



SAFETY DATA SHEET

Product:

FR Acrylonitrile-Butadiene-Styrene Copolymer
Version: 1.3

Page: 1 / 7

Date: 01/01/2018

1. PRODUCT AND COMPANY IDENTIFICATION

PHONE NUMBERS

Emergency Medical (24 HOUR)	886-7-3513911
Emergency Transportation / CHEMTREC (24 HOUR)	886-7-3513911
Other Emergency Information (24 HOUR)	886-7-3513911
Non-Emergency Information	886-7-3513911

PRODUCT IDENTIFICATION

PRODUCT IDENTIFIER : FR Acrylonitrile-Butadiene-Styrene Copolymer

PRODUCT NAME : D1000S/D1000A/D1000

PRODUCT USE : May be used to produce molded or extruded articles or as a component of other industrial products.

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

- Fine particle powder with slight or no odor.
- Spilled material may create slipping hazard.
- Can burn in a fire creating dense toxic smoke.
- Molten plastic can cause severe thermal burns.
- Fumes produced during melt processing may cause eye, skin, and respiratory tract irritation. Severe over-exposure may result in nausea, headache, chills, and fever.
- Secondary operations, such as grinding, sanding, or sawing can produce dust which may present an explosion or respiratory hazard.

HMIS Ratings : Health = 0; Flammability = 1; Reactivity-0, PPE-B

POTENTIAL HEALTH EFFECTS

INGESTION : No hazard in normal industrial use.

SKIN ABSORPTION : No absorption hazard in normal industrial use.

EYE CONTACT : Can cause mechanical irritation if dusts are generated.

SKIN CONTACT : May cause skin irritation.

CHRONIC/CARCINOGENICITY

NTP : Not Tested.



SAFETY DATA SHEET

Product:

FR Acrylonitrile-Butadiene-Styrene Copolymer
Version: 1.3

Page: 2 / 7

Date: 01/01/2018

OSHA : Not Regulated.

IARC : Not Listed.

MEDICAL RESTRICTIONS : There are no known human health effects aggravated by exposure to this product. However, certain sensitive individuals and individuals with respiratory impairments may be affected by exposure to components in the processing vapors.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components listed below are physical or health hazards as defined in the Hazard Communication Standard. The quantities represent typical or average values for the materials shown. Additional compositional data are provided in Section 15. REGULATORY INFORMATION, subject to supplier notification requirements.

<u>Component Name</u>	<u>%</u>	<u>CAS Number</u>	<u>ACGIH TWA</u>
Acrylonitrile-Butadiene-Styrene Copolymer	> 65	9003-56-9	None
Tetrabromobisphenol A	< 20	79-94-7	
Antimony oxide	< 7	1309-64-4	
Typical Lubricants	0-5		
Typical Antioxidants	0-3		

4. FIRST AID MEASURES

EYES : case of pellets or powder, flush with plenty of water for at least 15 minutes. Seek medical advice if any dust particles still remain. In case of gases evolving from melted resin of high temperature, flush with plenty of water for at least 15 minutes. Seek medical advice if necessary..

SKIN : In case of pellets or powder, wash with water. In case of melt, wash affected skin area and clothing with plenty of (soap and) water. Seek medical advice.

INGESTION : In case of gases evolving from melted resin, move subject to fresh air. Treat symptomatically.

5. FIRE FIGHTING MEASURES

FIRE FLGHTING : Do not enter fire area without proper protection including self contained breathing apparatus and full protective equipment. Fight fire from a safe



SAFETY DATA SHEET

Product:

FR Acrylonitrile-Butadiene-Styrene Copolymer
Version: 1.3

Page: 3 / 7

Date: 01/01/2018

distance and a protected location due to the potential of hazardous vapors and decomposition products.

EXTINGUISHING MEDIA : Water spray and foam. Carbon dioxide and dry chemical arc not recommended because their lack of cooling capacity may permit re ignition.

HAZARDOUS COMBUSTION PRODUCTS : Intense heat, smoke, carbon dioxide, carbon monoxide, hydrocarbon fragments.

CONDITIONS OF FLAMMABILITY : Requires a continuous flame source to ignite.

6. ACCIDENTAL RELEASE MEASURES

GENERAL : No special spill clean-up considerations. Collect and discard in regular trash.

Warning! Avoid the generation of dusts during clean-up. Allow molten material to solidify before disposal.

7. HANDLING AND STORAGE

HANDLING : No special handling instructions due to toxicity.

STORAGE : store between 5~55°C. Keep covered when not use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS : A continuous supply of fresh air to the workplace together with removal of processing fumes through exhaust systems is recommended. Processing fumes condensate may be a fire hazard and toxic; remove periodically from exhaust hoods, duct work, and other surfaces using appropriate personal protection. Local ventilation requirements must be determined to limit exposure to processing fumes in the workplace.

PERSONAL PROTECTION

EYE/FACE : Wear safety glasses with side shields or chemical goggles. In addition, use full face shield when cleaning processing fume condensates from hoods, ducts, and other surfaces.

SKIN : When handling pellets or powder, avoid prolonged or repeated contact with skin. Wear long pants, long sleeves, well insulated gloves, and a face shield during melt processing.



SAFETY DATA SHEET

Product:

FR Acrylonitrile-Butadiene-Styrene Copolymer
Version: 1.3

Page: 4 / 7

Date: 01/01/2018

Appropriate clothing-including chemical resistant gloves-should be worn to prevent contact with processing fumes condensate.

RESPIRATORY : When using this product at elevated temperatures, implement engineering systems, administrative controls, or a respiratory protection program (including a respirator approved for protection from organic vapors, acid gases, and particulate matter) if processing fumes are not adequately controlled or operators experience symptoms of overexposure. If dust or powder are produced from secondary operations such as sawing or grinding, use a respirator approved for protection from dust.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM : Granules

ODOR : odorless

BOILING POINT : Not applicable

FLASH POINT : 402°C

SPECIFIC GRAVITY : 1.145~1.200

LOWER EXPLOSION LIMIT : 45 g/m³

SOLUBILITY IN WATER : Insoluble in water

AUTO-IGNITION TEMPERATURE : 466 °C

pH : Not applicable

VAPOR PRESSURE : None

VAPOR DENSITY : None

10. STABILITY AND REACTIVITY

STABILITY : Stable

REACTIVITY : Net reactive under recommended conditions of handling, storage, processing and use.

CONDITIONS TO AVOID : Non-reactive.

11. TOXICOLOGICAL INFORMATION

ACUTE HEALTH HAZARDS



SAFETY DATA SHEET

Product:

FR Acrylonitrile-Butadiene-Styrene Copolymer
Version: 1.3

Page: 5 / 7

Date: 01/01/2018

EYE CONTACT : Product not considered primary eye irritant. When similar products, in finely divided form, were placed into the eyes of rabbits, slight transient redness or discharge occurred. This is consistent with the expected slightly abrasive nature of the resin particles.

SKIN CONTACT : Product not considered primary skin irritant.

SUBCHRONIC HEALTH HAZARDS

SUBCHRONIC TOXICITY : No data available.

CHRONIC HEALTH HAZARDS

CARCINOGENIC

NTP : Not Tested.

OSHA : Not Regulated.

LARC : Not Listed.

12. ECOLOGICAL INFORMATION

GENERAL : This material is not expected to be harmful to the ecology.

13. DISPOSAL INFORMATION

WASTE DISPOSAL : Recycling is encouraged. Landfill or incinerate in accordance with federal, state and local requirements. Collected processing fumes condensates and incinerator ash should be tested to determine waste classification.

POSSTBLEEPA WASTE CODES : No data.

14. TRANSPORTATION INFORMATION

REGULATORY STATUS : Not Regulated.

15. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT(TSCA) : This product is in compliance with all rules and orders of TSCA.

WHMIS PRODUCT CLASSIFICATION : Not a controlled product.

16. OTHER INFORMATION

Prepared by : Product Stewardship



SAFETY DATA SHEET

Product:

FR Acrylonitrile-Butadiene-Styrene Copolymer
Version: 1.3

Page: 6 / 7

Date: 01/01/2018

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ABBREVIATIONS :

ACGIH : American Conference of Governmental Industrial Hygienists

CAS : Chemical Abstracts Service

CFR : Code of Federal Regulations

CPR : Cardiopulmonary Resuscitation

EPA : Environmental Protection Agency

HMIS : Hazardous Material Identification System (National Paint and Coatings Association)

IARC : International Agency for Research on Cancer

NTP : National Toxicology Program

PPE : Personal Protective Equipment

TLV : Threshold Limit Value



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GRAND PACIFIC PETROCHEMICAL CORPORATION

SAFETY DATA SHEET

Product:

FR Acrylonitrile-Butadiene-Styrene Copolymer
Version: 1.3

Page: 7 / 7

Date: 01/01/2018

TSCA : Toxic Substance Control Act

WHMIS : Workplace Hazardous Materials Information System (Canada)