

SAFETY DATA SHEET

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REV. No.: No.009

1. PRODUCT INFORMATION :

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| PRODUCT GRADE | GPPS-861 B/ D / W / N / F, GPPS-866 B/ N/NM/BM, GPPS-808, GPPS-818 GPPS-818K / W / L, GPPS-951 F, GPPS-751S |
| SUPPLIER | TAITA CHEMICAL CO. LTD., / KAOHSIUNG BRANCH No. 3, Jianji St. Qianzhen District, Kaohsiung City 80672, Taiwan |
| TRADE NAME | TAITAREX GPPS |
| CHEMICAL NAME | Styrene Homopolymer. |
| SYNONYMS | GPPS (General Purpose Polystyrene) |

2. HAZARD IDENTIFICATION :

GHS classification

This product is not hazardous under United Nations GHS Parts 2,3 and 4.

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|-------------------------------|------|
| Most Important Hazards | None |
| Adverse Human Health Effects | None |
| Environmental Effects | None |
| Physical and Chemical Hazards | None |

3. COMPOSITION/INFORMATION ON INGREDIENTS :

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|------------------------------------|--|
| Substance or Preparation | Substance |
| Content | >97 % (Additives <= 3 %) |
| Formula | (C ₈ H ₈) _m |
| CAS NO. | 9003-53-6 |
| Impurities Contributing to Hazards | None |

4. FIRST AID MEASURES :

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| Inhalation | In case of gases evolving from melted resin, move subject to fresh air. Treat symptomatically. |
| Skin Contact | In case of pellets or powder, wash with water. In case of melted resin, wash affected skin area and clothing with plenty of soap and water, seek medical advice. |
| Eye Contact | In case of pellets or powder, flush with plenty of water for at least 15 minutes. Seek medical advice if any dust particles still remain. In case of gases evolving from melted resin of high temperature, flush with plenty of water for at least 15 minutes. Seek medical advice if necessary. |
| Ingestion | Induce vomiting. Rinse mouth with water. Seek medical advice if necessary. |

5. FIRE-FIGHTING MEASURES :

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| Extinguishing Media | Water and various kinds of fire-extinguishers may be used. |
| Special Fire-Fighting Procedure | Self contained breathing apparatus. |
| Fire and Explosion Hazards | None. |

6. ACCIDENTAL RELEASE MEASURES :

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|---------------------------|--|
| Methods for Cleaning Up | Recovery if not contaminated or disposal. |
| Personal Precautions | Spilled pellets or powder on ground may cause slipping. |
| Environmental Precautions | Gather pellets and powder thoroughly to avoid environment water pollution. |

7. HANDLING AND STORAGE :

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| Handling | Keep away from fire and sources of ignition. Maintain good housekeeping standards to prevent accumulation of dust. To avoid dust explosion resulting from the existence of static electricity build-up, electrostatics eliminators and grounding such as air transferring pipes, electrically conductive bag filters and hoppers should be fixed to equipment. |
| Storage | Keep the materials in a cool dry place. Protect from direct sunlight, rain and violent temperature fluctuation. Store in a fire inhibited area. |

8. EXPOSURE CONTROLS / PERSONAL PROTECTION :

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|-----------------------|---|
| Threshold Limit Value | Not determined. |
| Ventilation | Necessary to exclude dust, fumes and gas. |

PERSONAL PROTECTION :

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|-------------|--|
| Eye | Wear safety glasses for general purpose. Wear chemical goggles for cleaning molding machines. |
| Skin | When handling pellets avoid prolonged or repeated contact with skin, gloves are not especially needed, but when handling molten resins, wear gloves with good thermal insulation. Ordinary work clothing will do, but in the case of handling molten resins, wear laboratory clothing with long sleeves. |
| Respiratory | Wear masks for cleaning molding machines. |

9. PHYSICAL AND CHEMICAL PROPERTIES :

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|---------------------|----------------------|
| Appearance | Off white pellets |
| Melting Temperature | Softening above 90°C |
| Solubility | Insoluble in water. |
| Specific Gravity | 1.03 ~ 1.10 |

10. STABILITY AND REACTIVITY :

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|--------------------------|--|
| Flammability | Yes |
| Flash Point | 350°C |
| Autoignition Temperature | 490°C |
| Reactivity with Water | No |
| Stability | Stable and non-reactive under normal handling and storage conditions |

| | |
|-----------------------------|--|
| Dust Explosion | Possible if powder exists Explosion data for powder (<145 mesh) Lower explosion limit 15 g / m ³ Minimum ignition energy 40 mJ Maximum explosion pressure 5.3×10 ⁵ Pa Maximum pressure increase rate 3.4×10 ⁶ Pa/S |
| Thermal Decomposition Gases | CO., CO ₂ , SM and SM dimer |
| Combustion Energy | 4.16×10 ⁷ j / kg (9930 Kcal / kg) |

11. TOXICOLOGICAL INFORMATION :

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|----------------------------|---|
| Irritation | Fumes or vapors generated from decomposing resin may irritate eyes. |
| Acute oral toxicity (LD50) | Not determined. |
| Mutagenicity | Not determined. |

12. ECOLOGICAL INFORMATION :

For the safety of ocean species and birds, disposal of the waste to the ocean and water courses is inhibited.

13. DISPOSAL CONSIDERATIONS :

Controlled incineration or landfill according to local, state or national laws and regulations concerning health and pollution. Inadequate incineration may generate toxic gases such as CO and SM.

14. TRANSPORT INFORMATION :

Not classified as dangerous or hazardous for transporting.

IMO/IMDG Classification : Not controlled under IMDG.

International regulation : Not applicable.

The United Nations No. : Not applicable.

15. REGULATORY INFORMATION :

1.Occupational Safety and Health Action. (Taiwan)

2.Standards of Permissible Exposure Limits of Airborne Hazardous Substances in Workplace (Taiwan)

3.Criteria Governing Methods of and Facilities for Storage, Clearance and Treatment of Industrial Wastes (Taiwan)

All disposal methods must be in compliance with every local government and local laws and regulations.

Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

16. OTHER INFORMATION :

Tabulation : Taita Chemical Company, Limited. R & D Dept.

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