



FORMOSA CHEMICALS INDUSTRIES (NINGBO) LIMITED COMPANY  
 FPG Ningbo Industrial Park Beilun Ningbo, China

**MATERIAL SAFETY DATA SHEET**

Product name: GENERAL PURPOSE POLYSTYRENE (GPPS)  
 Grade name: TAIRIREX GP5000 , GP5250 , GP525P , GP5350 , GP535A , GP535N ,  
 GP535P , GP535H , GP5500 , GP550N , GP550 , GP560 , GP560N , GP570 and other  
 grades  
 Freight classification: Plastics  
 Used for: Injection and Extrusion  
 Dated Prepared: Aug 20, 2009  
 Dated Revised: Oct 15, 2018

**1. COMPANY IDENTIFICATION**

Manufacturer (Company)

Name: FORMOSA CHEMICALS INDUSTRIES (NINGBO) LIMITED COMPANY  
 Address: FPG Ningbo Industrial Park Beilun Ningbo, China  
 Telephone Number: 86-574-86902999 Ext. 2812115  
 Facsimile Number: 86-574-86902980  
 Emergency Phone: 86-574-86902999 Ext. 2816

**2. COMPOSITION/INFORMATION ON INGREDIENTS :**

Composition	CAS NO.	Content
Styrene copolymer	9003-53-8	98.5~100%
ADD	/	≤1.5%
Residual styrene monomer	00100-42-5	≤0.08%

**3. HEALTH HAZARD INFORMATION :**

Health Hazard Composition : This product is not expected to be a hazard.  
 However, the residual monomer styrene in IARC list is a 2B-class  
 specification: probably carcinogenic.

Emergency Overview : Milky off-white solid. No significant immediate  
 hazards for emergency response are known. In fire situations toxic fumes  
 will be release slippery, Can cause falls if walked on.

Potential Health Effect :

Eyes contact : Solid or dust may cause irritation or corneal injury due  
 to mechanical action.

Skin contact : Essentially nonirritating to skin.



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Ingestion : Essentially no hazards anticipated from swallowing small amounts incidental to normal handling operations. Single dose oral toxicity is considered to be extremely low.

Inhalation : Dust may cause irritation to upper respiratory tract.

#### 4. FIRST AID MEASURES :

Eyes : Flush eyes with plenty of clean water.

Skin : No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

Ingestion : No adverse effects anticipated by this route of exposure incidental to proper industrial handling.

Inhalation : Remove to fresh air if effects occur. If still feel malaise consult a physician.

First-aid Personnel Equipment : Wear an approved dust respirator and chemical goggles.

Note to Physician : No specific antidote supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

#### 5. FIRE AND EXPLOSION HAZARD DATA :

Flammable Properties :

Flash point : none.

Auto-ignition temperatures : Not applicable.

Flammability Limits :

LFL : Not applicable.

ULF : Not applicable.

Extinguishing Media : Dry chemical, Carbon dioxide, foam and water fog.

Hazardous Combustion Products : Under fire conditions polymers decompose.

The smoke may contain polymer fragments of varying compositions in additions to unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to: carbon dioxide and carbon monoxide. Hazardous combustion products may include trace amounts of styrene.

Dense smoke emitted when burned without sufficient



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oxygen. Mechanical handling can cause formation of dusts. To reduce the potential for dust explosion, do not permit dust to accumulate.

Fire-fighting Equipment : Wear protective fire-fighting clothing, includes fire-fighting helmet, coat, pants, boots and gloves. If there is not enough fresh air in such surroundings, wear positive-pressure self-contained breathing apparatus (SCBA). If protective clothing is not available or not used, fight fire from a protected location or safe distance.

#### 6. ACCIDENTAL RELEASE MEASURES :

Protect People : Pellets may present a slipping hazard.

Protect the Environment : Keep out of irrigation ditches, sewer and water supplies. Spills should be collected to prevent contamination of waterways.

Cleanup : Sweep up and can be reuse after separate impurity.

#### 7. HANDLING AND STORAGE :

Handling : Good housekeeping and controlling dusts are necessary for safe handling of product. Workers should be protected from possibility of contact with molten resin during treatment.

Storage : Store in a dry place. Avoid exposure to high temperature or under flame.

#### 8. EXPOUSURE CONTROLS/PERSONAL PROTECTION :

Engineering Controls : Good general ventilation should be sufficient for most conditions. If overhead occurs during processing, exhaust ventilation should be provided.

Exposure Guidelines : None established.

Personal Protective Equipment :

Respiratory Protection : In dust atmospheres, use an approved dust respirator.

Skin Protection : Clean body-covering clothing should be needed.

Eyes : If there is a potential for exposure to particles which could cause



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mechanical injury to the eyes, wear chemical goggles.

#### 9. PHYSICAL AND CHEMICAL PROPERTIES :

Physical State : Solid.

Appearance : Pellet.

Color : Transparent or light blue.

Odor : Odorless.

Heat Deflection Temperature : 80~100°C

Specific Gravity : 1.02~1.08 (water = 1)

Decomposition Temperature : Over 400°C

Solubility in Water : Not soluble in water.

Flash Point : Not applicable.

#### 10. STABILITY AND REACTIVITY :

Chemical Stability : Stable.

Hazardous in Special Situation : None known.

Conditions to Avoid : Avoid temperatures above 300°C, because product can decompose at elevated temperatures.

Incompatibility with Other Materials : None known.

Hazardous Decomposition Products : Processing may release fumes which may include polymer fragments and other decomposition products. Fumes can be irritating. At temperatures exceeding melt temperatures, polymer fragments can occur.

#### 11. TOXICOLOGICAL INFORMATION :

Ingestion : Single dose oral LD50 has not been determined.

#### 12. ECOLOGICAL INFORMATION :

Environmental Effect : No bio-concentration is expected. In the terrestrial environment, material is expected to remain in the soil. In the aquatic environment, material will sink and remain in the sediment.

Degradation & Persistence : This water insoluble polymeric solid is expected to be inert in the environment.

Surface degradation is expected with exposure



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to sunlight. No appreciable biodegradation is expected.

Eco-toxicity : Not expected to be acutely toxic.

### 13. DISPOSAL CONSIDERATIONS :

Disposal : Do not dump into any sewers, on the ground, or into any body of water. 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.

For Unused & Uncontaminated Product : The preferred options include sending to a licensed, permitted, recycler, re-claimer, incinerator or other thermal destruction device.

### 14. TRANSPORT INFORMATIONS :

Not classified as dangerous or hazardous for transporting.

### 15. REGULATORY INFORMATIONS :

Regulations on the safety management of hazardous chemicals (revised and promulgated by the state council on February 16, 2011), regulations on the safe use of chemicals in the workplace ([1996] department of labor issued no. 423), and other regulations have made corresponding provisions on the safe use, production, storage, transportation, loading and unloading of hazardous chemicals.

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### 16. OTHER INFORMATIONS :

None Emergency Telephone No. : (+86)57486262999ext. 2115

Tabulation : Formosa Chemicals Industries (Ningbo) limited company , PABS Div, QC Dept.

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