

# **Product Data Sheet**

EnviroFluff® Product Data Sheet rev 092922

## **Product Description:**

EnviroFluff® is a thermoplastic foam which is produced in sheet form then granulated into shredded particles ranging in size from .05 mm to 10 mm. EnviroFluff® has been designed to have a high resistance to environmental degradation and most chemicals. When mixed with a polyurethane binder it produces a cushioned layer for use in playground safety surfaces and passes ASTM F1292-18 Impact Attenuations without the harmful effects to children and the environment as do the current SBR cushions used today. EnviroFluff®, with its patented design, can also be used as the first and only safety surface in water play due to its high resistance to chlorinated water.

#### **Physical Properties:**

- 1. Elongation: 400% 600%
- 2. Tensile Strength 700-2500 psi
- 3. Hardness Shore A 30 85 Shore A
- 4. Bond Strength to Urethane 425 psi
- 5. Flammability Self Extinguishing
- 6. Impact Resistance Passes all impact attenuations.

#### **Mechanical Properties:**

- 1. Compression Set Excellent
- 2. Rebound Rating Good to excellent
- 3. Flexible, Crack Resistance Good
- 4. Shrinkage Resistance Excellent
- 5. Abrasion Resistance Good
- 6. Tear Resistance Good to excellent
- 7. Impact Resistance Excellent
- 8. Flame Resistance Poor

## **Chemical Resistance:**

- 1. Acetone Fair to good
- 2. Animal Fats Good
- 3. Chlorine Excellent
- 4. Fuel Oil Fair to good
- 5. Gasoline Fair
- 6. Mineral Spirits Good
- 7. Naphtha Good

## **Technical Properties:**

- 1. Particle size .05 mm 10 mm
- 2. Composition Thermoplastic Foam
- 3. Mixing Ratio by Volume:
  - Dry Play: 22 lbs. to (2) Two Quarts Aromatic Urethane
  - Water Play: 22 lbs. to 1 gallon of Flecks Aliphatic Binder
- 4. Spread Rate 1 lb. at 1 sq. ft. per 1 inch
- 5. Toxicity Non-toxic; no harmful ingredients

#### **Environmental Resistance:**

- 1. Recommended Shelf Life Over 10 years
- 2. Weather Resistance Good to excellent
- 3. U.V. Resistance/Light Stability Good
- 4. Ozone Resistance Good
- 5. Oxidization Resistance Good to excellent
- 6. Water Resistance Good to excellent
- 7. Radiation Resistance Good

## **Chemical Resistance:**

- 8. Salt Water Excellent
- 9. Sodium Hydroxide Excellent
- 10. Vegetable Oils Good to excellent
- 11. Nitric Acid Not Recommended
- 12. Sulfuric Acid Not Recommended
- 13. Hydrochloride Acid Not Recommended
- 14. Solvent Resistance Fair to Good