



BP CHEMICALS

SAFETY DATA SHEET

BP POLYSTYRENE AND RIGILENE GRADES

PS001 1.00 GB Current

96423

1. PRODUCT AND COMPANY IDENTIFICATION	
MSDS Code	PS001
Trade Name	BP POLYSTYRENE AND RIGILENE GRADES
Manufacturer/Supplier	BP Chemicals Ltd
Address	Poplar House, Chertsey Road Sunbury-on-Thames Middlesex TW16 7LL
Phone Number	01932-774321
Fax Number	01932-774374
Emergency Phone Number	01482-896251
2. COMPOSITION/INFORMATION ON THE COMPONENTS	
Product Trivial Name	Polystyrene
Product Formal Name	Polystyrene
Product Chemical Family	polystyrene
CAS Number	Crystal polystyrene: 9003-53-6 Impact polystyrene: 9003-55-8 Impact polystyrene/Polyethylene blends: 9003-55-8 / 25087-34-7 Impact polystyrene/polypropylene blends: 9003-55-8 / 9003-07-0
Information on composition	THIS DATASHEET APPLIES TO PRODUCTS LISTED IN SECTION 16
3. HAZARD IDENTIFICATION	
Main Hazards	Not classified as hazardous. Thermal burns from contact with molten product.
Health Effects - Eyes	Dust may cause slight transient irritation.
Health Effects - Skin	Contact with hot material may cause thermal burns.
Health Effects - Ingestion	Not applicable.
Health Effects - Inhalation	Exposure to dust may have the following effects: irritation of nose, throat and respiratory tract.
4. FIRST AID MEASURES	
First Aid - Eyes	Immediately flood the eye with plenty of water for at least 10 minutes, holding the eye open. Obtain medical attention if pain persists or redness persists.
First Aid - Skin	Wash skin with soap and water. Contaminated clothing should be washed or dry-cleaned before re-use. If burned by contact with hot material, flush skin immediately with large amounts of cold water. No attempt should be made to detach polymer adhering to the skin or to remove clothing attached with molten material. Thermal burns require immediate medical attention.



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4. FIRST AID MEASURES (continued)	
First Aid - Ingestion	Wash out mouth with water. Obtain medical attention.
First Aid - Inhalation	If affected by fumes from heated material, remove from source of exposure and move the affected person into fresh air. Keep warm and at rest. If there is difficulty breathing, give oxygen but only under strict medical supervision. If breathing stops or shows signs of failing, give artificial respiration. Obtain medical attention urgently.
5. FIRE FIGHTING MEASURES	
Extinguishing Media	Use water spray, foam, dry chemical or carbon dioxide.
Protective Equipment for Fire-Fighting	Wear self contained breathing apparatus.
6. ACCIDENTAL RELEASE MEASURES	
Personal Precautions	Granules spilled on the floor can cause slipping. Avoid creating a dust cloud. Wear goggles, gloves and protective mask at high levels of dust.
Spillages	Sweep up into suitable containers for recovery or disposal. Avoid creating a dust.
7. HANDLING AND STORAGE	
Handling	Use local exhaust ventilation if conditions are dusty. When handling in bulk, the possibility of dust explosion should be considered. Mechanical handling equipment must be earthed and provided with explosion venting.
Storage	Storage area should be dry, out of direct sunlight. Pellet spills should be swept up immediately to prevent slipping. The main hazards are related to pallet stock storage and forklift truck manoeuvres, which can cause injury to personnel.
8. EXPOSURE CONTROLS/PERSONAL PROTECTION	
UK Occupational Exposure Standards	Nuisance dust TLV: 10mg/m ³ (ACGIH). Limits for the hazardous decomposition products (see section 10): Carbon monoxide: UK EH40: OES 55mg/m ³ TWA. Carbon dioxide: UK EH40: OES 9000mg/m ³ TWA.
Engineering Control Measures	Use only in well ventilated areas, minimum 6 air changes per hour.
Respiratory Protection	Product processing, or operations above 300°C may produce dust, vapour or fumes.
Hand Protection	Where contact may occur with hot or molten materials, wear heat resistant gloves, arm protection and a face shield. The concentration of additives in PS masterbatches is significantly higher than in compounds and hence their ability to abrade the surface of the pellets is higher. It is recommended that suitable protective gloves are worn when handling PS masterbatches.
Eye Protection	Wear goggles, gloves and protective mask at high levels of dust.



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8. EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)	
Body Protection	Standard work clothes and safety shoes.
9. PHYSICAL AND CHEMICAL PROPERTIES	
Physical State	Solid.
Colour	Opaque.
Odour	Odourless.
pH	Not applicable.
Boiling Range/Point (°C)	Not applicable.
Melting Point (°C)	Melts between 180 and 250.
Flash Point (PMCC) (°C)	Not applicable.
Solubility in Water (kg/m3)	Insoluble.
Vapour Pressure (kPa)	Not applicable.
Density (kg/m3)	1.05
Auto-flammability (°C)	Not applicable.
Viscosity (cSt)	Not applicable.
Pour Point (°C)	Not applicable.
10. STABILITY AND REACTIVITY	
Stability	Stable under normal conditions.
Conditions to Avoid	None under normal conditions.
Materials to Avoid	None under normal conditions.
Hazardous Decomposition Products	Combustion will generate: carbon monoxide. Carbon dioxide.
11. TOXICOLOGICAL INFORMATION	
Acute Toxicity	No evidence of acute toxicity reported.
12. ECOLOGICAL INFORMATION	
Mobility	The product is insoluble in water.
Persistence/Degradability	The product is resistant to biodegradation.
Bio-accumulation	Not applicable.



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12. ECOLOGICAL INFORMATION (continued)	
Ecotoxicity	The material is not toxic.
13. DISPOSAL	
Product Disposal	Can be recycled, incinerated or disposed of in landfill.
Container Disposal	Not applicable.
14. TRANSPORT INFORMATION	
UN Class	Not classified.
ADR/RID - Class	Not classified.
IMDG - Class	Not classified.
IATA - Class	Not classified.
15. REGULATORY INFORMATION	
R phrases	Not classified.
EINECS Listing	Polymer produced from listed monomers with additives.
EC Annex I Classification	Not classified.
16. OTHER INFORMATION	
MSDS first issued	11 December 1998
MSDS data revised	
Footnote	MSDS distribution: The information in this document should be made available to all who may handle the following products: BP POLYSTYRENE AND RIGILENE GRADES. The following are trade marks of the BRITISH PETROLEUM COMPANY plc, are registered in a number of countries and are used with their permission: RIGILENE
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16. OTHER INFORMATION (continued)

application, adaptation or processing of the products described herein, the use of other materials in lieu of BP materials or the use of BP materials in conjunction with such other materials.

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MATERIAL SAFETY DATA

1. General Information

Product Trade Name	ASTOR UNIVERSAL Foil - Grade - 350
Product Type	Gloss Pigment Foil Development Products
Composition	Polyester Carrier
Pigments	} 10-5%
Polymeric Resins	

2. Hazardous Ingredients

NOT APPLICABLE

3. Physical Data

Specific Gravity ($H_2O = 1$)	1.4	Vapour Density (Air = 1)	NOT APPLICABLE
Melting Point ($^{\circ}C$)	260	Vapour Pressure (mm Hg)	NOT APPLICABLE
Boiling Point ($^{\circ}C$)	N/A	Percent Volatile	NIL
Solubility in Water	INSOLUBLE	Evaporation Rate	NOT APPLICABLE
Appearance & Odour	Coloured Polymeric Coatings On Clear Polyester Film, Odourless		

4. Fire and Explosion Hazard Data

Flash Point	No Flash Point
Extinguishing Media	Foam, Extinguishing Powder, Carbon Dioxide, Water
Special Firefighting Procedures	Self Contained Breathing Apparatus Should be Used
Unusual Fire & Explosion Hazards	None Known

CONTINUED OVER

The data set forth on this sheet are based on information provided by the suppliers of the raw materials and chemicals used in the manufacture of the above mentioned products. ASTOR UNIVERSAL makes no warranty with respect to the accuracy of the information provided by their suppliers and disclaims all liability of reliance there of.

5. Health Hazard Data

Ingestion NONE KNOWN

Inhalation NOT APPLICABLE

Skin NONE KNOWN

Eyes MINOR PHYSICAL IRRITATION

First Aid Procedures	EYES	-	Rinse With Water To Wash Away Material
	SKIN	-	Wash With Soap And Water
	INGESTION	-	Drink Quantities Of Water

6. Reactivity Data

Material Stability Stable

Conditions/Materials To Avoid None Known

Hazardous Decomposition Products Carbon Oxides, Hydrogen Chloride, Acrylate Monomer (Hydrogen Sulphide, Depending On Shade)

7. Spill Or Leak Procedures

Steps To Be Taken If Material Is Released Or Spilled Rolls Of Foil Can Present A Trip Hazard And Should Be Tipped Away To Avoid Accidental Falls

Waste Disposal Method Dispose Waste Material To Landfill Sites According To Local Regulations. In The UK The Waste Is Not Notifiable

8. Special Protection Information

Respiratory Protection (Specify Type) In The Event Of Airborne Particles Being Present, Use A Nuisance Dust Mask

Ventilation Normal Industrial Conditions

Protective Gloves Not Required. Other Protective Equipment

Eye protection Not Required

9. Special Precautions

Precautions To Be Taken In Handling and Storage Store Away From Excessive Heat Or Open Flame

Other Precautions

Prepared By: I P Bennett Ref. No. 444/1

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