## SAYTEX® BT-93 Flame Retardant

### **DESCRIPTION**

ethylenebistetrabromophthalimide

SAYTEX® BT-93 flame retardant is a unique additive that combines stable, aromatic bromine with an imide structure.

### **APPLICATIONS**

SAYTEX® BT-93 flame retardant provides premium performance in a wide range of applications. It finds use in polyolefins, high-impact polystyrene (HIPS), thermoplastic polyesters (PBT, PET,etc.), polycarbonate and elastomers.

Additional information on the use of SAYTEX® BT-93 flame retardant may be found in the following technical bulletins produced by Albemarle:

- UV-Stable High-Impact Polystyrene Based on SAYTEX® BT-93 flame retardant
- Flame Retardants High-Impact Polystyrene
- Flame Retarding Elastomers
- Introduction to Flame Retarding Polyolefins

## **BENEFITS AND FEATURES**

SAYTEX® BT-93 flame retardant has outstanding thermal and UV stability. It is the flame retardant of choice in high-impact polystyrene (HIPS) formulations where the highest degree of UV stability is required. Its thermal stability allows use in engineering resins like polyesters and polyamindes. SAYTEX® BT-93 flame retardant is also non-blooming. This feature allows use in such critical applications as polyolefin films where good heat sealability is required. Its excellent wet electrical properties also make it ideal for wire and cable applications.

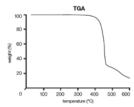
## **TYPICAL PROPERTIES\***

| % Bromine (theoretical)                                | 67.2                 |
|--|----------------------|
| Melt range (°C)  | 456                  |
| Molecular weight                                       | 951.5                |
| Appearance/form  | light yellow /powder |
| Specific gravity                                       | 2.77                 |
| Dielectric constant (1 MHz)                            | 1.42                 |
| Dissipation factor (1 MHz)                             | 0.001                |
| Bulk density (Hosokawa powder tester, lb/ft³, [Kg/m³]) |                      |
| Packed   | 54 [860]             |
| Aerated  | 38 [610]             |
| Average particle size (μ)                              | 3.05                 |
| Refractive index                                       | 1.77                 |

## TYPICAL PROPERTIES\* Continued

| Solubility (weight % at 25°C)                      |        |
|--|--------|
| Water  | < 0.01 |
| Acetone  | < 0.01 |
| Methanol   | < 0.01 |
| Toluene  | < 0.01 |
| TGA (TA Instrument model 2950, 10°C/min, under N2) |        |
| 1% weight loss, °C                                 | 324    |
| 5% weight loss, °C                                 | 419    |
| 10% weight loss, °C                                | 441    |
| 50% weight loss, °C                                | 473    |
| 90% weight loss, °C                                | > 600  |

<sup>\*</sup>These properties are typical but do not constitute a specification either in part or as a whole. Specification data is available on request from sales, customer service or customer technical service.



#### SHIPPING INFORMATION

**Transportation classification:** not regulated for transportation

Harmonized tariff number: 2925.19

Packaging and minimum order information is available from sales or customer service.

# CHEMICAL REGISTRATION NUMBER

CAS: 32588-76-4 EINECS: 2511186 MITI: 5-5550

## **RESPONSIBLE CARE**

Albemarle is committed to the safety and well-being of our customers, employees and the community at large. Safety data sheets (SDS) are available upon request.



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