

MARPROOF™ MH series

Acrylic polymer for toughness binder

Features

- Good heat decomposition under low temperature
 - Low-temperature sintering, less calcined residue
- High tensile strength comparable to PVB and EC

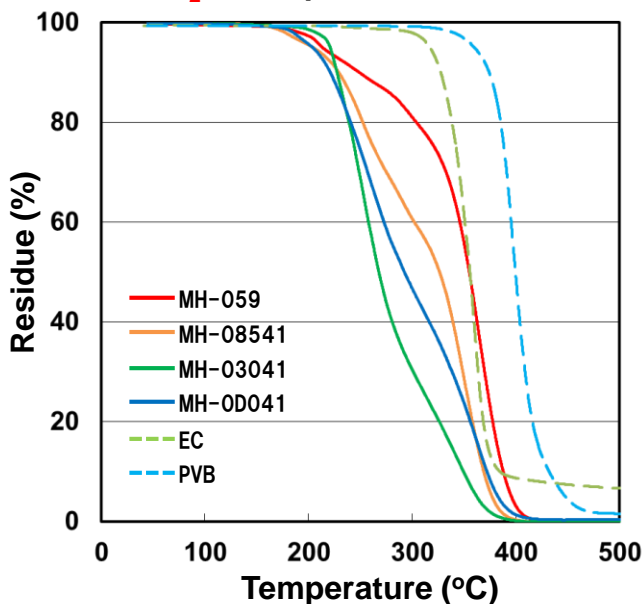
PVB : Poly Vinyl Butyral , EC: Ethyl Cellulose

List of products and development products

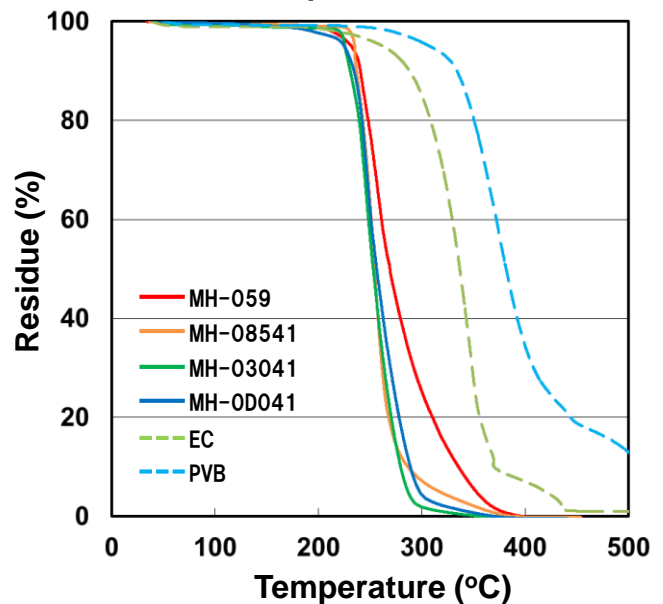
Products	MH-059	MH-08541	MH-03041	MH-0D041
Molecular weight	Ca. 500,000	Ca. 800,000	Ca. 300,000	Ca. 60,000
Tg (°C)	105	70	50	50
Appearance	White beads	White beads	White beads	White beads
Characteristics	<ul style="list-style-type: none"> •High tensile strength •Resistance to sheet attack 	<ul style="list-style-type: none"> •Good thermal decomposition •High tensile strength 	<ul style="list-style-type: none"> •Good thermal decomposition •Good solubility 	<ul style="list-style-type: none"> •Low viscosity •Good solubility
Remarks	Development product	Product	Product	Development product

Thermal decomposition

● Under N₂ atmosphere



● Under Air atmosphere

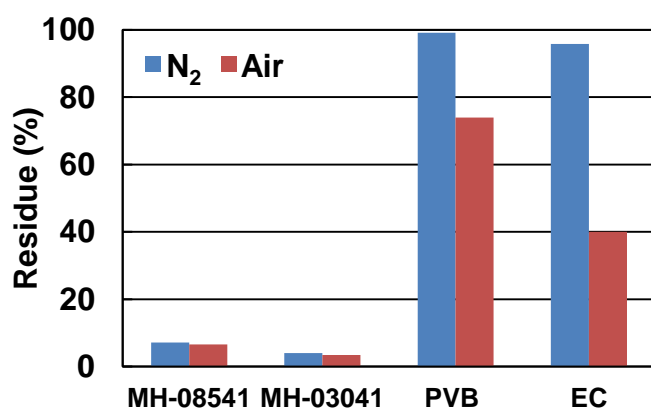


Rate of temperature rise : 10 °C/min

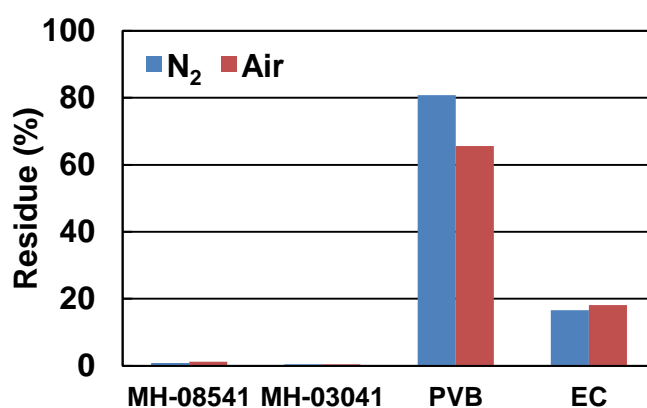
MARPROOF™ MH series show excellent thermal decomposition under 450 °C.

Thermal decomposition at constant temperature

● at 250 °C , 2hr



● at 300 °C , 2hr



Tensile characteristics

	MH-059	MH-08541	MH-03041	PVB	EC
Tensile strength (MPa)	40	31	26	31	33
Elongation (%)	5.3	5.5	5.5	4.2	6.7

Solubility

Solvents	MH-059	MH-08541	MH-03041	MH-0D041
Toluene	○	○	○	○
Ethanol	×	×	○	○
Toluene / Ethanol (50/50 wt%)	○	○	○	○
Methyl ethyl ketone	○	○	○	○
Terpineol	×	○	○	○
Dihydro terpineol (DHT)	×	○	○	○
Dihydro terpineol acetate (DHTA)	×	○	○	○
Butyl carbitol acetate	×	○	○	○

5wt% solution ○: Soluble, ×: Insoluble

We can customize products upon your request. Please feel free to contact us.

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