PRODUCT DATA SHEET

Recycled HDPE

DESCRIPTION

Polymer: Recycled high-density polyethylene (R-HDPE)

Source: Bottles, containers, industrial scrap

Color: White, black or colored

Additives: Stabilizers, pigments, antioxidants

APPLICATIONS

Injection molded parts	Roto molding, extrusion applications
Pipes, profiles, sheets	

SPECIAL FEATURES

Good chemical resistance, toughness	Lower cost, sustainable alternative
Slightly lower mechanical properties vs virgin	

PHYSICAL PROPERTIES

Property	Typical Value	Test Method
Density	0.94 – 0.96 g/cm³	ISO 1183
Melt Flow Rate (190°C/2.16kg)	4 – 8 g/10 min	ISO 1133
Flexural Modulus	750 – 900 MPa	ISO 178
Elongation at Break	> 200%	ISO 527
Charpy Impact Strength, notched (23°C)	20 – 35 kJ/m²	ISO 179/1eA

- Data should not be used for specification work.
- Measured on injection moulded specimens acc. to ISO 1873-2.
- Measured on injection moulded specimens, conditioned at 23°C and 50% Rel. Hum.

PROCESSING CONDITIONS

is easy to process with standard injection moulding machines
Following parameters should be used as guidelines:

Drying: not needed (PE is non-polar, low moisture absorption)

Extrusion / injection: ~180 – 240 °C (depending on grade)

Screw design: moderate back pressure

Avoid overheating / residence time for thermal stability

Use stabilizers (antioxidants) during compounding

If blending with virgin, pre-dry and pre-mixing beneficial

STORAGE

Store dry, cool, away from UV

Use sealed containers / bags

Prevent contamination (dust, other polymers)

Avoid stacking heavy loads that crush pellets

SAFETY

Processing fumes are mild (mostly hydrocarbon vapors)

Use ventilation, PPE

Ingestion, inhalation of pellets or dust to be avoided

Scrap recycling is preferred; disposal per local regulations, for more information contact your PAFT representative.

RECYCLING

Very good potential for mechanical recycling

With each cycle, molecular weight falls, property deterioration

Compatibility issues with other polyolefins (poor miscibility)

Sorting, washing, decontamination critical

Closed-loop and open-loop recycling common

RELATED DOCUMENTS

The following related documents are available on request, and represent various aspects on the

usability, safety, recovery and disposal of the product.

Safety Information Sheet

Statement on chemicals, regulations and standards.

Statement on compliance to food contact regulations.

DISCLAIMER

The product(s) mentioned herein are not intended to be used for medical, pharmaceutical or healthcare applications and we do not support their use for such applications.

To the best of our knowledge, the information contained herein is accurate and reliable as of the date of publication, however we do not assume any liability whatsoever for the accuracy and completeness of such information.

PAFT makes no warranties which extend beyond the description contained herein. Nothing herein shall constitute any warranty of merchantability or fitness for a particular purpose.

It is the customer's responsibility to inspect and test our products in order to satisfy itself as to the suitability of the products for the customer's particular purpose.

The customer is responsible for the appropriate, safe and legal use, processing and handling of our products.

No liability can be accepted in respect of the use of PAFT products in conjunction with other materials. The information contained herein relates exclusively to our products when not used in conjunction with any third-party materials.