1. PRODUCT IDENTIFICATION

Product Name: Yungsox Copolymer PP

Manufacturer: Name: Formosa Plastics Corporation, Polypropylene Division
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2. HAZARD IDENTIFICATION

Hazard Classification: The product is not classified according to the Globally Harmonized System (GHS) for classification and labeling of chemicals.

Primary Route(s) of Exposure: Inhalation, Ingestion, Eye, Skin Contact

Potential Health Effects:

Eye Contact: No significant irritation expected other than possible mechanical irritation. Heated material can cause thermal burns. When heated to decomposition, it emits acrid smoke and irritating fumes.

Skin Contact: No significant irritation expected other than possible mechanical irritation. Heated material can cause thermal burns.

Inhalation: Exposure to airborne concentrations well above the recommended exposure limits may cause irritation of the nose, throat, and lungs. If heated to more than 300°C, the product may form vapors or fumes which could cause irritation of the respiratory tract, coughing, and shortness of breath.

Ingestion: No significant health hazards identified.

3. COMPOSITION

Chemical Name: Polypropylene Copolymer
Synonyms: PP Copolymer, Copolymer of polypropylene, Block Copolymer, Random Copolymer

Formula: \((\text{C}_3\text{H}_6)_x-(\text{C}_2\text{H}_4)_y\)

CAS No.: 9010-79-1

GHS Classification: Not hazardous according to GHS criteria.

POLYPROPYLENE COPOLYMER (%): >98
Additives (%): <2

4. FIRST AID MEASURES

Eye Contact: Immediately wash eyes with water for at least 15 min. Consult physician if irritation or other symptoms occur.

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.

Inhalation: Remove to fresh air. Consult physician if irritation of respiratory passages occurs.

Ingestion: If ingested, dilute swallowed material by drinking water. Never give
anything by mouth to an unconscious person. Get medical attention if irritation or other symptoms develop.

Other Instructions: Treat symptomatically and supportively.

5. **FIRE FIGHTING MEASURES**

**Flash Point:** Not applicable

**Extinguishing Media:** Dry chemical, carbon dioxide, foam, water spray.

**Special Fire Fighting Procedure:** In the event of a fire, wear NIOSH approved, positive pressure, self-contained breathing apparatus (SCBA) and full protective clothing. Extinguish fires with water, foam or dry chemical. Do not use water jet.

**Unusual Fire and Explosion Hazards:** Avoid accumulation and dispersion of dust to reduce explosion potential. Fire may produce irritating gases and dense smoke.

**Hazardous Combustion Products**

When forced to burn, the major gaseous products of the combustion of plastic resin are carbon monoxide and carbon dioxide.

6. **ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Restrict access to keep out unauthorized or unprotected personnel. Wear appropriate personal protective equipment during all clean-up activities. Avoid inhalation and direct contact.

**Environmental Precautions:** Keep spilled material away from heat, sparks and open flames. Ensure adequate ventilation.

**Methods for Clean-Up:** Collect spilled material using a method that minimizes dust generation (e.g., wet methods, HEPA vacuum). Place waste in an appropriate container for disposal. Use care during clean-up to avoid exposure to the material and injury from broken containers.

7. **HANDLING AND STORAGE**

**Handling:** Maintain good housekeeping. Spilled materials may create a slipping hazard. Remove dust from settling areas to prevent any secondary potential dust explosion or fire hazards. Electrostatics charge may build up during handling. Grounding of equipment is recommended.

**Storage:** Keep dry. Store away from extreme heat and away from strong oxidizing agent.

**Container Use:** Keep containers closed to prevent contamination.

8. **EXPOSURE CONTROL AND PERSONAL PROTECTION**

**Engineering Control:** If user operations generate dust or fumes, ventilate area to prevent accumulation.

**Eye Protection:** Safety glasses

**Skin Protection:** Gloves required when handling hot material.

**Respiratory Protection:** None required in normal use of product. NIOSH approved dust mask recommended if dusty conditions exist.

**Hygiene Procedures:** 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 facility. Dusted clothing and shoes should be thoroughly cleaned before reuse.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

**Physical Form:** Pellets

**Color:** Translucent white

**Odor:** Odorless to faint, mild hydrocarbon odor

**Boiling Point:** Not available

**Melting Point:** 120 - 170°C

**Auto-ignition temperature** Not applicable

**Decomposition temperature** >400°C

**Solubility in Water:** Insoluble

**Specific Gravity:** 0.90 g/cm³ (water = 1)  Bulk Density: 400 - 600 kg/ m³
10. STABILITY AND REACTIVITY

**Stability:** Stable
**Condition to Avoid:** Strong oxidizers and excessive heat
**Hazardous Decomposition Products:** Burning can produce carbon monoxide and/or carbon dioxide and other organic vapors.

**Hazardous Polymerization:** Under normal conditions of storage and use, hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

The information provided below can be subject to misinterpretation. Therefore, it is essential the following information be interpreted by individuals trained in its evaluation.

**Chemical Toxicity Data**
- Polypropylene: No toxicology data available.
  - Polypropylene is not considered hazardous materials under the OSHA Hazard Communication Standard

12. ECOLOGICAL INFORMATION

**Ecotoxicity:** No data available
**Persistence and degradability:** No data available
**Bioaccumulative potential:** No data available
**Mobility in soil:** No data available
**Other adverse effects:** No data available

13. DISPOSAL INFORMATION

**Disposal Method:** It must be disposed of in accordance with Federal, State and local environmental control regulations.
**Recycle/Reclaim:** Recycling or reclamation of Polypropylene should be encouraged where possible.

14. TRANSPORT INFORMATION

This product is not regulated as a hazardous material/dangerous good for all forms of transportation.
**DOT:** Not Regulated for Land Transport
**TDG:** Not Regulated for Land Transport
**IMDG:** Not Regulated for Sea Transport
**IATA:** Not Regulated for Air Transport

15. REGULATORY INFORMATION

**U.N. GHS Classification & Labeling Information:**
- **Classification:** Not hazardous according to GHS criteria.

**NFPA 704 Information:**
- **Health Rating:** 0
- **Flammability Rating:** 1
- **Reactivity Rating:** 0
- **Other Hazards:** Not applicable

**U.S. Federal Regulatory Information:**
- **EPA Clean Air Act:** Not listed
- **EPA Clean Water Act:** Not listed
- **TSCA:** The ingredients of this product are listed on TSCA inventory (40 CFR 710).
Formosa Plastics Corporation

**RCRA:** This product as supplied is not considered a RCRA hazardous waste.

**CERCLA RQ:** Not listed

**European Union Regulatory Information:**
**Classification:** Not hazardous according to EU criteria.

**Canadian Regulatory Information:**
**Classification:** Not hazardous according to WHMIS criteria.

**Domestic Substances List (DSL):** Listed

**16. OTHER INFORMATION**

**Disclaimer of Liability:** The information on this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied, regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself.

The conditions or methods of handling, storage, use and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with handling, storage, use or disposal of the product.

This SDS was prepared for and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

**Sources & References:** This Safety Data Sheet conforms to regulation 1907/2006/EC (REACH). This product has been classified in accordance with European CLP regulations (1272/2008/EC) and the U.S. Hazard Communication standard (29 CFR 1910.1200).