SAFETY DATA SHEET

DATE ISSUED: 2004/11/03   DATE REVISED: 2020/01/10   REV. No.: No.010

1. PRODUCT INFORMATION:

PRODUCT GRADE: GPPS-861 N/ B/O/F, GPPS-866 N/B/NM/BM, GPPS-808, GPPS-818
GPPS-818K / L, GPPS-751S

SUPPLIER: TAITA CHEMICAL CO. LTD., / KAHOHIUNG BRANCH
No. 3, Jianji St. Qianzhen District, Kaohsiung City 80672, Taiwan

TRADE NAME: TAITAREX GPPS

CHEMICAL NAME: Styrene Homopolymer.

SYNONYMS: GPPS (General Purpose Polystyrene)

USED FOR: Single or mixture used for the production of injection and extrusion

2. HAZARD IDENTIFICATION:

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

Most Important Hazards: None

Adverse Human Health Effects: None

Environmental Effects: None

Physical and Chemical Hazards: None

3. COMPOSITION/INFORMATION ON INGREDIENTS:

Substance or Preparation: Substance
Content: >97% (Additives <= 3%)
Formula: \((C_8H_8)_m\)
CAS NO.: 9003-53-6

Impurities Contributing to Hazards: None

4. FIRST AID MEASURES:

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

PERSONAL PROTECTION :
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 handing 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:

- **Appearance**: Transparent (colourless)
- **Melting Temperature**: Softening above 90°C
- **Solubility**: Insoluble in water.
- **Specific Gravity**: 1.03 ~ 1.10

10. STABILITY AND REACTIVITY:

- **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 / m³
  - Minimum ignition energy: 40 mJ
  - Maximum explosion pressure: 5.3x10⁵ Pa
  - Maximum pressure increase rate: 3.4x10⁶ Pa/S

- **Thermal Decomposition Gases**: CO, CO₂, SM and SM dimer
- **Combustion Energy**: 4.16x10⁷ J / kg (9930 Kcal / kg)

11. TOXICOLOGICAL INFORMATION:

- **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:

ADR/RID

14.1 UN number
   Not applicable

14.2 UN proper shipping name
   Proper Shipping Name: NOT REGULATED

14.3 Transport hazard class(es)
   Not applicable

14.4 Packing Group
   Not applicable

14.5 Environmental hazards
   Not considered environmentally hazardous based on available data

14.6 Special precautions for user
   Special Provisions: no data available
   Hazard identification No: no data available

ADNR / ADN

14.1 UN number
   Not applicable

14.2 UN proper shipping name
   Proper Shipping Name: NOT REGULATED

14.3 Transport hazard class(es)
   Not applicable

14.4 Packing Group
   Not applicable

14.5 Environmental hazards
   Not considered environmentally hazardous based on available data

14.6 Special precautions for user
   no data available

IMDG

14.1 UN number
   Not applicable

14.2 UN proper shipping name
   Proper Shipping Name: NOT REGULATED
14.3 Transport hazard class(es)
   Not applicable

14.4 Packing Group
   Not applicable

14.5 Environmental hazards
   Not considered environmentally hazardous based on available data

14.6 Special precautions for user
   Not applicable

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
   Not applicable

ICAO/IATA

14.1 UN number
   Not applicable

14.2 UN proper shipping name Proper Shipping Name:
   NOT REGULATED

14.3 Transport hazard class(es)
   Not applicable

14.4 Packing Group
   Not applicable

14.5 Environmental hazards
   Not considered environmentally hazardous based on available data

14.6 Special precautions for user
   No data available

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 :

   Addresses : No. 3, Jianji St. Qianzhen District, Kaohsiung City 80672, Taiwan
Tel : (886)-7-810-0866
Fax : (886)-7-811-2150