



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

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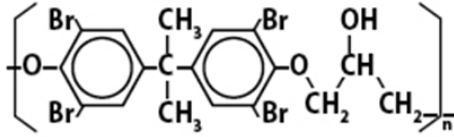
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**FARETAR™ BEO**

**Brominated Epoxy Oligomer**

**Product description**

**FARETAR™ BEO** is an oligomer synthesized from TBBA (Tetrabromobisphenol A), which has excellent flame retardant effect. It can be divided into EP type and EC type according to different capping group. The former is terminated by epoxy group, and the latter is terminated by tribromophenoxy group.

Molecular Structure	
Chemical Name:	Brominated Epoxy Oligomer
Formula	C <sub>3</sub> H <sub>5</sub> O(C <sub>18</sub> H <sub>16</sub> O <sub>3</sub> Br <sub>4</sub> ) <sub>n</sub> C <sub>18</sub> H <sub>15</sub> Br <sub>4</sub> O <sub>2</sub>
CAS Number	68928-70-1
Bromine content (theoretical), %:	53
Appearance	Light yellow particle
Specific gravity, g/cm <sup>3</sup>	1.8

**Comparable grade**

ICL F-2000 series

**Characteristics**

- Good electrical properties, UV resistance, thermal stability and aging resistance effect
- Better adhesion than traditional epoxy resin
- Excellent self-fire-retardant property
- No corrosive gas during combustion

## Application

- **FARETAR™ BEO** is widely used in the shell of printers, computers, printed circuit boards and electronic components.
- **FARETAR™ BEO** with high polymerization degree can be used as a flame retardant additive for PBT, PET, PA66 and other engineering plastics; **FARETAR™ BEO** with low polymerization degree can be used as reactive flame retardant to synthesize epoxy resin, phenolic resin, unsaturated polyester, etc.

## Specification

Item	Test method	EP	EC
Softening Point, °C	GB/T 12007.6	95~158	90~145
Bromine Content, %	Q/0783FRT004-2020	49~55	54~59
Molecular Weight, %	GB/T 6679	1500~56000	1400~12000
Color, APHA	GB/T 605	≤ 90	≤ 90
Capping group	/	Epoxy group	Tribromophenyl

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

Weight loss, %	°C
2	348
5	355
10	359

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

Solvent	Solubility
DMF	Soluble
Dioxane	Soluble
Alcohol	Insoluble
MEK	Insoluble
MIBK	Insoluble
Xylene	Insoluble
Water	Insoluble

## Package

25 kg/bag

## **Storage and transportation**

This product is non-dangerous products and should be stored in a cool, dry, ventilated warehouse, in the storage and transportation process should be handled with care to prevent impact damage.