

ProTEX Med Polypropylene

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: ProTEX Med Polypropylene
Synonyms: Polypropylene, 1-Propene Homopolymer, PP
Substance name: Polypropylene Homopolymer
CAS No.: 9003-07-0

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

Use of the Substance/Mixture: Manufacture of plastic articles by injection moulding, extrusion or other conversion process

1.3 Details of the supplier of the safety data sheet

Company/undertaking identification: Aran Biomedical Teoranta
Address: Coilleach, Spiddal, Co. Galway, Ireland
Telephone No.: +(353) 91 896900
Fax: +(353) 91 896901
E-mail: info@aranbiomedical.com

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008): Not a dangerous substance according to GHS.
Classification according to EU Directives 67/548/EEC or 1999/45/EC, as amended: Not a hazardous substance or Mixture according to EC-directives 67/548/EEC or 1999/45/EC.

2.2 Label elements.

Labelling (REGULATION (EC) No 1272/2008): Not a dangerous substance according to GHS.

2.3 Other hazards

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).
This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

3. Composition/information on ingredients

3.2 Mixtures

Hazardous ingredients

Chemical Name	CAS-No. EC-No.	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Polypropylene	9003-07-0	Not Classified	Not Classified	min. 99.7 wt.

Contains: Additives and stabilizers

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4. First aid measures

4.1 Description of first-aid measures

General advice	Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid.
If inhaled	Remove person to fresh air. If signs/symptoms continue, get medical attention. Avoid breathing fumes that may be generated during the processing and heating of this material. In case of excessive inhalation of fumes move the person to fresh air. Call for medical help. Keep person warm, if necessary give mouth-to-mouth resuscitation, or artificial respiration.
In case of skin contact	If molten material contacts the skin, immediately flush with large amounts of water to cool the affected tissue and polymer. Do not attempt to peel polymer from skin. Obtain immediate emergency medical attention if burn is deep or extensive.
In case of eye contact	Flush eyes thoroughly with water for several minutes and seek medical attention if discomfort persists. In case of eye contact with molten polymer: Continuously flush eye(s) with cool running water for at least 5 minutes. Beyond flushing, DO NOT attempt to remove the material adherent to the eye(s). Immediately seek medical attention.
If swallowed	Adverse health effects due to ingestion are not anticipated. Get medical advice/ attention if you feel unwell.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms	Inhalation of process fumes and vapors may cause soreness in the nose and throat and coughing.
Hazards	Dust contact with the eyes can lead to mechanical irritation. Molten polymer may cause thermal burns.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment	Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.
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5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	SMALL FIRE: Use dry chemical, CO ₂ , water spray or regular foam LARGE FIRE: Use water spray, water fog or foam. DO NOT use straight streams
Unsuitable extinguishing media	High volume water jet

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire fighting	Keep away from heat and sources of ignition. In case of fire hazardous decomposition products may be produced such as: Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).
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5.3 Advice for firefighters

Special protective equipment for fire-fighters	Wear an approved positive pressure self-contained breathing apparatus and firefighter turnout gear.
Further information	Not normally combustible, but will decompose under fire conditions. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Heat from fire may melt, decompose polymer, and generate flammable vapors. Move containers from fire area if you can do it without risk. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Always stay away from tanks engulfed in fire. Cool containers with flooding quantities of water until well after fire is out.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions Equip responders with proper protection. Potential combustible dust hazard. Avoid generating dust. Creates dangerous slipping hazard on any hard smooth surface.

6.2 Environmental precautions

Environmental precautions Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up On land, sweep/shovel into suitable disposal containers or vacuum using equipment which avoids ignition risk. On water, material is insoluble; collect and contain as any solid. All recovered material should be packaged, labelled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible. Allow to evaporate.

7. Handling and storage

7.1 Precautions for safe handling

Advice on safe handling Avoid dust accumulation in enclosed space. Use dust collection systems to avoid dust accumulation. 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. Static discharge (spark), or other ignition sources, in high dust environments may ignite the dust and result in a deflagration. Electrostatic charge may build up during handling. Equipment should be grounded and bonded. Metal containers involved in the transfer of this material should be grounded and bonded. All electrical equipment should be grounded and conform to applicable electric codes and regulatory requirements. Material creates dangerous slipping hazard on hard surfaces. After handling, always wash hands thoroughly with soap and water. When bringing the material to processing temperatures gases might develop. See section 10.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers Store in a dry location. Use good housekeeping practices during storage, transferring and handling. Process enclosures and adequate ventilation should be used to avoid excessive dust accumulation. Store away from excessive heat and away from strong oxidizing agents. Keep container closed to prevent contamination. Take measures to prevent the build up of electrostatic charge.

7.3 Specific end use(s)

See Section 1.2.

8. Exposure controls/personal protection

8.1 Control parameters

<i>Ingredients</i>	CAS-No.	Value	Control parameters	Update	Basis
Materials that can be formed when handling this product: Non-specified (inert or nuisance) dust	n/a	TWA	10 mg/m ³	2005	US (ACGIH)
<i>Further information:</i>					
Inhalable					
Materials that can be formed when handling this product: Non-specified (inert or nuisance) dust	n/a	TWA	3 mg/m ³	2005	US (ACGIH)

ProTEX Med Polypropylene**8.2 Exposure controls**

Engineering controls, preferably enclosed systems, should be used whenever feasible to maintain exposures below acceptable criteria. When such controls are not feasible, or sufficient to achieve full conformance, other engineering controls such as local exhaust ventilation should be used. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment).

Personal protective equipment

Respiratory protection:	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Use appropriate respiratory protection where atmosphere exceeds recommended limits.
Hand protection:	Wear heat protective gloves and clothing if there is a potential for contact with heated material.
Eye protection:	Dust service goggles should be worn to prevent mechanical injury or other irritation to eyes due to airborne particles which may result from handling this product.
Skin and body protection:	Wear suitable protective clothing.
Hygiene measures	Selection of appropriate personal protective equipment should be based on an evaluation of the performance characteristics of the protective equipment relative to the task(s) to be performed, conditions present, duration of use, and the hazards and/or potential hazards that may be encountered during use. Use good personal hygiene practices. Wash hands before eating, drinking, smoking, or using toilet facilities. Take off contaminated clothing and wash before reuse.

Environmental exposure controls

General advice: See section 6.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	granulate (pellets)
Physical state:	solid
Colour:	translucent to white
Odour:	odourless
Flash point (°C):	Not applicable.
Explosive limits – upper limit (% vol.):	Not applicable.
– lower limit (% vol.):	
Flammability (solid, gas):	Not classified.
Oxidising properties:	Not considered an oxidizing agent.
pH:	Not applicable.
Boiling point (°C):	Not applicable.
Melting point (°C):	164°C
Vapour pressure:	Not applicable.
Density	905 g/dm ³
Solubility:	in water: insoluble
Partition coefficient: n-octanol/water	No data available.
Viscosity, dynamic	Not applicable.
Relative vapor density	No data available.
Evaporation rate	Not applicable.
Explosive properties:	Not explosive

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Polymer dust particles in the atmosphere are combustible and may be explosive.
N/A

9.2 Other information:

10. Stability and reactivity

10.1 Reactivity: No known reactivity hazards.

10.2 Chemical stability: Stable under normal conditions.

10.3 Possibility of hazardous reactions: Hazardous: Will not occur.

10.4 Conditions to avoid: Avoid contact with strong oxidizers, excessive heat, sparks or open flame.

10.5 Incompatible materials: Material may be softened by some hydrocarbons.

10.6 Hazardous decomposition products: Thermal decomposition: Carbon monoxide, olefinic and paraffinic compounds, trace amounts of organic acids, ketones, aldehydes and alcohols may be formed.

11. Toxicological information

Potential Acute Health Effects

The product is not toxic; the product does not contain hazardous substances.

12. Ecological information

Other adverse effects:

The product is not hazardous for the environment. Prevent from being discharged into the environment.

Ecotoxicity is expected to be minimal based on the low water solubility of polymers.

This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

13. Disposal considerations

13.1 Waste treatment methods

All recovered material should be packaged, labelled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Recycle if possible.

Methods of disposal: Landfill, recycle or incinerate in compliance with local regulation.

Waste Classification:

European Waste Catalogue (EWC):

Waste code: 07 02 13, 20 01 39 plastic waste;

Hazardous Waste: not hazardous

14. Transport information

Not regulated for transport.

15. Regulatory information

The ingredients of the product are not classified as dangerous.

16. Other information

Recommended limitations of usage:

The substance shall not be used for any other purpose than the intended one (see Chapter 1.2). As specific conditions of the substance usage are beyond control of the supplier, it is the responsibility of the user to adapt specified notices for local laws and regulations. Safety information describes the product in terms of safety and therefore shall not be considered to be technical information about the product.

Notice:

To the best of our knowledge, the information contained herein is accurate. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Before using this product, the user is advised and cautioned to make its own determination and assessment of the safety and suitability of the product for the specific use in question and is further advised against relying on the information contained herein as it may relate to any specific use or application. It is the ultimate responsibility of the user to ensure that the product is suited and the information is applicable to the user's specific application. Aran Biomedical Teorantadoes not make, and expressly disclaims, all warranties, including warranties of merchantability or fitness for a particular purpose, whether oral or written, express or implied, or allegedly arising from any usage of any trade or from any course of dealing in connection with the use of the information contained herein or the product itself. The user expressly assumes all risk and liability, whether based in contract, tort or otherwise, in connection with the use of the information contained herein or the product itself. Further, information contained herein is given without reference to any intellectual property issues, as well as state or local laws, which may be encountered in the use of thereof. Such questions should be investigated by the user.