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#### FaRetar Flame Retardant Technology Co., Ltd.

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# FARETAR<sup>TM</sup> BPS

### **Brominated Polystyrene**

## **Product description**

**FARETAR<sup>TM</sup> BPS** is a bromine flame retardant with high flame retardancy, thermal and light stability. It is widely used in engineering plastics such as polybutylene terephthalate, polyethylene terephthalate, polyphenylene oxide, nylon-66, etc.

| Molecular Structure                 | CH - CH2<br>x<br>Bry                    |
|-------------------------------------|---|
| Chemical Name                       | Brominated Polystyrene                  |
| Formula                             | (C8H8–xBrx)n                            |
| CAS Number                          | 88497-56-7                              |
| Bromine content (theoretical), %    | 66                                      |
| Appearance                          | White or light-yellow granules / powder |
| Specific gravity, g/cm <sup>3</sup> | 2.1~2.5                                 |

## Comparable grade

Chemtura BA-59P Albemarle Saytex CP-2000 ICL FR-1524

## **Characteristics**

- Outstanding thermal stability
- Non-blooming
- Low conductivity and good electrical properties.
- Good compatibility with some engineering plastic.

## Application

**FARETAR<sup>TM</sup> BPS** flame retardant provides outstanding thermal stability and electrical performance. It is particularly suitable for engineering plastic applications such as HIPS, polyesters (PET, PBT, PCT) and polyamides (nylons).

## **Specification**

| Item                       | Specification |
|----------------------------|---------------|
| Softening Point, °C        | ≥ 210         |
| Bromine Content, %         | ≥ 66.0        |
| Volatiles, %               | ≤ 0.3         |
| 1% thermal weight loss, °C | ≥300          |

\*Test method: Q/0783FRT020-2019

### Solubility Reference (wt. % at 25 °C)

| Solvent         | Solubility |
|-----------------|------------|
| Water           | < 0.01     |
| Acetone         | < 0.01     |
| Methanol        | < 0.01     |
| Toluene         | 0.7        |
| Styrene monomer | 11.2       |

#### Thermogravimetric Analysis Reference, (10°C/min, air)

| Weight Loss (%) | °C  |
|-----------------|-----|
| 2               | 340 |
| 4               | 358 |
| 10              | 374 |

## Packaging

In 25 kg PP woven bag or 1000kgs jumbo bag; package can also be made according to client's request.

### Storage

Store the product in a cool, dry, well - ventilated area away from incompatible materials.