

Clarifying Nucleating Agent Masterbatch for PP

▶ Characteristics

- Masterbatch dispersed with clarifying nucleating agent for PP at high concentration, having excellent workability and anti-staining property
- Capable of creating extremely transparent molded articles by using Homo/Random PP (Nonuse of nucleating agent is recommended.)
- Applicable to various molding methods such as injection, extrusion, and blow moldings
- Excellent transparency even in a small addition amount compared with conventional products
- Sufficient transparency effect even by low temperature molding because of the small temperature dependency
- Applicable to food packaging materials because of having little harmful impact on smell and taste of the content
- Our clarifying nucleating agent is already registered and approved by U.S. Food and Drug Administration (FDA) and Japan Chemical Innovation and Inspection Institute (JCII).
- And our masterbatch itself containing the clarifying nucleating agent is also registered and approved by JCII.
- Suitable for applications requiring heat-resistance because of having high deflection temperature under load
- Capable of improving mechanical properties and cycle time reduction in molding process by increasing crystallinity and crystallization temperature

▶ Representative Products

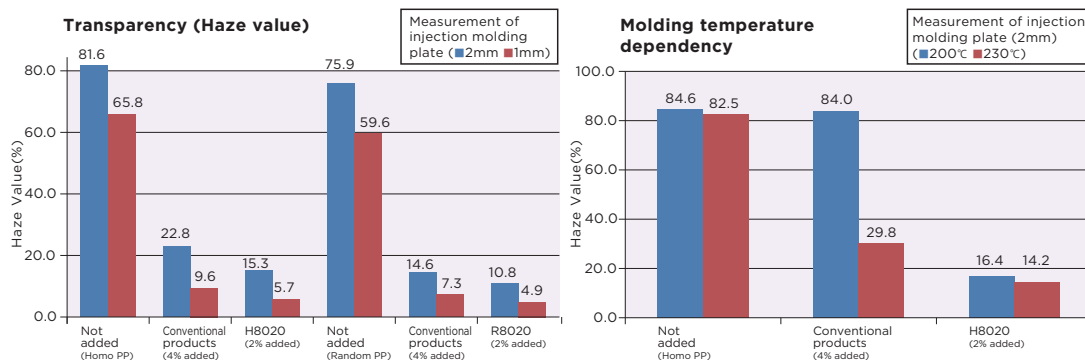
Product name	MFR* (g/10min)	Base resin	Recommended Addition amount (%)	JCII's Certificate registration number (limitation amount)
H8020	40	Homo PP	1.5 ~ 2.5	[B]PM-56878 (less than 2.5% to PP)
R8020	5	Random PP	1.5 ~ 2.5	

*MFR measurement conditions (230°C / 2.16kgf) * Above is our internal experimental data. It is not guaranteed.

▶ Evaluation Results

Transparency of molded articles

Comparison with the conventional products (H300)



Mechanical properties

Items of physical properties	Test standard	Unit	Homo PP No additives	Homo PP H8020=2%
Tensile strength	ISO 527	MPa	35	42
Tensile elongation		%	83	9
Tensile modulus		MPa	1618	2184
Flexural strength	ISO 178	MPa	46	57
Flexural modulus		MPa	1627	2164
Charpy impact value	ISO 179	KJ/m ²	1.4	1.5
Heat distortion temperature (under low load)	ISO 75	°C	94	109
Shrinkage rate	Our company standard	%	1.1	1.3
Crystallization temperature	Our company standard	°C	112	132

Clarifying nucleating agent masterbatch:H8020 * Above is our internal experimental data. It is not guaranteed.

▶ Application

Masterbatch capable of improving transparency of polypropylene (PP) food packaging materials, stationeries, household goods, and industrial components

