

KRATON® IR-309

Polyisoprene
Kraton Polymers LLC



Prospector

Product Description

KRATON® IR-309 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 8.0 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-309 polymer are tyres, moulded goods, calendered sheet and speciality products for the electronics industry. This product is not intended for food packaging or food contact applications. KRATON IR-309 polymer is an easy-processing version of KRATON IR-305 polymer and does not require a peptiser. It offers the advantage that it may be mixed directly with pre-masticated natural rubber, while the addition of compounding ingredients is achieved with short Banbury or mill mixing cycles.

General

Material Status	• Commercial: Active
Availability	• Asia Pacific • Europe • North America
Features	• Good Flow • High Molecular Weight • Good Processability • Solvent Resistant
Uses	• Electrical/Electronic Applications • Sheet • General Purpose • 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) 10.4 MPa ISO 37

Tensile Stress (Yield) 21.6 MPa ISO 37

Tensile Elongation (Break) 430 % ISO 37

Mooney Viscosity 40 to 50 MU ASTM D1646

Additional Information

Oil, KM31: 2 to 5%mass
Volatile Matter, ASTM D5668:0.5%mass
Ash Content, ASTM D5667: 0.1%mass
Stabiliser, KM31: 0.1 to 0.3%mass
Limiting Viscosity Number, KM33: 6.5 to 9.5dl/g

Notes

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