

## Technical Data Sheet

### *Koattro* KT AR 05



Polybutene-1

#### Product Description

*Koattro* KT AR05 is a novel plastomeric material based on LyondellBasell technology with unique characteristics.

The product shows an excellent compression set performance which is highly compatible with Polypropylene.

Blended with PP it enhances softness, elastic recovery, elongation at break and impact resistance whilst improving transparency and reducing stress whitening. Blended at low concentrations in PP, *Koattro* KT AR05 enhances also the thermal bonding strength.

*Koattro* KT AR05 is available in free flowing pellet form.

#### Regulatory Status

For regulatory compliance information, see *Koattro* KT AR 05 [Product Stewardship Bulletin \(PSB\) and Safety Data Sheet \(SDS\)](#).

This grade is not intended for medical and pharmaceutical applications.

<b>Status</b>	Commercial: Active
<b>Availability</b>	Africa-Middle East; Asia-Pacific; Australia and New Zealand; Europe; North America; South & Central America
<b>Application</b>	Appliances; Automotive Parts; Coatings, Protective; Colour Concentrates; Industrial; Polymer Modifier; Products for Use in Property Modification; Sealants; Surface Protection Film
<b>Market</b>	Consumer Products
<b>Processing Method</b>	Blown Film; Calendaring; Cast Film; Compression Molding; Injection Molding
<b>Attribute</b>	Foamable; Good Melt Strength; Good Processing Stability; High Elasticity; Low Temperature Flexibility; Medium Flow; Weldable

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Flow Rate, (190 °C/2.16 kg)	0.5	g/10 min	ISO 1133-1
Density	0.890	g/cm <sup>3</sup>	ISO 1183-1
<b>Mechanical</b>			
Flexural Modulus, (23 °C)	25	MPa	ISO 178
Tensile Modulus, (23 °C)	19	MPa	ISO 527-1, -2
Tensile Strength at Break	12	MPa	ISO 8986-2
Tensile Elongation at Break	>400	%	ISO 8986-2
<b>Impact</b>			
Charpy Impact Strength - Notched, (23 °C) Note: NB=no break Note: Also at 0°C NB observed. At -20°C 5.1 kJ/m <sup>2</sup>	NB	kJ/m <sup>2</sup>	ISO 179
<b>Hardness</b>			
Shore Hardness, (Shore A)	87		ISO 868
<b>Thermal</b>			
Melting Temperature, Tm1	114	°C	ISO 11357-3

#### Additional Information

Compression Set

42 %

ASTM D395

Note: Compression set measured at 70°C (25% deformation)

#### Notes

Mechanical properties are measured on specimens conditioned for 10 days at 23°C

These are typical property values not to be construed as specification limits.

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

#### Product Storage and Handling

- Product should be stored in dry conditions at temperatures below 50°C and protected from UV-light
- Improper storage may bring damage to the packaging and can negatively affects on the quality of this product
- Keep material completely dry for good processing

#### Health and Safety:

The resin is manufactured to the highest standards, but special requirements apply to certain applications such as food end-use contact and direct medical use. For specific information on regulatory compliance contact your local representative.

Workers should be protected from the possibility of skin or eye contact with molten polymer. Safety glasses are suggested as a minimal precaution to prevent mechanical or thermal injury to the eyes.

Molten polymer may be degraded if it is exposed to air during any of the processing and off-line operations. The products of degradation may have an unpleasant odor. In higher concentrations they may cause irritation of the mucus membranes. Fabrication areas should be ventilated to carry away fumes or vapours. Legislation on the control of emissions and pollution prevention should be observed.

The resin will burn when supplied with excess heat and oxygen. It should be handled and stored away from contact with direct flames and/or ignition sources. While burning, the resin contributes high heat and may generate a dense black smoke.

Recycled resins may have previously been used as packaging for, or may have otherwise been in contact with, hazardous goods. Converters are responsible for taking all necessary precautions to ensure that recycled resins are safe for continued use.

For further information about safety in handling and processing please refer to the Safety Data Sheet.