



Safety Data Sheet

Section 1. Identification of the Hazardous Chemical and of the Supplier

Product Name : PP/GF 20% Black

Product Code : UBK 1312

Synonyms : Polypropylene with 20% Glass Fiber Reinforced Black

Responsible Party : Teh Ah Yau Rubber Factory Sdn Bhd

Topah Baru Estate, 08100 Semiling Bedong, Kedah. Malaysia

Tel: + 604 4573 616 | Fax: + 604 4573 618

Website: www.tayrubber.com.my

Product Use : Engineering thermoplastic.

Section 2. Hazard Identification

Emergency Overview: Pellets or chips with slight to no odor. Combustion and decomposition may produce hazardous fumes. Base resin dust/powder has a US Bureau of Mines relative dust explosion hazard rating of weak. Molten material can cause thermal burns on contact with skin or eyes. Spilled pellets may create a slipping hazard.

Potential Health Effects:

Routes of Exposure: Skin and eye contact; inhalation of vapors, if overheated.

Signs and Symptoms of

Exposure: No specific information available.

Skin: In the form supplied, this material will not cause any skin irritation. Hot or molten material has the potential to cause thermal burns. Polymer particles can cause mechanical irritation.

Eyes: In the form supplied, this material will not cause any eyes irritation. Polymer particles can cause mechanical irritation. Degradation vapors may cause irritation.

Inhalation: In the form supplied, this material is not considered an inhalation hazard. Overheating in processing may generate hazardous, irritating vapors.

Ingestion: Low toxicity by this route is expected based on the biological activity of high molecular weight polyesters.

Carcinogenicity: The International Agency for Research on Cancer (IARC) has evaluated carbon black, which may be contained in this product, and found it to be possibly carcinogenic to humans (Group 2B). Any carbon black in this product is wetted by the polymer system, and therefore, presents minimal likelihood of exposure under normal conditions of processing and handling.

Medical Conditions

Aggravated by

Exposure: Off-gases, which may be released if overheated, may affect those with chronic diseases of the respiratory system.

Section 3. Composition and Information of the Ingredients of the hazardous Chemical

| Ingredients: | Ingredient | CAS Number | % Usage |
|--------------|--------------------|------------|---------|
| | PolyPropylene (PP) | 9003-07-0 | 80% |
| | Glass Fiber (GF) | 65997-17-3 | 20% |

This is a polymeric material. Any hazardous constituents are wetted by the polymer system, and therefore, present no likelihood of exposure under normal conditions of processing and handling. This product may contain proprietary ingredients. While this product is not classified as hazardous under OSHA Regulations, this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and made available for employees and other users of the product.

This product is not regulated by WHMIS.

Section 4. First-Aid Measures

Skin: If hot or molten polymer or hot vapors contact skin, cool rapidly with cold water. If polymer is stuck to skin, do not remove. Seek medical attention. Allow adhered polymer to come off naturally. Removal of adhered polymer may result in more tissue damage than if polymer is allowed to come off over time.

Eyes: Flush with plenty of water. Seek medical attention if discomfort persists, and to remove foreign body.

Inhalation: Remove to fresh air. Seek medical attention if breathing difficulties occur.

Ingestion: If a significant quantity has been swallowed, give two glasses of water to dilute. Seek medical attention.

Note to Physicians: This product is essentially inert and nontoxic. However, if it is heated at too high a temperature or if it is burned, gases may be released (see Sections 5 and 10 for off gases). Patients who have been exposed to off-gases may need to have their arterial blood gases and carboxyhemoglobin levels checked. If the carboxyhemoglobin levels are normal, asphyxia (carbon dioxide replacing oxygen) is a possibility. As with any fire, irritant gases may have formed. If patients may have inhaled high concentrations of irritating fumes, they should be monitored for delayed onset pulmonary edema.

Section 5. Fire Fighting Measures

Flashpoint: > 93 deg C (>200 deg F) by Tag Closed Cup Method.

Base resin dust/powder has a US Bureau of Mines relative dust explosion hazard rating of weak.

Hazardous Products of

Combustion: Carbon monoxide and carbon dioxide

Extinguishing Media: Water spray, foam, carbon dioxide, or dry chemical.

Firefighting

Instructions: Firefighters should wear self-contained breathing apparatus and full fire-fighting turn-out gear (bunker gear). Keep personnel removed from and upwind of fire. Water should be used to keep fire-exposed containers cool. Water, foam and dry chemical may cause damage to electrical equipment.

Section 6. Accidental Release Measures

*For more information, see regulatory section 15.

Procedures in Case of

Spill or Leak: Sweep or gather up spills and place in proper container for recovery or disposal.

Section 7. Handling and Storage

Handling: Do not handle hot or molten material without appropriate protective equipment. Maintain good housekeeping in work areas. Do not exceed recommended process temperatures to minimize release of decomposition products. Do not smoke in areas where polymer dust is present. Appropriate measures should be taken to control the generation and accumulation of dust during conveying and processing operations.

Storage: Store in a cool dry place. Maintain dryness of resin.

Section 8. Exposure Controls and Personal Protection

Engineering Controls: Local Exhaust: Recommended when appropriate to control employee exposure to dust or process vapors.

General: May not be adequate as the sole means to control employee exposure.

Protective Equipment:

Skin: When thermal or melt processing, wear long pants, long sleeves, well insulated gloves, and face shield when there is a chance of contact.

Eyes: Safety eyewear recommended.

Inhalation: A NIOSH approved respirator is recommended if there is a possibility of dust generation above permissible exposure limits or that decomposition vapors may be generated.

Section 9. Physical and Chemical Properties

Appearance: Pellets

Odor: Slight characteristic odor

Physical State: Solid

Vapor Pressure: Not applicable

Melting Point: 140°C

Solubility: Not applicable

Specific Gravity: 1.05 – 1.10

Percent Volatiles: Not applicable

Section 10. Stability and Reactivity

Chemical Stability: Stable under ordinary conditions of use and storage.

Conditions to Avoid: Flame; do not heat above 550 deg F (288 deg C). Avoid prolonged exposure to temperatures above 520 deg F (271 deg C).

Incompatibility: Strong bases.

Hazardous

Decomposition

Products: Aldehydes, ketones, esters, acids, alcohols, butadiene, tetrahydrofuran, toluene, benzoic acid, and terephthalic acid.

Hazardous

Polymerization: Will not occur.

Section 11. Toxicological Information

No specific information available on the product.

Section 12 Ecological Information

Ecotoxicity: The effects of resin pellets on the wildlife that may ingest them is not well understood. In the case of seabirds, some marine biologists believe that the fowl may not be able to pass plastic pellets through their digestive tracts. Thus, large quantities of ingested pellets may cause intestinal blockage, false feelings of satiation or reduction in absorption of nutrients, causing malnutrition and starvation. The goal of SPI's Operation Clean Sweep is zero loss of pellets into the environment.

Environmental

Fate/Information: This material is considered to be non-biodegradable.

Section 13. Disposal Information

Disposal: Recycling is encouraged. Dispose of in accordance with federal, state, and local regulations. This product, as shipped, is not a RCRA hazardous waste under present EPA regulations.

Section 14. Transportation Information

Not regulated under Department of Transportation.

Section 15. Regulatory Information

TSCA: All ingredients are listed in the TSCA Inventory or are compliant with the TSCA Polymer Exemption Rule. This product contains traces of tetrahydrofuran, which is a TSCA 12b chemical. TSCA 12b requires notifying EPA prior to export.

SARA: This product does not contain any toxic chemicals subject to the reporting Requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372.

Section 16. Other Information

| Hazard Ratings: | Agency | Health | Flammability | Reactivity | Other |
|-----------------|--------|--------|--------------|------------|-------|
| | NFPA | 1 | 1 | 0 | |
| | HMIS | 0 | 1 | 0 | |

Disclaimer: This product is not intended for use in medical or dental implants. The information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. Makes no warranty of any kind, express or implied, concerning the safe use of this material in your process or in combination with other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.