

## Product Information

### Product description

INNOPOL® CS 4-8000 is a polypropylene random copolymer. This grade is available in nature and custom coloured form.

### Recommended application

INNOPOL® CS 4-8000 is highly suitable for pressure pipe manufacturing, including hot, drinking water systems and floor-heating application.

Physical properties / Typical values	Test method	Unit	Mean value
<b>Properties</b>			
Abbreviated term	ISO 1043	-	PP-R
Colour	-	-	nature
Density 23°C	ISO 1183	g/cm <sup>3</sup>	0.9
<b>Rheology</b>			
Melt Mass Flow Rate MFR (230°C/2,16kg)	ISO 1133	g/10 min	0,3
<b>Mechanical properties</b>			
Tensile Modulus (1 mm/min)	ISO 527-1,-2	MPa	850
Tensile Stress at Yield (50 mm/min)	ISO 527-1,-2	MPa	25
Tensile Strain at Yield (50 mm/min)	ISO 527-1,-2	%	12
Charpy Impact Strength at 23°C	ISO 179/1eU	kJ/m <sup>2</sup>	NB
Charpy Impact Strength at 0°C	ISO 179/1eU	kJ/m <sup>2</sup>	NB
Charpy Impact Strength at -20°C	ISO 179/1eU	kJ/m <sup>2</sup>	70
Charpy Impact Strength notched at 23°C	ISO 179/1eA	kJ/m <sup>2</sup>	20
Charpy Impact Strength notched at 0°C	ISO 179/1eA	kJ/m <sup>2</sup>	3
Charpy Impact Strength notched at -20°C	ISO 179/1eA	kJ/m <sup>2</sup>	2
<b>Thermal properties</b>			
Heat Deflection Temperature 0.45 MPa (HDT/B)	ISO 75-1.-2	°C	68
<b>Flammability</b>			
Burning behaviour (d= 3,2 mm)	UL-94	Class	HB

Data contain above represent typical values of individual properties. They are informative, please do not construe as specifications.

MFR is measured at 230°C under a load of 2.16 kg with standard nozzle having a diameter of 2.095 mm.

Average mechanical property values of several measurements carried out on standard injection moulded specimens (ISO 3167) conditioned at room temperature (ISO 291).

## Product Information

### Physical form and storage

Standard packaging includes the 25 kg bags, the 1000 kg octabin (octagonal container) or the 1250 kg big-bag. All containers are tightly sealed and should be opened only immediately prior to processing.

INNOPOL® CS 4-8000 should generally have a moisture content of less than 0,05% when being processed. In order to ensure reliable production pre-drying is suggested before processing of material at 80°C/2h.

INNOPOL® CS 4-8000 should be stored in dry conditions at temperatures below 60 °C and protected from UV-light. The quality of product may suffer due to storage under improper condition.

### Recommended processing parameters

INNOPOL® CS 4-8000 can be extruded with standard extrusion lines.

The following temperatures should be used as guidelines:

Barrel temperatures	180 – 220°C
Polymer melt temperature	200 – 220°C
Die temperature	200 – 220°C

INNOPOL® CS 4-8000 can be processed with injection moulding machines.

Possible injection parameters:

Barrel temperatures	190 – 250°C
Polymer melt temperature	230 – 260°C
Mould temperature	15 – 50°C
Injection speed	slow to intermediate, depending on the mould design
Hold pressure	50 – 100 % of actual injection pressure

### Product safety

For detailed safety information, see Safety Data Sheet, which is available on request.

### Note

All information provided herein is based on our best knowledge, experience and laboratory test results. However, Inno-Comp Kft. shall be in no even responsible or liable for misunderstood data or for inefficient application.

In order to check the availability of products, please, contact us:

### INNO-COMP KFT.

H-3580 Tiszaújváros, Vegyészek útja 8.

Telephone: +36-49-542-084

Fax: +36-49-522-509

E-mail: [innocomp@innocomp.hu](mailto:innocomp@innocomp.hu)