



TECHNICAL SPECIFICATION AKYPRINT[®] UV 4 mm 1300 gr/m²

| Description : bubble structure polypropylene copolymer extruded | | | | | uded |
|---|----------------|-------------------|---------------|---------|--------|
| Product | Treatment * | Thickness (mm) | Weight gr/sqm | Density | Colour |
| Akyprint® | Corona UV | 4± 0,2 | 1300±130 | 0,29 | white |

*others on request

Item

| | Dimension (mm) | Tolerance |
|------------|----------------|-----------|
| Width | 2050 | +/- 2 mm |
| Length | 3050 | 0/+16 mm |
| Squareness | | 3 mm / m |

Logistic details

| Nr of piece/pallet | 100 |
|---------------------|---|
| Dimension of pallet | 2050 x 3050 x 570 |
| Protection | Wood pallet + SPC bottom and cover + PP Corners + PE stretch foil |
| Storage | Inside, dry place, 2 pallets on 1 maxi |

Treatment

| | Method | Unit | Value | Result |
|----------------|--------------|------|-------|-----------|
| Corona | Sherman pens | mN/m | ≥ 38 | 6 months |
| Anti-static | On request | | | |
| Fire retardant | On request | | | |
| UV treatment | Internal | | | 18 months |

Printing

| | 2 sides | 1 side |
|---------------|---------|--------|
| Offset UV | | |
| Silkscreen UV | Х | Х |
| Digital UV | Х | Х |

In order to protect better the printing results, we recommend to apply an additional varnish over the inks.

Converting

- Gluing (hot melt: PP or polyurethane reactive)
- Welding
- Screwing
- Riveting
- Cutting (guillotine, die cut, laser, knife, plotter)

Regulations

- Conformity with: Heavy metal (RoHS, 94/62/EC); REACH / SVHC)
- Food contact: please consult us

DS SMITH KAYSERSBERG SAS au capital de 53.816.000 euros Siège social : 77 route de Lapoutroie, F - 68240 KAYSERSBERG RCS COLMAR B 572 219 202 – SIRET 572 219 202 00072 TVA FR 21 572 219 202

The Power of Less°



Mechanical properties of raw material*

| Property | Method | Unit | Result |
|---------------------------|-----------|--------|--------|
| Tensile Strength at Yield | ISO 527-2 | M Pa | 25 |
| Elongation at Yield | ISO 527-2 | % | 7 |
| Flexural modulus | ISO 178 | MPa | 1100 |
| Izod Impact Strength | | | |
| At 23°C | ISO 180 | KJ /m² | 18 |
| At –20°C | | - | 5.5 |

Mechanical properties of final product

| Property | Method | Unit | Result |
|--|----------|-------|-----------|
| Flexural Break Resistance (Distance between fulcrums: 100 | ISO 178 | N/mm² | > 7 |
| mm, test speed 5 mm/m, sample: 40x200 mm) | | | |
| Deformation at maximal Load - Fmax (Distance between | ISO 178 | mm | > 4.0 |
| fulcrums: 100 mm, test speed 5 mm/m, sample: 40x200 mm) | | | |
| Compression Resistance | ISO 3035 | % | < 20 |
| Deformation by 1000 kPa Pressure | | | |
| Dimensional variation 22H, 70°C | Internal | % | < 0,5 |
| Impact resistance at -30° C and 23 °C (steel ball 500 g, falling | Internal | | no effect |
| height: 250 mm) | | | |

| Thermal properties of raw material* | | | |
|-------------------------------------|----------|--------|--------|
| Property | Method | Unit | Result |
| Melting point | ISO 3146 | °C | 165°C |
| Heat Deflection Temperature | | | |
| 1.80 MPa – 120°C per hour | ISO 75-2 | °C | 50 |
| 0.45 MPa - 120°C per hour | | | 92 |
| Flash point | | °C | 350 |
| Auto ignition temperature | | °C | > 380 |
| Thermal expansion coefficient | | mm/m°C | 0,11 |

*Extracted from the polypropylene Heterophasic Copolymer raw material data sheet

Chemical resistance

Polypropylene has good chemical inertness and good resistance to cracking under stress. It has no solvent at 20°C. Very resistant to mineral and organic products; it is neither affected by water solutions of mineral salts, nor by chemical bases and mineral acids at temperatures lower than 60°C, except very strong acids. Not resistant to substances with an oxidizing effect or to certain solvents. Details can be supplied on request.

Environment

Polypropylene is persistent in the environment and is not biodegradable.

Recycling properties

Thermal recycling or incineration

The heat produced can then be used as substitutes for oil, gas and coal or to generate energy at power plants. The complete combustion of polypropylene with air only produces carbon dioxide and water. At higher temperatures traces of nitrogen oxide are present.

The incomplete combustion of polypropylene produces soot, carbon dioxide and monoxide, and several carbon, hydrogen and oxygen compounds. Unburnt substances or additional products may be released.

The same by-products are also released during the combustion of natural materials such as wood or wool.

Mechanical recycling

Polypropylene wastes can easily be recycled. They are collected, separated, milled, melted and extruded in granules in order to be re-injected in our process. We can reuse our own wastes and also the wastes of our customers.

Complementary information:

Industrial waste number EC for PP: plastics (16 10 19, 17 02 03 & 20 01 39)



www.kaysersberg-plastics.com

2

The Power of Less°