

## SAFETY DATA SHEET

Product name: GENERAL PURPOSE POLYSTYRENE (GPPS)  
Grade name: TAIREX GP5000, GP5250, GP525N, GP5350, GP535A, GP5500, GP550N  
and other grades  
Freight classification: Plastics, Clearness solid  
Used for: Injection and Extrusion  
Dated Prepared: June 10, 1996  
Dated Revised: Jan. 10, 2009  
SPR Item No: GJO30400, GJO30401, GJO30402, GJO30403, GJO30404, GJO30405,  
GJO30406, GJO58926

### 1. COMPANY IDENTIFICATION

#### Manufacturer (Company)

Name: FORMOSA CHEMICALS & FIBRE CORPORATION.  
Address: 201, TUNG HWA N.R., TAIPEI, TAIWAN, R.O.C.  
Department: Plastics Division  
Telephone Number: +886-2-2712-2211 Ext.5493  
Facsimile Number: +886-2-2718-0358  
Emergency Phone: +886-0800-211506

### 2. HEALTH HAZARD INFORMATION

#### GHS Classification:

This product is not hazardous under the criteria of U.S. Occupational Safety and Health Standard 29 CFR 1910 Subpart Z and United Nations GHS Parts 2, 3, and 4.

Health Hazard Composition : Not Applicable

Emergency Overview : Clearness 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.

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.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS :

Chemical Name : Polystyrene  
CAS Registry Number : 09003-53-6  
Approx. Weight Percentage : 100%  
Residual Monomer : Trace.



#### **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-FIGHTING MEASURES**

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 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.

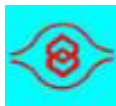
Protect the Environment : Keep out of irrigation ditches, sewer and water supplies. Spills should be collected to prevent contamination of waterways.

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 mechanical injure to the eyes, wear chemical goggles.

## **9.PHYSICAL AND CHEMICAL PROPERIES :**

Physical State : Solid.

Appearance : Pellet.

Color : Clearness.

Odor : Odorless.

Melting Point : 180°C

Specific Gravity : 1.04 (water = 1)

Decomposition Temperature : Over 400°C

Solubility in Water : Not soluble in water.

Flash Point : 350°C

Auto ignition point: Over 400°C

## **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 :**

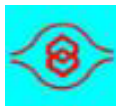
Ingestion : Single dose oral LD50 has not been determined.

## **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 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 INFORMATION :**

Not classified as dangerous or hazardous for transporting.

### **15.REGULATORY INFORMATION :**

Labor Safety and Health Action. (In Taiwan)

Waste Disposal Action. (In Taiwan)

Water Pollution Control Action. (In 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 :**

None Emergency Telephone No. : +886-2-27122211 ext. 5493

Tabulation : Formosa Chemicals & Fibre Corp. Plastics Div. R & D Dept.

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