

# TECHNICAL SPECIFICATION

## AKYPLAC® RC 50

### ▶ Description

- ▶ **Material:** Polypropylene copolymer extruded sheet containing at least 50% of recycling material (for example wastes from PP printed boards)
- ▶ **Colour:** Slightly greyish colour due to the presence of ink particles in the recycling material

### ▶ Tolerances

	Tolerance
Width	+/- 2 mm
Length	0/+16 mm
Squareness	5 mm / m

### ▶ Packaging/storage

Protection	Wood pallet + PC bottom and cover + PP Corners + PE stretch foil
Storage recommendation	Store in a dry place protected from UV

### ▶ Treatment

	Method	Unit	Value	Result
Corona	Sherman pens	mN/m	≥ 38	3 months

### ▶ Printing

	2 sides	1 side
Offset UV		
Silkscreen UV	X*	X
Digital UV	X*	X

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

\*2 sides printing is technically possible, but the printing results depend on the picture covering to print; to be tested

### ▶ Converting

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

### ▶ Mechanical properties of Polypropylene raw material

Property	Method	Unit	Result
Tensile Strength at Yield	ISO 527-2	M Pa	24
Elongation at Yield	ISO 527-2	%	11
Flexural modulus	ISO 178	MPa	1150
Izod Impact Strength			
At 23°C	ISO 180	KJ /m <sup>2</sup>	15
At -20°C			7

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► **Thermal properties of Polypropylene raw material**

Property	Method	Unit	Result
Melting point	ISO 3146	°C	165°C
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**

Akyplac RC50 is 100% recyclable by following methods:

► **Mechanical recycling**

Mechanical recycling must be the preferred way.

Polypropylene can easily be recycled for extrusion purpose for example.

Our own wastes of production are crushed in order to be re-injected in our extrusion machines.

our products wastes have to be separated from other wastes in order to improve the recycling.

We have the possibility to collect the wastes from our customers. Please contact us for more information.

► **Thermal recycling or incineration**

Our products can be recycled by thermal recycling process.

The heat produced can then be used as substitutes for oil, gas and coal or to generate energy at power plants.

The calorific gain from polypropylene in an energy recovery process is 24 MJ/kg

► **Complementary information:**

- Dispose of in accordance with relevant local regulations. Do not discharge the product into the environment.

- Recycling identification code: 5



- Our products are not suitable for composting

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