

## Material Safety Data sheet (MSDS)

### Polypropylene

The Egyptian Propylene & Polypropylene Company (EPP) urges each customer or recipient of this MSDS to study it carefully to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology, and fire prevention, as necessary or appropriate to use and understand the data contained in this MSDS.

#### 1. Identification of The Substance

**Product Name:** Polypropylene

**MSDS#:** 0000000001

**Effective Date:** 01/01/2023

**CAS Number:** 9003-07-0

**Common Name:** Homopolymer, Polypropylene

**Chemical Family:** Natural Pelleted Polypropylene compound

**Application of the substance / the preparation:** Synthetic resin

**Appearance:** 1/8" diameter pellets; whitish color

**Physical State:** Pellets

**Odor:** Negligible Odor

**Manufacturer/Supplier:** Egyptian Propylene and Polypropylene Company

#### 2. Hazards Identification

2.1 Classification of the substance or mixture Classification (REGULATION (EC) No 1272/2008) Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

2.2 Label elements Labeling (REGULATION (EC) No /2008) Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008.

##### **Information Pertaining to Particular Dangers for Man and Environment:**

The molten product adheres to the skin and causes burns. Spilled material may present a slipping hazard. Possible production of electrostatic charging when used. The working steams can irritate the eyes as well as the respiratory tract.

##### **General Health Hazards:**

- Residual hydrocarbon vapor may accumulate in the top of shipping containers.
- Extremely high concentrations of vapor may cause asphyxiation.
- Do not breath vapor from container opening.
- Treat fines and dust as nuisance particulates.
- Avoid breathing dust and processing fumes. Dust causes eye irritation, experienced as stinging and discomfort or pain.
- Polyolefin pellets or granules are abrasive and may cause mechanical skin irritation.
- Molten or hot polymer will cause thermal burns.

##### **Hazards of Product:**

CAUTION!

- Plastic bag or liner, if present, may cause static ignition hazard.
- Exposure to dust and processing fumes may cause irritation of skin, eyes and respiratory tract.
- Vapor in top of shipping container, at high concentrations, may be harmful if inhaled.

### 3. Composition/Information on Ingredients

**CAS No. Designation: Pre-registration number; 9003-07-0**

**Description:**

Mixture of the substances listed below with harmless additives:

1. Propene-Homopolymer
2. Anti-oxidants

### 4. First Aid Procedures

**Inhalation:** If inhaled, remove to fresh air.

**Swallowing:** No emergency care anticipated.

**Notes to physician:**

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

**Eye contact:**

- In case of dust contact with eye(s), flush eyes thoroughly with water for several minutes.
- Remove contact lenses, if worn. Seek medical advice if irritation persists.
- For thermal eye burns, immediately flush eyes with water and continue washing for several minutes.

Do not remove contact lenses, if worn. Obtain medical attention without delay, preferably from an ophthalmologist.

**Skin Contact:**

- For thermal skin burns, remove clothing, any jewelry, and gross debris from the burned area.
- Leave blisters intact.
- Wash the area thoroughly with room temperature tap water. Do not use ice.
- Cover the wounded area with gauze dressing moistened with cool water; keep the dressing moist.
- Seek medical attention.

### 5. Firefighting Measures

**Auto-Ignition Temperature:**

Generally, 600 °F – 770 °F (315°C – 410 °C.) depending on individual product composition.

**Extinguishing Media:**

- Apply alcohol-type or all purpose-type foams by manufacturer's recommended techniques for large fire.
- Use carbon dioxide or dry chemical media for small fires.

**Suitable Extinguishing Agents:**

- Water haze
- Foam
- Carbon dioxide
- Chemical powder

**Special Firefighting Procedures:**

Do not direct a solid stream of water or foam into burning molten material; this may cause spattering and spread the fire.

**Special Protective Equipment for Firefighters:**

Use self-contained breathing apparatus and protective clothing.

**Unusual Fire & Explosion Hazards:**

Avoid dispersion of dust in air to reduce potential for dust ignition/explosions.

**Special hazards Caused by the Material, its Products of Combustion or Resulting Gases:**

- In case of fire it can release: water (H<sub>2</sub>O), carbon dioxide (CO<sub>2</sub>), and when lacking oxygen (O<sub>2</sub>), carbon monoxide (CO).
- The products of the burning are dangerous.
- The formation of hydrocarbons and aldehydes are possible in the initial stages of a fire (especially in between 400°C and 700°C).

**Protective Equipment:** Put on breathing apparatus.

**Additional Information Heat Value:** 8000 - 11000 kcal/kg

## 6. Accidental Release Measures

**Steps to be Taken if Material is Released or Spilled:**

- Sweep up and collect in suitable container for disposal.
- To prevent littering, avoid releases to surface waters.

CAUTION: Polypropylene pellets on floors are slippery and can causes falls.

**Personal Precautions:** Wear suitable protective equipment.

**Environmental Precautions:** To prevent littering, avoid releases to surface waters.

## 7. Handling and Storage

**General Handling:**

- Do not handle empty bag or liner in presence of flammable vapor.
- Avoid breathing dust and process fumes.

**Precaution During Storage and Handling:**

- Store in Cool and dry place.
- Good ventilation (To control airborne dust).
- Away from sunlight (maximum temperature 50 °C).
- Equipment must be earthed to avoid static charge.

➤ **Eye Protection:** Not required.

➤ **Body Protection:** Normal overalls & Processing precaution.

**Measures after Spillage or Leakage:**

- Sweep to avoid slipping on pellets
- Airborne dust, fumes and vapor, particularly in confined areas from the product carry a risk of dust explosion.
- All equipment should be properly earthed.

**Engineering Controls:**

Physical handling and processing of this product such as through pneumatic conveying and grinding, etc., can generate fines and dust particles that can, under certain conditions, pose an explosion hazard.

We recommend that the systems used be:

- Equipped with filters of adequate size.
- Operated and maintained in a manner to ensure that no leaks develop
- Adequately grounded.

We further recommend good housekeeping be practiced throughout the facility.

## 8. Exposure Controls/Personal Protection

**Personal Protection:**

- Do not eat or drink while working.
- No smoking.
- Provide a collection system for gathering the vapors which are created during the working process.

**a. Respiratory Protection:** Use NIOSH-approved respirator if unable to control airborne dust, fumes, and vapor.

**b. Ventilation:** Local exhaust ventilation is recommended for control of airborne dust, fumes, and vapor, particularly in confined areas.

**c. Breathing Equipment:** If appropriate ventilation is not available; use face masks when handling the molten product.

**d. Protection of Hands:** Use Heat resistant gloves.

**Material of gloves:** The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material:** The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

## 9. Physical and Chemical Properties

**Form:** Granulate

**Physical State:** Pellets

**Color:** transparent

**Odor:** Negligible Odor (Odorless)

**Melting point/Melting range:** 162-167°C

**Ignition temperature:** > 400°C

**Decomposition temperature:** > 300°C

**Danger of explosion:** Product is not explosive.

**Density at 20°C:** 0.89-0.91 g/cm<sup>3</sup>

**Solubility in / Miscibility with Water:** Insoluble

**Additional information** Soluble in boiling, aromatic chlorinated solvents.

## 10. Stability and Reactivity

**Thermal Decomposition / Conditions to be Avoided:**

- The product is stable at normal handling- and storage conditions.
- Thermal decomposition products may include simple hydrocarbons such as methane and propane, carbon monoxide, carbon dioxide, aldehydes and other organic vapor. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiate, aldehydes are known irritants. In addition, some aldehydes are skin sensitizers and/or probable carcinogens.
- Acute overexposure to the decomposition products may result in headache, nausea, and irritation of the eyes, skin and respiratory tract.
- Local exhaust ventilation is recommended for control of airborne dust, fumes and vapor.

**Materials to be Avoided:** Strong oxidation agent.

**Dangerous Reactions:** No dangerous reactions known.

**Dangerous Products of Decomposition:** No hazardous decomposition products known at room temperature.

## 11. Toxicological Information

Avoid exposure to fumes that can arise during the process by extraction and / or ventilate the working place.

## 12. Ecological Information

- The product is not biodegradable. It can be recycled using suitable technology. It doesn't contain additive compounds of lead. Disposal must be done in accordance with existing local regulations.
- Land - filling and environmental protection incineration can be considered in most cases suitable.

## 13. Disposal Considerations

When disposed of, this product is not considered a hazardous waste. Disposal methods identified are for the product as sold. For proper disposal of used material, an assessment must be completed to determine the proper and permissible waste management options permissible under applicable rules, regulations and/or laws governing your location.

## 14. Transport Information

- According to national and international guidelines, which regulate the road-, rail-, air- and sea transport, this product is classified as not dangerous.
- This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Additional transportation system information can be obtained through your EPP sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

## 15. Regulatory Information

This material safety data sheet is an addition to the technical data sheet in use and is not a replacement. The information contained is true up to EPP knowledge about the product.

## 16. Other Information

To promote safe handling, each customer or recipient should:

- Notify its employees, agents, contractors and others whom it knows or believes will use this material or the information in this MSDS and any other information regarding hazards or safety.
- Furnish this same information to each of its customers for the product.
- Request its customers to notify their employees, customers, and other users of the product of this information.

## Company Identification

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