

# GPPC CHEMICAL CO., LTD.

## Safety Data sheet

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### 1. Product & Manufacturer's Information

|               |  |
|---------------|--|
| Product Name  | HIPS Plastic: PS-302, PS-350,PS-350K,PS-350HF,PS-350S                |
| Manufacturer  | GPPC Chemical Co., Ltd.  |
| Address       | No. 66, Chang-Hsin Road, Lu-Chu District, Kaohsiung , Taiwan, R.O.C. |
| Emergency TEL | 886-696-7135, Customer Service: 886-2-8770-4567 ext. 297             |
| Emergency FAX | 886-696-1748, Customer Service: 886-2-2545-8760                      |

### 2.Hazards Identification

|                  |  |
|------------------|--|
| Usage Overview   | This product is a kind of general and popular plastic.<br>And HIPS plastic is known to serve widely as housings/parts of electronics/household appliances after processed.<br>In proper use, it is not expected to present any unusual hazard. |
| Hazardous Effect | no special hazardous effect to health and environment  |

### 3. Material Identification & Ingredients

|                  |  |
|------------------|--|
| HIPS Plastic     | High Impact Polystyrene Plastic<br>(Styrene-Butadiene Copolymer) |
| CAS Registry No. | 9003-55-8  |
| Chemical Formula | $(C_8H_8)_m-(C_4H_6)_n$  |
| Content          | > 96%  |
| Others           | Lubricants and Antioxidants (less than 4%)                       |

### 4.First Aid Measures

|              |  |
|--------------|--|
| Eye Contact  | Flush eyes thoroughly with running water immediately. Seek medical advice if discomfort persists.  |
| Skin Contact | No emergency care anticipated. Wash skin with soap and water immediately. Remove contaminated clothing..   |
| Ingestion    | and seek medical advice.   |
| Inhalation   | In case of breathing, obtain medical attention.<br>If not breathing, give artificial respiration.<br>In case of inhaling dense smoke, move the person to fresh air immediately. If necessary, apply artificial respiration and seek medical attention immediately. |

### 5.Fire & Explosion Hazard Data

|                                  |   |
|----------------------------------|---|
| Flammability                     | UL 94 HB (1/16") (File No. 115332)  |
| TLV                              | Not available   |
| Extinguishing Media              | water and extinguish media  |
| Special Fire Fighting Procedure  | Cool it with water spray. In closed warehouse, provide fire fighter with self-contained breathing apparatus in positive mode. |
| Usual Fire and Explosion Hazards | Irritating gases and dense smoke  |

### 6.Spill & Leak Procedures

|                     |   |
|---------------------|---|
| Personal Precaution | If gas and/or mist is generated by heating, spraying and etc., wear an organic vapor respirator with a mist filter. |
|---------------------|---|

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|             |   |
|-------------|---|
| Environment | Reuse or transfer such concerned product to approved disposal areas. Observe all federal, state or local regulation upon disposition. |
| Cleaning    | Sweep, use vacuum cleaner or shovel into intact packaging for reuse or waste disposal.  |

### 7. Handling & Storage

|                     |   |
|---------------------|---|
| Handling Precaution | Keep packing sacks (at 25 kg or 1 m.t.) tightly closed to prevent contamination. Avoid dust formation.  |
| Storage Precaution  | Store in a dry place. Keep out of strong sunlight. Keep away from fire, flame and strong oxidizing agent. Avoid packing sacks from getting wet. |

### 8. Exposure Controls & Personal Protection

|                        |   |
|------------------------|---|
| Respiratory Protection | chemical protect respirator   |
| Hand Protection        | protective gloves   |
| Eye Protection         | safety goggles  |
| Skin Protection        | Wear protective clothing such as long sleeves to minimize skin contact. |

### 9. Physical & Chemical properties

|                             |   |
|-----------------------------|---|
| Appearance                  | white and opaque pellet                                   |
| Physical State              | solid, cylindrical pellet at 3 mm x 3 mm diameter         |
| Color                       | white   |
| Odor                        | None  |
| Specific Gravity            | 1.04 (water=1)  |
| Solubility                  | None (in water)   |
| Flash Point                 | 350°C   |
| Combustion Temp.            | 490°C   |
| Solubility in water         | insoluble   |
| Solubility in other solvent | soluble in THF, DMF, acetone and other analogous solvents |

### 10. Reactivity Data

|                         |  |
|-------------------------|--|
| Stability               | stable under normal condition                  |
| Storage Condition       | Avoid fire and heat.                           |
| Incompatibility         | normally unreactive                            |
| Hazardous Decomposition | Not applicable                                 |
| Combustion Heat         | 4.16 x 10 <sup>7</sup> J/kg (or 9930 Kcal/kg)  |
| Combustion Product      | Burning can produce oxides of carbon and soot. |

### 11. Toxicological Information

|                 |  |
|-----------------|--|
| Swallowing      | Treat symptomatically. May induce vomiting. It is not expected to be toxic by ingestion. |
| Skin Absorption | unlikely due to physical property  |
| Inhalation      | unlikely due to physical state   |
| Skin Contact    | Essentially nonirritating to skin but mechanical injury.                                 |
| Eye Contact     | Solid or dust may cause irritating or injury due to mechanical action.                   |

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### 12. Ecological Information

|             |  |
|-------------|--|
| General     | This product is very stable in water, and can be mechanically separated from water. Moreover, such HIPS plastic can be also easily separated from stone and soil.  |
| Restriction | Do not dispose this product to river, lake, sea and etc.. Because HIPS plastic's density is higher than water and seawater's. Therefore, sea creatures, birds, land animals may not eat such indigestive material. |

### 13. Disposal Considerations

|          |  |
|----------|--|
| General  | The best way to treat such HIPS plastic could be easily reused/regenerated/recycled because of its thermoplastic property. Dispose should not be the proper way if the above ways are available. |
| Disposal | Incineration is probably the proper way of disposal. Landfilling is a kind of disposal way.  |
| Caution  | Insufficient combustion may cause some toxic gas such as styrene monomer and/or carbon monoxide.   |

### 14. Transportaion Information

|                     |  |
|---------------------|--|
| DOT Classification  | This product is not regulated by DOT.  |
| IMDG Classification | This product is not regulated by INDG. |
| ICAO Classification | This product is not regulated by ICAO. |

### 15. Regulatory Information

|  |      |
|--|------|
| Superfund Amendments and Reauthorization Act of 1986 Title III | None |
| EPA Hazard Categories (SARA 311, 312)                          | None |

### 16. Other Information

|                |   |
|----------------|---|
| General        | This product should be handled, stored and used in accordance with the generally accepted industrial hygiene practices and in conformity with all the applicable legal regulations. What such information provided herein is based on the knowledge possessed at this present time. It should not be constructed as guaranteeing specific property. |
| Website        | Some other information may be consulted from the website -- <a href="http://www.gppc.com.tw">www.gppc.com.tw</a>  |
| E-mail Address | Some representative may be contacted by E-mail -- <a href="mailto:su210@gppc.com.tw">su210@gppc.com.tw</a> ; <a href="mailto:laura@gppc.com.tw">laura@gppc.com.tw</a>   |

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