**Description**

Ethane-1,2-bis(pentabromophenyl)

SAYTEX 8010 flame retardant is a non-diphenyl oxide based product containing a high level of aromatic bromine.

![Chemical Structure of SAYTEX 8010 Flame Retardant](image)

**Applications**

SAYTEX 8010 flame retardant can be used in a wide range of high performance applications. In particular it finds use in styrenic polymers, engineering resins, wire & cable and elastomers.

Additional information on the use of SAYTEX 8010 flame retardant may be found in the following technical bulletins, which are available from Albemarle:

- Flame Retarding High Impact Polystyrene Extrusion Stability Study
- Flame Retarding High Impact Polystyrene
- Flame Retarding Polyamides
- SAYTEX 8010 flame retardant and the Proposed German Dioxin Ordinance
- Toxicology of SAYTEX 8010 flame retardant
- Evaluation of Flow Aids in HIPS Containing Saytex 8010 flame retardant
- Introduction to Flame Retardant Polyolefins
- Flame Retarding Elastomers
- Flame Retardant Comparison in Glass Filled PBT
- Impact Modification of HIPS Containing SAYTEX 8010 flame retardant
- SAYTEX 8010 flame retardant: A New and Versatile Flame Retardant for Styrenics
- SAYTEX 8010 flame retardant Laboratory Simulation of Municipal Waste Incineration

**Benefits and Features**

SAYTEX 8010 flame retardant has very good thermal stability and high bromine content making it a prime candidate for high temperature applications. It exhibits good UV resistance and hence is suitable for use in many applications requiring color stability. Because of its very good thermal stability and low blooming characteristics, SAYTEX 8010 flame retardant is suitable for use in systems where recycling is anticipated. SAYTEX 8010 flame retardant is not acutely toxic, it is not teratogenic, and it is not harmful to fish. SAYTEX 8010 flame retardant can be used in the formulation of products meeting European dioxin ordinances.
Typical Properties

% Bromine (theoretical)................................................................................................. 82.3
Initial melting point (by DSC), °C .............................................................................. 350
Molecular weight ........................................................................................................ 971.2
Appearance/form ........................................................................................................ white/powder
Specific gravity .......................................................................................................... 3.25
Dielectric constant (1 MHz) ...................................................................................... 1.15
Dissipation factor (1 MHz)......................................................................................... 0.19

Bulk density (Hosokawa powder tester, lb/ft3; [Kg/m3])
  Packed.......................................................... 110 [1760]
  Aerated...................................................... 54 [868]

Average particle size (µ) ........................................................................................... 5.63
Refractive index ......................................................................................................... 1.75

Solubility (weight % at 25°C)
  Water ......................................................................................................................... < 0.01
  Acetone.......................................................... < 0.01
  Methanol ...................................................... < 0.01
  Toluene ..........................................................< 0.01
  Chlorobenzene ........................................... < 0.01
  Methylene Dibromide .................................. < 0.01
  Dimethyl Formamid .................................... < 0.01

TGA (TA Instruments, model 2950, 10°C/min under N2)
  1% weight loss, °C .............................................. 314
  5% weight loss, °C .............................................. 344
  10% weight loss, °C ........................................... 359
  50% weight loss, °C ........................................... 402
  90% weight loss, °C ........................................... 423

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: 2903.6990

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

Chemical Registration Numbers

CAS: 84852-53-9
EINECS: 284-366-9
MITI: 4-1735

Responsible Care

Albemarle is committed to the safety and well-being of our customers, employees and the community at large. Material safety data sheets (MSDS) are available upon request from the offices listed below.

The information presented herein is believed to be accurate and reliable, but is presented without guarantee or responsibility on the part of Albemarle Corporation. It is the responsibility of the user to comply with all applicable laws and regulations and to provide for a safe workplace. The user should consider any health or safety hazards or information contained herein only as a guide, and should take those precautions which are necessary or prudent to instruct employees and to develop work practice procedures in order to promote a safe work environment. Further, nothing contained herein shall be taken as an inducement or recommendation to manufacture or use any of the herein materials or processes in violation of existing or future patents.

Albemarle Corporation®

AMERICAS 451 Florida Street • Baton Rouge, Louisiana 70801-1765 • Phone: 225-388-7402 • Toll-Free: 800-535-3030 • Fax: 225-388-7848
EUROPE Parc Scientifique Einstein • Rue du Bosquet 9 • B-1348 Louvain-la-Neuve Sud, Belgium • Phone: 32-10-48-1711 • Fax: 32-10-48-1717
ASIA PACIFIC 111 Somerset Road #13-03 • Singapore 238164 • Phone: 65-732-6286 • Fax: 65-737-4155

16th Floor, Fukoku Seimei Building • 2-2, Uchisaiwaicho, 2-Chome • Chiyoda-ku, Tokyo 100, Japan • Phone: 81-3-5251-0791 • Fax: 81-3-3500-5623
China World Tower, Room 1917 • No. 1 Jian Guo Men Wai Avenue • Beijing 100004 China • Phone: 86-10-6505-4158 • Phone: 86-10-6505-4154 • Fax: 86-10-6505-4150

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