

NAME OF PRODUCT: MOLDED SHAPES
 SDS REVISION: 2.1
 SDS DATE: 5/20/2022

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: COMPRESSION MOLDED PTFE SHAPES
 SYNONYMS: MOLDED SHAPES (STYLES 8764, 8765, 8790, 8536, 8603, 8604, 8737)
 MOLDED RODS, CYLINDERS OR SHEETS
 RECOMMENDED USE: RAW MATERIAL FOR INDUSTRIAL COMPONENTS
 RESTRICTIONS ON USE: THE USE OF THIS PRODUCT MUST BE DETERMINED BY THE USER
 MANUFACTURER: ALTAMIRA MATERIAL SOLUTIONS
 DIVISION: ALTAMIRA MATERIAL SOLUTIONS
 ADDRESS: 10633 WEST LITTLE YORK #300, 77041 HOUSTON, TX.
 PRODUCT INFORMATION: 713-983-4261
 SAFETY INFORMATION: 713-983-4235

SECTION 2: HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION: The components of the product are not classified as hazardous according to OSHA Hazard Communication Standard, 29 CFR 1910.1200, therefore the product is not classified as hazardous. This product is considered an "article" as supplied for its intended and foreseen use
 SIGNAL WORD: Not Applicable
 SYMBOLS: Not Applicable
 PICTOGRAMS: Not Applicable
 OTHER HAZARDS: Contact with dust may cause mechanical irritation or drying of the skin, Dust contact with the eyes can lead to mechanical irritation. May cause nose, throat, and lung irritation.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENT	CAS-NO	WEIGHT %
Polytetrafluoroethylene (PTFE)	9002-84-0	>99%

SECTION 4: FIRST AID MEASURES

INHALATION: Remove person to fresh air. If symptoms persist, seek medical attention.
 SKIN CONTACT: Not likely to cause skin irritation and is not likely to be absorbed through the skin. In the event of contact with released dust particles, wash off with soap and water.
 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.
 INGESTION: Rinse mouth. If you feel unwell, get medical attention.
 MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED: Irritant effects. See Section 11 (Toxicological effects)
 PROTECTION OF FIRST-AIDERS: No special precautions are necessary for first-aid responders
 NOTES TO PHYSICIAN: No special protective equipment required.
 No specific intervention is indicated.

SECTION 5: FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Use a firefighting agent suitable for ordinary combustible material such as water or foam to extinguish. However, extinguishing measures must be appropriate to local circumstances and the surrounding environment.
UNSUITABLE EXTINGUISH MEDIA/METHODS:	None known
SPECIAL HAZARDS ARISING FROM PRODUCT:	Exposure to extreme heat can give rise to thermal decomposition
SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS:	When firefighting conditions are severe and total thermal decomposition of the product is possible, 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.
FURTHER INFORMATION:	The product itself is not flammable

SECTION 6: ACCIDENTAL RELEASE MEASURES

SAFEGUARDS (PERSONNEL):	Not applicable
ENVIRONMENTAL PRECAUTIONS:	Not Applicable
CONTAINMENT METHOD:	Collect solid material

SECTION 7: HANDLING AND STORAGE

SAFE HANDLING PRECAUTIONS:	Avoid creating dust and breathing it. Do not breathe thermal decomposition products. Avoid skin contact with hot material. For industrial or professional use only. Store work clothes separately from other clothing. Thermal decomposition may generate fumes. Do not breathe dust/fume/gas/mist/vapors/spray. An electrostatic charge can potentially build up when processing or conveying product.
SAFE STORAGE CONDITIONS:	Keep containers and product in a cool, well-ventilated place. Storage in climate-controlled environments is highly recommended.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMIT:	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.
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Ingredient	C.A.S. No.	Agency	Limit Type	Additional Comments
Polytetrafluoroethylene	9002-84-0	CMRG	TWA (as respirable dust): 5 mg/m ³ TWA (as total dust): 10mg/m ³	

ENGINEERING CONTROLS:	Provide appropriate local exhaust when product is heated. For those situations where the material might be exposed to extreme overheating, ensure appropriate local exhaust ventilation sufficient to maintain levels of thermal decomposition products below their exposure guidelines. 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.
SKIN/HAND PROTECTION:	No special protection is required for short time contact with product. If product will be touched for extended periods of time, the use of nitrile rubber gloves is recommended.

EYE/FACE PROTECTION

Safety glasses are recommended when exposed to fumes/vapors resultant from thermal decomposition

RESPIRATORY PROTECTION:

No respiratory protection necessary during normal use. Wear a respirator or self-contained breathing apparatus (SCBA) when exposed to thermal decomposition products for extended periods of time.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Solid sheets, rods or cylinders	PHYSICAL STATE:	Solid
COLOR:	White	ODOR:	Odorless
FLASH POINT:	Not applicable	ODOR THRESHOLD:	No data available
MELTING POINT:	325 - 330°C (PTFE)	pH:	Not Applicable
FLASH POINT:	No flash point	EVAPORATION RATE:	Not Applicable
BOILING POINT:	Not applicable	VAPOR DENSITY:	Not applicable
FLAMMABILITY:	Product is not flammable	VAPOR PRESSURE:	Not applicable
FLAMMABLE	Not applicable	SPECIFIC GRAVITY:	2.10 – 2.20 g/cm ³
LIMITS (LEL/UEL):			
AUTOIGNITION	Not applicable	PARTITION COEFFICIENT, n-OCTANOL / WATER	No data available
TEMPERATURE:		DECOMPOSITION TEMPERATURE:	No data available
SOLUBILITY:	Insoluble in all common solvents	VISCOSITY:	Not applicable
VOC CONTENT:	< 0.1%		

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	No decomposition if stored and applied as directed
CHEMICAL STABILITY:	The product is chemically stable
POSSIBILITY OF HAZARDOUS REACTIONS:	Hazardous polymerization will not occur. Small amounts of hazardous gases and/or particulate matter may be released. These may irritate eyes, nose and throat. Large molten masses may give off hazardous gases. Stable under normal conditions.
CONDITIONS TO AVOID:	To avoid thermal decomposition, do not overheat. Abnormally long processing time or high temperatures can produce irritating and toxic fumes.
INCOMPATIBLE MATERIALS:	Alkali and alkaline metals, finely divided magnesium and aluminum, potent oxidizers like fluorine (F ₂), chlorine trifluoride (ClF ₃). Reactions with metals in powder form occur from 370°C onwards. Contact with incompatibles can cause an explosion, fire. Sealing tape, produced from Teflon, burned intensively in a helium atmosphere upon contact with sodium-potassium alloy.
HAZARDOUS DECOMPOSITION PRODUCTS:	At elevated temperatures (above 450°C.) thermal decomposition products may include Carbonyl Fluoride, Carbon Oxides and Fluorides, Fluorinated compounds, Hydrogen Fluoride, Perfluoroisobutylene (PFIB), Toxic Vapor, Gas, Particulate. If the product is exposed to extreme condition of heat from misuse or equipment failure, toxic decomposition products that include hydrogen fluoride and perfluoroisobutylene can occur.

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.

CARCINOGENIC EFFECTS:	No data supporting carcinogenic effects in humans for the product or its ingredients.
MUTAGENIC EFFECTS:	No data is available on the product itself. Product ingredients showed no mutagenic effects on laboratory animals
REPRODUCTIVE TOXICITY:	No data is available on the product itself. Product ingredients showed no reproductive effects on laboratory animals

Name	Exposure method	Signs and Symptoms
Polytetrafluorethylene	Inhalation	Vapors from heated material may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain During heating: Polymer Fume Fever: Sign/symptoms may include chest pain or tightness, shortness of breath, cough, malaise, muscle aches, increased heart rate, fever, chills, sweats, nausea and headache. LD50 data not available for the product.
	Skin Contact	During heating: Thermal Burns: Signs/symptoms may include intense pain, redness and swelling, and tissue destruction. Mechanical Skin irritation may occur if dust is released: signs/symptoms may include abrasion, redness, pain, and itching. LD50 data not available for the product
	Eye Contact	Vapors from heated material may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.
	Ingestion	Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea LD50 estimated to be > 5,000 mg/kg

SECTION 12: ECOLOGICAL INFORMATION

The product itself is not considered a hazardous substance or mixture.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE FROM RESIDUES / UNUSED PRODUCTS:

Dispose of in accordance with federal, state and local regulations. This product is not a hazardous waste under RCRA, 40 CFR 261 in its original form. If this product is mixed with other materials and/or physically changed, it should be evaluated to assure that the resulting mixture/material does not meet the criteria for listing hazardous waste as specified in 40 CFR 261.11.

SECTION 14: TRANSPORT INFORMATION

Not regulated in transportation by DOT/IMO/IATA.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS:

311/312 Hazard Categories:

Fire Hazard: No Pressure Hazard: No Reactivity Hazard: No Immediate Hazard: No Delayed Hazard: No

CHEMICAL INVENTORIES: The components of this material are in compliance with the provisions of:

- Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply.
- Canadian Environmental Protection Act (CEPA).
- China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply.
- Korean Toxic Chemical Control Law. Certain restrictions may apply.
- Japan Chemical Substance Control Law. Certain restrictions may apply.
- Philippines RA 6969 requirements. Certain restrictions may apply.
- The chemical notification requirements of TSCA.

If a specific country is not listed above, compliance with its specific requirements have not been determined.

REACH/ROHS REGULATIONS:

This product complies with Regulation (EC) No 1907/2006 (REACH), Directives 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) and 2015/863 (RoHS 3) and its amendments as of this document's release date. Furthermore, Altamira Material Solutions does not intentionally add or use any of those substances nor chemicals known as PFAS during any of its manufacturing processes. Please note that we have not conducted any analyses for these substances in relevant raw materials or finished products to determine if any of those substances are present.

CALIFORNIA PROP 65:

This product complies with California's Safe Drinking Water and Toxic enforcement act of 1986 (California Prop 65).

PESISTENT, BIOACCUMULATIVE AND TOXIC (PBT) CHEMICALS:

To the best of our knowledge, none of the Persistent, Bioaccumulative and Toxic (PBT) Chemicals, as defined in U.S. CFR40 Part 751 (Regulation Of Certain Chemical Substances And Mixtures Under Section 6 Of The Toxic Substances Control Act), Subpart E, is intentionally added or used during the production of this product.

FOOD CONTACT:

This product complies with the requirements of the Regulation (EC) No. 1935/2004, EC 10/2011 and its amendments 2011/282, 2012/1183, 2014/202, 2015/174, 2016/1416, 2017/752, 2018/79, 2018/831 and 2019/37. This product is made of monomers present on the list of authorized monomers, as defined in Annex I of EU regulation 10/2011. In addition, this product is manufactured following the indications of Good Manufacturing Practice (GMP) as set out in Regulation (EC) No. 2023/2006 and is suitable to be used in contact with foodstuffs in accordance with U.S. legislation – FDA 21CFR 177.1210 and 21CFR 177.1550 (Perfluorocarbon resins).

HUMAN/ANIMAL DERIVATIVES:

Based on the information available to us from our raw material suppliers and to the best of our knowledge, this product does not contain any kind of human and/or animal derivatives (such as animal tissue or other derivatives). Furthermore, Altamira Material Solutions does not intentionally add or use any kind of animal derivative during any of its manufacturing processes. Please note that we have not conducted any analyses in relevant raw materials or finished products to determine if there's any presence of such materials/substances.

BIOCIDES and VOCs:

This product does not contain any biocides, preservatives, or pest control agents.

OTHER REGULATORY INFORMATION:

- This product does not have components listed in GADSL (Global Automotive Declarable Substance List).
- This product is latex free, does not contain or come in contact with natural rubber and does not include any DEHP, BPA and PCB, which exceed the level of 1000 parts per million by weight as per 2011/65/EU (RoHS 2), 2015/863 (RoHS 3).
- This product does not contain genetically modified organisms.
- This product does not contain any ingredients classified as a food allergen according to the "Food Allergen Labeling and Consumer Protection Act of 2004" and EU Cosmetic Regulation No 1223/2009, 1169/2011.
- This product does not contain any ingredient classified as a "hazardous air pollutant" or "ozone depleting substance" according to US Clean Air Act.

SECTION 16: OTHER INFORMATION

Additional advice: Consult Altamira Material Solutions if the material is to be used for special applications such as in the food industry or for hygiene, medical or surgical end-use.

DISCLAIMER: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information provided herein is related only to the specific product designated and may not be applicable where such product is used in combination with any other materials or in any process. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE, ARE MADE HEREUNDER. The user of this product has the sole responsibility to determine the suitability of the product for any use and manner of use intended. This document may be revised after its issuance, and the user should refer to the most current version.