

KRATON® IR-305

Polyisoprene

Kraton Polymers LLC



Prospector

Product Description

KRATON® IR-305 polymer is a solution polymerised polyisoprene with a high cis-1,4 content. It has a high molecular weight as indicated by its limiting viscosity number of 7.75 dl/g. The product also contains 3.6 phr of a non-staining naphthenic oil, which is classified as a 'Distillate (petroleum), solvent refined heavy naphthenic'. The main outlets for KRATON IR-305 polymer are tyres, moulded goods, adhesives and chemical derivatives such as chlorinated and isomerised rubbers. This product is not intended for food packaging or food contact applications. KRATON IR-305 polymer is used as a replacement for natural rubber in a wide range of compounds, offering advantages of light colour, uniformity and low levels of impurities. Its good flow characteristics produce improvements in mixing and moulding behaviour in blends with general purpose and speciality rubbers. Both compression and injection moulding benefit from the good mould flow offered by KRATON IR-305.

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Europe	
Features	• Good Flow	• High Molecular Weight	• Solvent Resistant
Uses	• Adhesives	• General Purpose	
	• Blending	• Wheels	
Forms	• Pellets		
Processing Method	• Compression Molding	• Injection Molding	

Physical

	Nominal Value	Unit
1,4-cis Content	90.0	wt%

Elastomers

	Nominal Value	Unit	Test Method
Tensile Stress (300% Strain)	11.2	MPa	ISO 37
Tensile Stress (Yield)	21.6	MPa	ISO 37
Tensile Elongation (Break)	430	%	ISO 37

Additional Information

Oil, KM31: 2 to 5%mass
Volatile Matter, ASTM D5668:0.5%mass
Ash Content, ASTM D5667: 0.1%mass
Stabiliser, KM31: 0.11%mass
Limiting Viscosity Number, KM33: 6.5 to 9.5d/g

Notes

¹ Typical properties: these are not to be construed as specifications.