

Description

- Extra® PC Flame Retardant Masterbatch (PC FR MB) provides high efficiency and eco-friendly way to let your polycarbonate product to get flame retardancy. This masterbatch is suitable with any brands (e.g. Sabic, TeiJin, etc.) and both injection/extrusion grade of non-flame-retardant PC(UL 94 HB) pellet. Simply add 4% ~ 8% and mix with PC pellet before injection/extrusion, the product could achieve UL94 1/16 V-0 flame retardant level. Extra® PC Flame Retardant masterbatch is using non-halogen, non-phosphorous, flame retardant. Totally harmless to the environment and the human body. Also can be used with phosphorus flame retardants in PC/ABS blends to increase HDT and physical flame retardancy.

Typical Use

- Extrusion, Injection Molding of polycarbonate(PC) product.

Type / Color

- Black, Matte, Transparent.

Product Data

Type	Black	Matte	Transparent
Form	Pellet	Pellet	Pellet
Appearance	Black	White	Transparent
Density	1.20	1.23	1.23
Melt Flow Index (300°C, 1.26KGS)	45	38	42
HDT	184°C (ASTM D648 18.4KGS/CM2)		



Packaging

- The packing is 25kgs per bag, paper-plastic bag outer with aluminum foil inner.

Typical Use

- Before usage, please dry the masterbatch with 100 ~ 120°C for 120 minutes
- Add 4% ~ 8% masterbatch into PC resin and mix it at least for 2 ~ 3 minutes

Features

- Halogen free, eco-friendly PC Flame-Retardant Masterbatches
- Suitable for different brands of PC(HB) resin pellet. (e.g. Sabic, TeiJin, etc.)
- Good compatibility and dispersibility with PC resin
- Low influence on PC's physical properties
- Add 4%~8%, it can go through UL 94 1/16(1.58mm) V-0, also suitable for both injection and extrusion grade PC resin
- Use with phosphorus flame retardants in PC/ABS blends to increase HDT and physical flame retardancy
- Using transparent type will not influence the transparency of PC resin, also could be used for the other color of PC

Advantages

- Significantly lower the cost
- Easy for processing
- Can achieve the desire flame retardant level, depends on the percentage of masterbatch
- Wouldn't affect physical properties and retain the original fire resistanc

Health and Safety

- Does not contain heavy metal, halogen element
- Does not release phosphorous

Remark

- The above information is given based on our present state of knowledge. As there are numerous variation in industrial practice, the information as given is without obligation and liability of whatever on our part. This information corresponds to the current state of our knowledge and should inform about our products and their application possibilities. Therefore, they are not guaranteeing certain qualities of the products for a specific application. The information is given after the best knowledge and conscience, however, represents no guarantee. Every processor of our products is always responsible himself for the observance of all legal rules also in the field of the food law and the accident prevention. We grant a high-class quality within the scope of our general conditions of sale.

Physical Properties Comparison with Different Ratio of PC FR MB(Black.)

NO	Properties	Method	Unit	0%	4%	6%
1	1Specific Gravity	D-792	-	1.186	1.186	1.187
2	Flexural Stress	D-790	Kgf/cm ²	965	997	1027
3	Flexural Modulus	D-790	Kgf/cm ²	23421	24385	24711
4	Izod Impact Strength(Notched)	D-256	J/m	781	789	795
5	Yield Strength	D-638	Kgf/cm ²	621	651	732
6	Elongation at yield point	D-638	%	6.6	6.9	7.1
7	Tensile Strength	D-638	Kgf/cm ²	702	780	795
8	Elongation at break point	D-638	%	>50	>50	>50
9	HDT(18.4 Kgf/cm ²)	D-648	°C	130	132	133
10	Melting Index(300°C/1.2kgf)	D-1238	g/10min	10.1	12.0	13.2
11	Flammability	UL-94	-	V2	1/8-V0	1/16-V0