## SAFETY DATA SHEET



## 1. Identification

Covestro LLC 1 Covestro Circle Pittsburgh, PA 15205 USA

## TRANSPORTATION EMERGENCY

CALL CHEMTREC: INTERNATIONAL: (800) 424-9300 (703) 527-3887

**NON-TRANSPORTATION** Emergency Phone: Information Phone:

Call Chemtrec (844) 646-0545

Product Name: Material Number: Chemical Family: Use:

#### 2. Hazards Identification

#### **GHS** Classification

This product is not hazardous in the form in which it is shipped by the manufacturer.

00804190

GHS Label Elements Signal word:	Warning
Hazard statements:	If fine particles are generated during further processing, handling or by other means, product may form combustible dust concentrations in air.

MAKROLON 2558 702600

Production of molded plastic articles

Thermoplastic Polymer

#### 3. Composition/Information on Ingredients

#### **Hazardous Components**

<b>Concentration</b>	Components	CAS-No.
1 - 5%	Titanium dioxide (Rutile)	13463-67-7

The specific chemical identity and/or exact percentage of component(s) have been withheld as a trade secret.

#### 4. First Aid Measures

Material Name: MAKROLON 2558 702600

Page: 1 of 8

#### Most Important Symptom(s)/Effect(s)

Acute: Contact with heated material can cause thermal burns., Gases and fumes evolved during the thermal processing or decomposition of this material may irritate the eyes, skin or respiratory tract.

#### Eye Contact

In case of contact, flush eyes with plenty of lukewarm water.

#### Skin Contact

Cool melted product on skin with plenty of water. Do not remove solidified product. Get medical attention if thermal burn occurs.

#### Inhalation

Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.

#### Ingestion

Get medical attention.

5. Firefighting Measures

Suitable Extinguishing Media: Water fog, Dry chemical, Carbon dioxide (CO2), Foam

Unsuitable Extinguishing Media: High Pressure Water Streams

#### **Fire Fighting Procedure**

Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

#### **Hazardous Decomposition Products**

By Fire and Thermal Decomposition: Phenol Carbon oxides, Hazardous decomposition products due to incomplete combustion

#### **Unusual Fire/Explosion Hazards**

Toxic and irritating gases/fumes may be given off during burning or thermal decomposition. Avoid generating dust: fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.

#### 6. Accidental Release Measures

#### **Spill and Leak Procedures**

If molten, allow material to cool and place into an appropriate marked container for disposal. Sweep up and shovel into suitable containers for disposal. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture as they are released into the atmosphere in sufficient concentrations. Avoid dispersal of dust in the air (e.g., cleaning dust from surfaces with compressed air).

#### 7. Handling and Storage

#### Handling/Storage Precautions

Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dust does not accumulate on surfaces. Solid particulate can generate electrical charging during operations such as unloading from containers and pneumatic transfer. Provide adequate precautions, such as electrical

Material Name: MAKROLON 2558 702600

grounding and bonding, where conductive equipment is involved.

**Storage Period:** 

None.

Storage Temperature Maximum:

49 °C (120.2 °F)

#### **Storage Conditions**

Containers should be tightly closed to prevent contamination with foreign materials and moisture.

Substances to Avoid

None known.

#### 8. Exposure Controls/Personal Protection

The recommendations in this section should not be a substitute for a personal protective equipment (PPE) assessment performed by the employer as required by 29 CFR 1910 Subpart I.

#### **Exposure Limits**

#### Titanium dioxide (Rutile) (13463-67-7)

US. ACGIH Threshold Limit Values Time weighted average 10 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Permissible exposure limit 15 mg/m3 (Total dust.)

US. ACGIH Threshold Limit Values Hazard Designation: Group A4 Not classifiable as a human carcinogen.

Any component which is listed in section 3 and is not listed in this section does not have a known ACGIH TLV, OSHA PEL or supplier recommended occupational exposure limit.

#### **Industrial Hygiene/Ventilation Measures**

General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines, especially during cutting, grinding and high heat operations.

#### **Respiratory Protection**

Although no exposure limit has been established for this product, the OSHA PEL for Particulates Not Otherwise Regulated (PNOR) of 15 mg/m3 - total dust, 5 mg/m3 - respirable fraction is recommended. In addition, the ACGIH recommends 3 mg/m3 - respirable particles and 10 mg/m3 - inhalable particles for Particles (insoluble or poorly soluble) Not Otherwise Specified (PNOS)., In the event that these limits are exceeded, an air purifying respirator (APR) equipped with particulate (P100) cartridges is recommended.

#### Hand Protection

Ensure gloves remain in good condition during use and replace if any deterioration is observed.

Wear heat resistant gloves when handling molten material.

#### **Eye Protection**

Safety glasses with side-shields

Material Name: MAKROLON 2558 702600

#### **Skin Protection**

No special skin protection requirements during normal handling and use.

#### **Additional Protective Measures**

Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product. Purgings should be collected as small flat thin shapes or thin strands to allow for rapid cooling.

#### 9. Physical and Chemical Properties

State of Matter:	solid
Appearance:	pellets
Color:	Gray
Odor:	Odorless
Odor Threshold:	No Data Available
pH:	No Data Available
Melting Point:	220 °C (428 °F)
<b>Boiling Point:</b>	No Data Available
Flash Point:	Not applicable.
<b>Evaporation Rate:</b>	No Data Available
Flammability:	No Data Available
Lower Explosion Limit:	No Data Available
Upper Explosion Limit:	No Data Available
Vapor Pressure:	not applicable
Vapor Density:	No Data Available
Density:	not applicable
<b>Relative Vapor Density:</b>	No Data Available
Specific Gravity:	Approximately 1.11
Solubility in Water:	practically insoluble
Partition Coefficient: n-	No Data Available
octanol/water:	
Auto-ignition Temperature:	>450 °C (>842 °F)
<b>Decomposition Temperature:</b>	>= 380 °C (716 °F)
Softening point:	130 - 160 °C (266 - 320 °F)
Dynamic Viscosity:	not applicable
Kinematic Viscosity:	No Data Available
Bulk Density:	600 - 700 kg/m3
Self Ignition:	not applicable

## **10. Stability and Reactivity**

#### **Hazardous Reactions**

Hazardous polymerisation does not occur.

Stability Stable

#### Materials to Avoid None known.

**Conditions to Avoid** Generation of dust clouds.

Material Name: MAKROLON 2558 702600

Page: 4 of 8

#### **Hazardous Decomposition Products**

By Fire and Thermal Decomposition: Phenol; Carbon oxides, Hazardous decomposition products due to incomplete combustion

#### **11. Toxicological Information**

Likely Routes of Exposure:

Inhalation Skin Contact Eye Contact

#### Health Effects and Symptoms

Acute: Contact with heated material can cause thermal burns., Gases and fumes evolved during the thermal processing or decomposition of this material may irritate the eyes, skin or respiratory tract.

#### Toxicity Data for: MAKROLON 2558 702600

No data available for this product.

#### Toxicity Data for: Titanium dioxide (Rutile)

Acute Oral Toxicity LD50: > 5,000 mg/kg (rat, female) (OECD Test Guideline 425)

Acute Inhalation Toxicity LC50: > 6.82 mg/l, 4 h, dust/mist (rat, male)

#### Acute Dermal Toxicity LD50: > 10,000 mg/kg (rabbit)

Skin Irritation

rabbit, OECD Test Guideline 404, Exposure Time: 24 h, Non-irritating

#### **Eye Irritation**

rabbit, OECD Test Guideline 405, Non-irritating

#### Sensitization

dermal: non-sensitizer (Guinea pig, Maximization Test)

dermal: non-sensitizer (Human, Patch Test)

Skin sensitization (local lymph node assay (LLNA)):: negative (Mouse, OECD Test Guideline 429)

#### **Repeated Dose Toxicity** 28 Days, inhalation: NOAEL: 35 mg/m3, (Rat)

29 days, Oral: NOAEL: 24,000 mg/kg, (rat, male, daily)

up to 2 years, inhalation: NOAEL: 0.01 mg/l, (Rat, male/female, 6 hrs/day 5 days/week)

#### Mutagenicity

Genetic Toxicity in Vitro: Ames: negative (Salmonella typhimurium, Metabolic Activation: with/without) Mammalian cell - gene mutation assay: negative (Mouse lymphoma cells (L5178Y/TK), Metabolic

Material Name: MAKROLON 2558 702600

Activation: with/without) Chromosome aberration test: negative (Chinese hamster ovary (CHO) cells, Metabolic Activation: with/without)

Genetic Toxicity in Vivo: Drosophila SLRL test: negative (Drosophila melanogaster) negative

Cytogenetic assay: negative (Mouse, male, intraperitoneal) negative

#### Carcinogenicity

Rat, Male/Female, inhalationAccording to IARC, several rat inhalation and intratracheal installation studies using titanium dioxide have shown increases in benign and malignant lung tumors. Reviewed human exposure data did not suggest an association between occupational exposure to titanium dioxide and risk for cancer. Additionally, the IARC working group determined that, "No significant exposure to titanium dioxide is thought to occur during the use of products in which titanium dioxide is bound to other material, such as in paints."

#### **Other Relevant Toxicity Information**

May cause irritation of respiratory tract.

## Carcinogenicity:

Titanium dioxide (Rutile)IARC - Overall evaluation: 2B Possibly carcinogenic to humans.

#### **12. Ecological Information**

#### Ecological Data for: MAKROLON 2558 702600

No data available for this product.

#### **Ecological Data for Titanium dioxide (Rutile)**

Acute and Prolonged Toxicity to Fish LC0: > 1,000 mg/l (Golden orfe (Leuciscus idus), 48 h)

#### Acute Toxicity to Aquatic Invertebrates

EC0: > 3 mg/l (Water flea (Daphnia magna))

#### **Toxicity to Microorganisms**

EC0: > 10,000 mg/l, (Pseudomonas fluorescens, 24 h)

#### **13. Disposal Considerations**

#### Waste Disposal Method

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

### **14. Transportation Information**

#### Land transport (DOT)

#### Non-Regulated

Material Name: MAKROLON 2558 702600

#### Sea transport (IMDG) Non-Regulated

#### Air transport (ICAO/IATA) Non-Regulated

#### 15. Regulatory Information

#### **United States Federal Regulations**

**US. Toxic Substances Control Act:** Listed on the Active Portion of the TSCA Inventory.

No substances are subject to TSCA 12(b) export notification requirements.

#### US. EPA CERCLA Hazardous Substances (40 CFR 302) Components: None

## SARA Section 311/312 Hazard Categories:

Refer to hazard classification information in Section 2.

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A) Components: None

US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required Components: None

# US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261):

Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste.

#### State Right-To-Know Information

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the SDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

The concentrations reported below in units of parts per million (ppm) or parts per billion (ppb) are maximum values.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists:				
<b>Concentration</b>	Components	CAS-No.		
>=1%	Bisphenol A Polycarbonate	25971-63-5		
1 - 5%	Titanium dioxide (Rutile)	13463-67-7		
Massachusetts Right to Know Extraordinarily Hazardous Substance List:				
<b>Concentration</b>	<u>Components</u>	CAS-No.		
<=3 ppm	Methylene Chloride	75-09-2		
California Proposition 65 List:				
<u>Concentration</u>	<u>Components</u>	CAS-No.		
<=3 ppm	Methylene Chloride	75-09-2		
Trace element	Bisphenol A	80-05-7		
Material Name: MAKROLON 2558 702600			Material Number: 00804190	
Page: 7 of 8				

#### CFATS (Chemical Facility Anti-Terrorism Standards) Chemicals

To the best of our knowledge, this product does not contain Appendix A Chemicals of Interest (COI), at or above the Screening Threshold Quantity (STQ), as defined by the Department of Homeland Security Chemical Facility Anti-terrorism Standard (CFATS, 6 CFR Part 27).

Based on information provided by our suppliers, this product is considered "DRC Conflict Free" as defined by the SEC Conflict Minerals Final Rule (Release No. 34-67716; File No. S7-40-10; Date: 2012-08-22).

#### 16. Other Information

The method of hazard communication for Covestro LLC is comprised of product labels and safety data sheets. Safety data sheets for all of our products and general product declarations are available for download at www.productsafetyfirst.covestro.com.

Contact:	Product Safety Department
Telephone:	(412) 413-2835
Version Date:	06/24/2019
SDS Version:	2.6

Information contained in this SDS is believed to be accurate but is furnished without warranty, express or implied, including warranties of merchantability or fitness for a particular purpose. The information relates only to the specific material designated herein. Covestro LLC. assumes no legal responsibility for use of or reliance upon the information in this SDS and such information shall in no case be considered a part of our terms and conditions of sale. The user is responsible for determining whether the Covestro product is suitable for user's method of use or application. Covestro is not liable for any failure to observe the precautionary measures described in this SDS or for any misuse of the product.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Material Name: MAKROLON 2558 702600