

Material Safety Data Sheet (MSDS)

code:

Date: Jan /23/1997

CAS. NO.	DOT. NO. (UN/NA, Guide No.)	Identity(Trade Name As Used On Label)
	-----	FR-ABS(Flame Retardant Resin)(Grades:D-1000,D-1000S,D-1200,D-1700)

Manufacture: Grand Pacific Petrochemical Corporation
Address: 11 FL, No.3 Sung Shou Road, TAIPEI, TAIWAN, R.O.C
Phone Number(For Information): 886-2-3458998 ext 297
Emergency Phone Number: 886-7-3513911 (24Hr)

SECTION 1-MATERIAL IDENTIFICATION AND INFORMATION

Components	ACRYLONITRILE, BUTADIENE, STYRENE, Organically Halogenated Flame Restardent, Antimony Oxide OTHER ADDITIVES
Chemical Name	ACRYLONITRILE-BUTADIENE-STYRENE COPOLYMERS
Common Name	FR-ABS Resin
Chemical Formula	$(C_3H_3N)_x-(C_4H_6)_y-(C_8H_8)_z.HOBr_2Ph-C_3H_6-PhBr_2OH, -(C_2H_3Cl)_n, Br_2Ph-o-PhBr_y, x+y+z=8, Sb_2O_3$

SECTION 2-PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: NA (because such FR-ABS resins serve in solid type)	Specific Gravity(H ₂ O=1): 1.20
Vapor Pressure: NA (because such FR-ABS resins serve in solid type)	Melting Point: NA (because of FR-ABS resin is Amorphous type)
Vapor Density: NA (because such FR-ABS resins serve in solid type)	Water Reactive: Non-Reactivity in water
Solubility(in water): insoluble in water	
Appearance and Odor: Free of Odor or Slightly	

SECTION 3-FIRE AND EXPLOSION HAZARD DATA

Flash Point(°C): NA	Auto-Ignition Temperature: NA	LEL: ----	UEL: ----	
Extinguisher Media: Any Type				
Unusual Fire and Explosion Hazards: No				

SECTION 4-HEALTH HAZARD DATA

Primary Routes of Entry	<input type="checkbox"/> Inhalation	<input type="checkbox"/> Ingestion	<input type="checkbox"/> Skin Absorption	√ Not Hazardous
Health hazards : Not likely to be inhaled due to physical form				
Medical Conditions Generally Aggravated by Exposure				
Sign and Symptoms of Exposure				

SECTION 5-REACTIVITY HAZARD DATA

Stability <input checked="" type="checkbox"/> Stable <input type="checkbox"/> Unstable	Hazardous Polymerization <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur
Conditions To Avoid: It will be decomposed at high temperature (>180 °C)	
Incompatibility (Materials to Avoid): Peroxide	
Hazardous Decomposition Products: Sb ₂ O ₃	

SECTION 6- CONTROL AND PROTECTIVE MEASURES

Respiratory Protection: Avoid High Temperature (example >500 °C)	
Protective Gloves: ND	Eye Protection: Avoid such powder to get in
Ventilation To Be Used <input type="checkbox"/> Local Exhaust	Other (Special) ~
Other Protective Clothing and Equipment: no need	
Hygienic Work practices: no need	

SECTION 7-PRECAUTIONS FOR SAFE HANDING AND USE /LEAK PROCEDURES

Steps to be Taken If Material Is Spilled Or Released: Discard It
Waste Disposal Methods: Send to Furnaces or Landfill or incinerate in accordance with federal, state and local requirements
Precautions to be Taken in Handling and Storage: Avoid High Temperature and Peroxide Chemicals
Other Precautions and/or Special Hazards: Please store in a dry and cool place away from excessive heat and sources of ignition.