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Foam. Dry chemical. Carbon dioxide (CO₂). Water spray.

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

Does not involve any particular risk of fire or explosion. Under conditions giving incomplete combustion, hazardous gases produced may consist of: carbon monoxide (CO). Carbon dioxide (CO₂). Combustion gases of organic materials must in principle be graded as inhalation poisons.

5.3 Advice for firefighters

Fire fighter protection should include a self-contained breathing apparatus (NIOSH-approved or EN 133) and full fire-fighting turn out gear. Clear the danger zone. Remove undamaged containers from fire area if it is safe to do so. Keep people away from and upwind of fire. Cool closed containers exposed to fire with water spray. Dike and collect water used to fight fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Avoid contact with eyes. Do not breathe dust. Special danger of slipping by leaking/spilling product.

For non-emergency personnel

Keep people away.

For emergency responders

No special technical protective measures required.

6.2 Environmental precautions

Not readily biodegradable. The product contains microparticles as defined in Regulation 1907/2004/EU, Annex XVII No. 78.*** Prevent further leakage or spillage. Do not flush into surface water or sanitary sewer system. Should not be released into the environment.

6.3 Methods and material for containment and cleaning up

Stop the flow of material, if possible without risk. 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.

Quantities released into the environment must be reported to the Chemicals Agency (according to Reach, Annex XVII, Restriction 78, §11 (c)).***

6.4 Reference to other sections

For personal protection see section 8.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for 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. Provide sufficient air exchange and/or exhaust in work rooms.

This product contains microplastics. Prevent any leakage or spill into the environment.***

Advice on general occupational hygiene

Do not eat, drink or smoke when using this product. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

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. Ground and bond containers when transferring material. Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.

Store indoors. Store in a cool dry place. Store away from direct sunlight or ultraviolet light.

Storage class (TRGS 510)

11: Combustible solids.

7.3 Specific end use(s)

see section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Dust, general threshold limit value (inhalable fraction)

	Occupational Exposure Limit Value		Short term exposure limit
TRGS 900 (DE)	10	mg/m ³	Ceiling value 2
MAK Liste (DE)	4	mg/m ³	
Decree No 202:1763, JORF No. 299 (FR)	4	mg/m ³	
EH40 WELs (UK)	10	mg/m ³	
OHSA Table Z-3 (USA)	15	mg/m ³	
GBZ 2.1 (CN)	8	mg/m ³	

Dust, general threshold limit value (respirable fraction)

	Occupational Exposure Limit Value	Short term exposure li- mit
TRGS 900 (DE)	1,25	mg/m ³
Decree No 202:1763, JORF No. 299 (FR)	0.9	mg/m ³
EH40 WELs (UK)	4	mg/m ³
OHSA Table Z-3 (USA)	5	mg/m ³

DNEL-/PNEC-values

Not required.

8.2 Exposure controls

Appropriate engineering controls

Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed.

Individual protection measures, such as personal protective equipment

General industrial hygiene practice.

Avoid inhalation of dust. Avoid contact with skin, eyes and clothing. Ensure that eye flushing systems and safety showers are located close to the working place.

Wash hands before breaks and at the end of workday.

Eye/face protection

Wear protective eyewear (safety glasses). Equipment should conform to EN 166.

Skin protection

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

Hand protection

Selection of gloves will depend on the task. Use gloves with insulation for thermal protection (EN 407), when needed.

Other

None under normal use.

Respiratory protection

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

Filter type:

Filter type P2.

Thermal hazards

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. As the products meets the definition of microplastics, any re-lease to the environment must be avoided.***

9.1 Information on basic physical and chemical properties

Physical state	pellets.
Colour	colorless. transparent.
Odour	odourless.
Melting point/freezing point	75 – 185°C
Boiling point or initial boiling point and boiling range	No data available
Flammability	May form combustible dust concentrations in air during processing, handling or other means.
Lower and upper explosion limit	Not applicable.
Flash point	Not applicable.
Auto-ignition temperature	No data available
Decomposition temperature	No data available
pH	No data available
Viscosity, kinematic	
Water solubility	Insoluble in water.
Partition coefficient n-octanol/water (log value)	No data available
Vapour pressure	< 0.001 mm Hg@25°C (77F)
Density and / or relative density	1,010 – 1,020 kg/l
Relative vapour density	No data available
Particle characteristics	No data available

9.2 Other information

VOC Content	< 0.5 %(w/w)
Bulk Density	550-650 g/l

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2 Chemical stability

Stable under normal conditions of handling, use and transportation.

10.3 Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4 Conditions to avoid

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

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Decomposition products depend upon temperature, air supply and the presence of other materials. Processing may release fumes and other decomposition products. At temperatures exceeding melt temperatures, polymer fragments can be released. Vapours may be irritating to eyes, nose, throat, and lungs. Decomposition products can include and are not limited to: aldehydes. Organic acids. Hydrocarbons.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Essentially non-toxic based on biological activity of high molecular weight polymers.

Acute toxicity

Skin corrosion/irritation

no data available.

Serious eye damage/irritation

no data available.

Respiratory or skin sensitisation

no data available.

Germ cell mutagenicity

no data available.

Carcinogenicity

no data available.

Reproductive toxicity

no data available.

STOT-single exposure

no data available.

STOT - repeated exposure

no data available.

Aspiration hazard

Not applicable.

Information on likely routes of exposure

Dermal. Inhalation.

Symptoms related to the physical, chemical and toxicological characteristics

None known.

Delayed and immediate effects and also chronic effects from short and long term exposure

None known.

Information on other hazards

Endocrine disrupting properties

The mixture does not contain substances (according to Reach Art. 59 §1, Regulation 2017/2100 (EU) or Regulation 2018/605 (EU)) with endocrine disrupting properties => 0,1%. .

11.2 Other information

no data available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Essentially non-toxic based on biological activity of high molecular weight polymers.

12.2 Persistence and degradability

Biodegradation: Not readily biodegradable.

12.3 Bioaccumulative potential

The polymer is too large to be bioavailable.

12.4 Mobility in soil

no data available.

12.5 Results of PBT and vPvB assessment

not required.

12.6 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

According to our experience and to the information provided to us, the product does not have any harmful environmental effects if it is used and handled as specified. As the products meets the definition of micro-plastics, any release to the environment must be avoided.***

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal required in compliance with all waste management related state and local regulations. The choice of the appropriate method of disposal depends on the product composition by the time of disposal as well as the local statutes and possibilities for disposal. 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	IMDG	IATA	ADN
14.1 UN number or ID number				
14.2 UN proper shipping name				
Hazard Inducer	Not dangerous goods.			
14.3 Transport hazard class(es)				
14.4 Packing group				
14.5 Environmental hazards				
14.6 Special precautions for user				

14.7 Maritime transport in bulk according to IMO instruments

Not relevant.

SECTION 15: REGULATORY INFORMATION

International Regulations

Regulation (EC) No. 1005/2009 on substances that lead to the depletion of the ozone layer	not subject.
Regulation (EG) 2019/1021 - Stockholm Convention (Persistent Organic Pollutants)	not subject.
Regulation (EU) 649/2012 - Prior Informed Consent (PIC)	not subject.
Regulation (EC) 428/2009 - dual use items	not subject.
Regulation (EU) 2019/1148 - explosive precursors	not subject.
Regulation (EC) 273/2004 - drug precursors	not subject.

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

Regulation (EC) No. 1907/2006 (REACH), Annex XVII (restrictions)

The synthetic polymer microparticles supplied is subject to conditions laid down by entry 78 of Annex XVII to Regulation (EC) No 1907/2006 of the European Parliament and of the Council.***

DI 2012/18/EU (Seveso III)

not subject.

National regulatory information

Storage Class (TRGS510)

11: Combustible solids.

Water hazard class according to AwSV

KBwS Class	not water endangering.
KBwS Number	766
KBwS-classification	§6 AwSV

15.2 Chemical Safety Assessment

not required.

Global Inventories

AICS (AU)	Listed.
DSL/NDSL (CA)	DSL: Listed.
IECSC (CN)	Listed.
EINECS	Listed.
ENCS (JP)	Listed.
ISHL (JP)	Not listed.
KECI (KR)	Listed.
INSQ (MX)	Not listed.
PICCS (PH)	Not listed.
TSCA (US)	Listed.
NZioC (NZ)	Listed.
TSCI (TW)	Listed.

SECTION 16: OTHER INFORMATION

Indication of changes

*** Data changed compared with the previous version. minor changes due to a redesign of the SDS are not marked.

Abbreviations and acronyms

ADR - Agreement concerning the International Carriage of Dangerous Goods by Road. RID - Convention concerning International Carriage by Rail. IMDG -International Maritime Dangerous Goods Code. IATA - International Air Transport Association. not applicable.

List of references

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.

Full text of H-Statements referred to under sections 2 and 3.

not applicable.

Training advice

product code TP01 Version / Revision 10.2

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

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