

Flame Retardant Masterbatch FRMB-601P

Introduction:

FRMB-601P is an environmentally friendly flame-retardant masterbatch based on phosphorus and nitrogen synergism. It is specifically designed for various flame-retardant PP (polypropylene) materials and can also be used to produce other olefin-based flame-retardant products. The components of FRMB-601P include acid sources, gas sources, and carbon sources, utilizing charring and intumescent mechanisms to achieve flame retardancy. When added to PP materials, FRMB-601P can achieve a flame retardant effect of UL 94 V-0 (3.2mm). It does not contain substances restricted by the EU REACH regulation and is not subject to the EU RoHS directive (2002/95/EC).

Characteristic:

- FRMB-601P is used in PP with a minimum addition of 40% to achieve UL94 V-0.
- FRMB-601P is free from halogens, heavy metals, and REACH Substances of Very High Concern (SVHC)
- FRMB-601P has excellent resistance to thermal and oxidative aging.

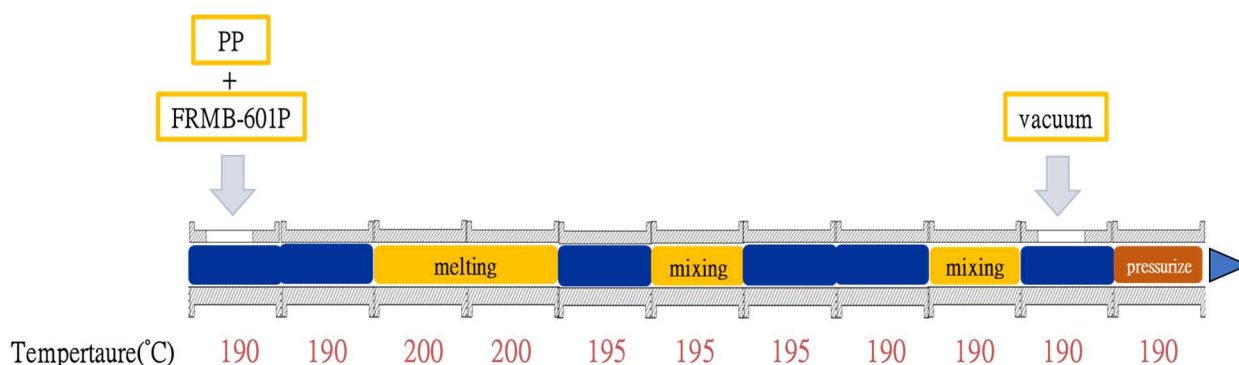
Physical and Chemical Properties:

Item	Unit	Index
Appearance	--	White granules
Polymer	--	PP
Flame retardant category	--	Phosphorus and nitrogen system
Flame retardant content	wt%	50
TGA 5% weight loss	°C	≥ 300
Moisture	%	≤ 0.3

Recommended Dosage:

Polymer	PP - 1040	PP - 2020
FRMB-601P (wt%)	40	40
UL-94 (3.2mm)	V-0	V-0

Extrusion processing temperature (twin screw extruder):



Processing precautions:

1. The addition of certain additives or pigments may cause adverse effects on the appearance and performance of flame retardant resin particles or flame retardant properties, and the choice of additives must be carefully evaluated.
2. When FRMB-601P is used in PP, it is not recommended to use a strong shear screw combination.

Package:

10kg/bag, 25kg/bag

Values included in this data sheet are based on limited laboratory test specimens. These values are typical values and are not meant to be used for setting maximum or minimum values for specification purposes. Any determination of the suitability of the materials shown in this property data sheet for use by the end user is the sole responsibility of the user, who must assure themselves that the material as subsequently processed meets the need of his particular product or use. To the best of our knowledge the information in this publication is accurate and reliable, USI does not assume any liability whatsoever for the accuracy of this information.