

## MSDS

# POLYPROPYLENE (Homopolymer)

Nch 2245 Of.2015

### 1. PRODUCT AND SUPPLIER IDENTIFICATION

Product Name (commercial):	<b>Polypropylene (homopolymer)</b> PH0130, PH0131, PH0132, PH0242, PH0322, PH0334, PH0362, PH0522, PH0952, PH0953, PH0954, PH1310, PH1315, PH2615, PH2621, PH3521, PH4040, PH6010, PH6011
Recommended uses identified of the Substance or mix:	Manufacture of plastic articles by injection molding, thermoforming, extrusion/ compression, film, raffia, blow molding, fibers or other conversion processes.
Supplier/ manufacturer /merchandise:	<b>PETROQUIM S.A</b>
Address:	Camino a Ramuntcho s/n Hualpén
Suppliers phone number:	<a href="mailto:supervisoresdeturno@petroquim.cl">supervisoresdeturno@petroquim.cl</a>
Emergency phone:	<b>+56 41 2440400</b>
Email:	<b>+56 41 2440482</b>

### 2. HAZARDS IDENTIFICATION

Classification of the substance or mix:	According to the DS57 or GHS (global harmonized system) is not a hazardous substance or mix.
Label Elements:	According to the DS57 or GHS (global harmonized system) is not a hazardous substance or mix.

**Other risks:**

Contact with skin:	Melted polypropylene sticks to the skin and may cause burns.
Contact with eyes and respiratory tract:	Handling and transporting the product may raise dust and fines, which could irritate the eyes and respiratory tract.
Slipping:	A product spill onto the ground may create a hazard of slipping and falling.
Electrostatic charge:	Using the product may produce electrostatic charges.
Combustible dust:	If small particles are generated during processing, handling or by other means, combustible dust concentrations may occur in the air.

**3. COMPOSITION/ INFORMATION OF THE COMPONENTS**

Chemical name:	<b>Polipropileno</b>
Chemical formula:	$(C_3H_6)_n$
CAS number:	9003-07-0

**Componentes:**

Chemical Name	No. CAS	Concentration (% w/w)
Polipropileno	9003-07-0	>99.5

Polypropylene has no dangerous components.

**4. FIRST AID MEASURES**

Inhalation:	In the event of excessive inhalation of polypropylene fines or dust, take the person immediately out into the open air. Any persistent irritation of the respiratory tract will require medical care. If necessary, use mouth-to-mouth resuscitation or artificial respiration.
Contact with the skin:	If a person comes in contact with the melted product, cool the zone quickly with cold water. Do not pull the solidified product off the skin and seek medical care.

Contact with eyes:	If fines and/or dust come in contact with eyes, wash them with water and consult a physician, if necessary. In case of contact with molten polymer, rinse eyes continuously with cold water for at least 15 minutes. Do not try to remove the material adhered to the eyes and seek immediate medical attention.
Ingestion:	Seek medical care if necessary, but there are no special measures to adopt if the product is ingested. No adverse health effects are anticipated due to ingestion.
Most important symptoms/ effects:	<ul style="list-style-type: none"> <li>• Dust contact with the eyes may cause mechanical irritation.</li> <li>• Molten polymer can produce thermal burns.</li> <li>• Inhalation of the fumes and vapors from the process can cause nasal and pharyngeal inflammation and cough.</li> </ul>
Identification of medical attention and the special treatments required that must be applied immediately:	The treatment of over exposition must be focus on symptoms control and the clinical state of the patient

## 5. FIRE-FIGHTING MEASURES

Appropriate extinguishing agents:	Water (H <sub>2</sub> O), Foam, Carbon Dioxide (CO <sub>2</sub> ), chemical powder For large fires, use water spray lances from a safe place.
Inappropriate extinguishing agents:	There is no.
Hazardous products that are released from combustion:	In the event of fire, Water (H <sub>2</sub> O), carbon dioxide (CO <sub>2</sub> ) may be released. In oxygen poor environments (oxygen gas, or O <sub>2</sub> ), carbon monoxide (CO) may be released. It is possible for hydrocarbons and aldehydes to form in the initial stages of the fire (especially between 400°C and 700°C).
Special fire-fighting procedures:	None are required.

Precautions for the personnel of emergency and / or firefighters:	Wear respiratory protection with positive pressure and approved fire protection clothing. Fight fire from a safe distance with hose lines or fire lances.
Other data:	<ul style="list-style-type: none"> <li>• Solid combustible particles, may discompose with fire.</li> <li>• Fight the fire from a safe distance with hose lines or fire lances.</li> <li>• The heat of the fire may melt and discompose the polymer and generate flammable vapors.</li> </ul>

## 6. ACCIDENTAL SPILL OR LEAK CONTROL MEASURES

### Personal precautions, protective equipment and emergency procedures:

For people not involved in the emergency services	Dust mask in case of presence of fines and/ or polypropylene powder. Polymer particles carry the risk of slipping on hard smooth surfaces.
For emergency services personnel:	Equip the emergency services personnel with appropriate individual protection.
Environmental precautions:	Prevent the material from entering a watercourse or sewage system, the material floats.
Cleaning methods:	Sweep and recover the material for reuse or recycling. In case of spillage in water, the material is insoluble; pick it up and contain it like any solid. Waste must be disposed of in an authorized deposit of household or industrial waste.
Reference to other Sections:	For elimination, have in mind the section number 13. Individual protection equipment, section 8.

## 7. HANDLING AND STORAGE

HANDLING	
Precautions for safe handling:	<p>The material has granules forms. If it becomes small particles during an additional transformation, avoid the accumulation of dust in closed places. Fine dust in suspension and in the presence of an ignition source (example: fire, electric shock spark, among others) carries the risk of explosion. The equipment used to manipulate the polymer must be conductive and be grounded. The static charges or another ignition sources, in a dust environment may ignite. The electrostatic charge may accumulate during the transport and manipulation. The material does not requires special measures in case of room temperature manipulation. When the material is heated to transform temperatures should generate vapors that may condensate in the extraction system. See section 10.</p>
Hygiene measures:	<p>Do not eat or drink liquids and do not smoke while working with the product. Wash your hands before eating, drinking, smoking or using toilets. Remove contaminated clothing before eating. Wash contaminated clothing before reuse.</p>
Conditions for safe storage Including possible incompatibilities:	<p>Store the product in bags, silos, containers or large boxes. The storage location must be well ventilated and dry. Octabins, if any, should not be stacked. Store in a dry place. No special measures are required in case of handling at room temperature. In case of process temperatures, the product should be handled with proper ventilation. Store away from excessive heat and any oxidant agent. Keep close to avoid contamination. Equipment at the storage location must be appropriately grounded to keep static electricity from accumulating</p>
Final specific uses:	See section 1.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

Control parameters:	There are no component exposure limits that must be monitored.
Maximum allowable concentration:	It does not present components that have exposure limits that must be monitored.

### Medidas de protección individual / equipos de protección personal:

Respiratory protection:	A dust mask must be worn when fines and dust will be raised during the handling or transport of the product.
Hand protection:	Leather or gender gloves that confer thermal protection if there is the possibility of coming into contact with the hot material.
Eye protection:	Safety goggles to avoid eye damage in the presence of dust and particles suspended in the air.
Skin and body protection:	A standard overall.

## 9. PROPIEDADES FÍSICAS Y QUÍMICAS

Physical state:	Solid
Appearance and smell:	Granules (pellet), odorless
Color:	White/Transparent
pH:	Not applicable
Melting point:	160 – 170°C
Flammability:	No information available
Density at 20°C:	0,89 – 0,91 g/cm <sup>3</sup>
Solubility in water / solvents:	Insoluble / soluble in hot chlorinated organic solvents
Auto-ignition temperature:	>300°C
Decomposition temperature:	Not determined
Explosive properties:	The product is not explosive
Fire or explosion hazard:	Mixing polypropylene powder in air can form an explosive mixture



## 10. STABILITY AND REACTIVITY

Reactivity:	There is no risks known from reactivity.
Chemical stability:	Stable.
Hazardous reactions:	It will not happen.
Conditions to be avoided:	Degradation from heat and sunlight unless it is protected by antioxidants. Avoid contact with strong oxidants, excessive heat, sparks and flames.
Incompatible materials:	Chlorine and strong oxidants attack the product.
Hazardous decomposition products:	It is not expected to decompose under normal conditions. In case of thermal decomposition, carbon monoxide, olefinic and paraffinic compounds, traces of organic acids, ketones, aldehydes and alcohols can be formed.

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity:	The product is not toxic.
Chronic or long-term toxicity:	The product is not toxic.
Irritation / skin corrosion:	It is not a skin irritant.
Serious eye damage / eye irritation:	It does not irritate the eyes. Mechanical irritation is possible.
Respiratory or skin sensitization:	None known.
Carcinogenicity:	Not classified.
Inhalation Hazard:	Not applicable.

## 12. ECOLOGICAL INFORMATION

Ecotoxicity:	Not classified.
Durability/ Degradability:	It is not foreseeable that it is biodegradable.
Bioaccumulation potential:	This material is not expected to bioaccumulate.
Mobility in soil:	This material is not volatile and insoluble in water.
Environmental precautions:	Must be disposed of by incineration or in an authorized household or industrial waste dump.

### 13. FINAL DISPOSAL INFORMATION

Recommended methods for a final safe provision and environmentally adequate:	Reuse, recycling, incineration or authorized deposit of residential or industrial waste.
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### 14. TRANSPORT INFORMATION

NCh 2120:	It does not apply since it is not a hazardous substance.
UN Number:	Not applicable.

### 15. REGULATORY INFORMATION

This product must be carried according to government and environmental laws on the carriage of non-hazardous substances.

The receiver should verify the possible existence of local regulations applicable to the product.

### 16. OTHER INFORMATION

The data contained in this data sheet was obtained from reliable sources.

The information provided is what is currently known about the product. Use of this information and of the products is beyond the supplier's control. Each user has the obligation to determine how the product can be used safely.

The design of this SDS is based on the model established in DS57.