MATERIAL SAFETY DATA SHEET

POLYPROPYLENE COPOLYMER

According to EC Directive 2001/58/EC

PPCO-MS-02/00 Dec 2007

NG

- **Chemical name:**
  Polypropylene copolymer, all grades
- **Trade name:**
  Jampilen
- **Chemical family:**
  Polyolefin
- **Formula:**
  $(C_3H_6)_x$-$(C_2H_4)_y$
- **CAS Number:**
  9010-79-1
- **Manufacturer /supplier:**
  Jam polypropylene Co. (P.J.S), 4th floor, NO. 3, Taban st., Afriqa Blvd., Tehran, Iran
  Postal Code: 1968913751
- **Emergency Telephone Number:**
  P.J.S: (+98)21 82 12 40 02-5

CAS NO.	Chemical name	% weight
9010- 79-1	Polypropylene copolymer	100

- **Emergency Overview:**
  Formation of irritating vapors to eyes and respiratory system when polymer is processed at elevated temperatures.

Potential Health Effects

- **Eye Contact:**
  Particulate or dust may cause transient irritation as a result of mechanical Abrasion.
- **Skin Contact:**
  Negligible hazard at ambient temperatures but exposure to hot material may cause severe burns.

- **Inhalation:**
  Negligible hazard at ambient temperatures.
  Exposure to dust may cause irritation to the respiratory tract.
  Vapor formed at elevated temperatures may irritate respiratory tract.

- **Ingestion:**
  No effects are expected for ingestion of small amounts.
  May cause a choking hazard.

- **Aggravated medical conditions:**
  Not expected. Polypropylene is generally accepted as being biologically inert.

4- FIRST AID MEASURES

- **General advice:**
  Show this safety data sheet to the doctor in attendance

- **After eye contact:**
  Rinse with water for a few minutes. Consult physician if necessary.

- **After inhalation:**
  Allow the victim to rest in a well-ventilated area.
  Consult physician if irritation of respiratory passages occurs.

- **After skin contact:**
  At ambient temperatures, no known effect on skin contact.
  For serious burns, get medical attention.
  In case of skin contact with hot polymer, immediately immerse in or flush with clean, cold water.

- **After ingestion:**
  First aid is normally not required

5- FIRE FIGHTING MEASURES

- **Suitable extinguishing media:**
  In small fire use dry chemicals, CO_2, water spray, foam.
  In large fire use water spray, fog or foam.
  Do not use water jet.

- **Special protective equipment for firefighters:**
  Wear MSHA/NIOSH approved self-contained breathing apparatus and full protective clothing.

- **Unusual fire and explosion hazards:**
  Avoid accumulation and dispersion of dust to reduce explosion potential.
  Fire may produce irritating gases and dense smoke.
  Failure or malfunction of temperature control systems on processing equipment may create explosion hazard.

- Flash ignition temperature:
  345 °C

- Auto ignition temperature:
  360 °C

6- ACCIDENTAL RELEASE MEASURES

- **Personal precautions:**
  Pellets released or spilled during shipping or storage may create a slipping hazard.

- **Environmental precautions:**
  Recover spilled material and place in suitable containers for recycle or disposal. Consult an expert on disposal of recovered material and insure conformity to local regulations.

- **Methods for cleaning up:**
  Good housekeeping must be maintained at all times to avoid serious slipping problem. Sweep, shovel, or vacuum material into clean containers.

7- HANDLING AND STORAGE

Handling

- **Technical measures/precautions:**
  Spilled materials may create a slipping hazard.
  Electrostatic charge may build up during handling.

- **Self handling advice:**
  Maintain good housekeeping.
  Remove dust from settling areas to prevent explosion or fire hazards.

Storage

- **Technical measures/precautions:**
  Store in a cool, well-ventilated place away from incompatible materials.
  Material will accumulate static charges that may cause an electrical spark.
  Use proper grounding procedures.

- **Incompatible products:**
  Do not store near an open flame, heat or other sources of ignition.
  Protect material from direct sunlight.

- **Storage temperature, °C:**
  Ambient

8- EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values

CAS No.	Chemical Name	% Weight	OSHA-PEL	ACGIH-TLV
9010-79-1	Polypropylene Copolymer	100	None Nuisance dust: 10mg/M3 TWA	None

Personal protective equipment

- **Respiratory protection:**
  Ventilation is normally required when handling this product at high temperatures.
  Wear appropriate respirator when ventilation is inadequate.
- **Hand protection:**
  Thermally insulated gloves required when handling hot material.
- **Hygiene measures:**
  Minimize contact with skin.
  Do not eat, drink, or smoke in work area.
  Wash hands thoroughly after handling, especially before eating, drinking, smoking, chewing, or using restroom facilities.
  Dusted clothing and shoes should be cleaned before reuse.
- **Skin and body protection:**
  Gloves required when handling hot material.
  No special protective clothing is required.
- **Engineering controls:**
  Heated polymer requires local exhaust ventilation or other engineering control to reduce exposure to vapors below recommended levels.
- **Eye protection:**
  Safety glasses

9- PHYSICAL AND CHEMICAL PROPERTIES

General information

- **Physical form:**
  Solid pellets
- **Color:**
  Translucent white
- **Odor:**
  No specific odor

Important health safety and environmental information

- **Melting point/range:**
  120-170 °C
- **Boiling point/range:**
  Not available
- **Molecular weight:**
  > 150000 g/gmol
- **Risk of explosion:**
  Not available
- **Density:**
  900-910 Kg/M3
- **Bulk density:**
  450-550 Kg/M3
- **Water solubility:**
  Insoluble to water
- **Vapor density:**
  Not applicable

10- STABILITY AND REACTIVITY

- **Stability:**
  The product is stable.
- **Conditions to avoid:**
  Temperatures above 300 °C, direct flame, strong oxidizers.
- **Hazardous decomposition products:**
  Carbon monoxide, carbon dioxide, hydrocarbons, smoke.
- **Hazardous polymerization:**
  Will not occur.
- **Materials to avoid:**
  Incompatible or reactive with fluorine gas, oxidizing agents, free halogens, benzene, petroleum ether, gasoline and lubricating oils, and aromatic and chlorinated hydrocarbons.

11- TOXICOLOGICAL INFORMATION

No toxicology data available.
Polypropylene is not considered hazardous material under the OSHA hazard communication standard.
Please refer to section 3 for available information on potential health effects.

12- ECOLOGICAL INFORMATION

No specific ecological data are available for this product.
Neither COD nor BOD data are available.
Fish or birds may eat pellets which may obstruct their digestive tracts.
Please refer to section 6 for information regarding accidental releases and section 15 for regulatory reporting information.

13- DISPOSAL CONSIDERATIONS

- **Waste from residues/unused products:**
  Transfer to an approved disposal area in accordance with local regulations.
- **Contaminated packaging:**
  Empty containers should be taken for local recycling, recovery or waste disposal.
- **Further information:**
  Recycling or reclamation of polypropylene should be encouraged where possible.

14- TRANSPORT INFORMATION

- **DOT:**
  Not regulated
- **ADR:**
  Not regulated
- **RID:**
  Not regulated
- **IATA-DGR:**
  Not regulated
- **ICAO:**
  Not regulated
- **Further information:**
  This product is not transport regulated.

15- REGULATORY INFORMATION

This product is not a "hazardous chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Federal regulatory information

- **OSHA status:**
  None
- **EPA clean Air Act Status:**
  None
- **EPA clean Water Act Status:**
  None
- **TSCA Status:**
  TSCA Inventory (40 CFR710) listing
- **CE RCLA RQ:**
  None

16- OTHER INFORMATION

- **Ecotoxicity:**
  Not toxic under normal conditions.
- **Persistence:**
  Non-biodegradable
- **Other special considerations:**
  Acceptable business/technical terms necessary for medical device applications must be developed by contacting your Jam Polypropylene Co. sales representative.

Validated by Technical Support Division on 17 December 2007