

Exxon™ Chlorobutyl 5066

Rubber

Product Description

Exxon™ chlorobutyl 5066 rubber is a chlorinated copolymer of isobutylene and isoprene. Exxon™ chlorobutyl is a trademark designating a series of polymers made by chlorinating isobutylene/isoprene copolymers (butyl).

Key Features

Due to the low amount of chlorine present, chlorobutyl is faster curing than standard butyl, is more heat stable and is more compatible with highly unsaturated rubbers. These polymers constitute a mixture of linear and star-branched molecules which result in processability improvements over standard butyl and chlorobutyl. The most important end uses are in tubeless tire innerliners, pharmaceutical stoppers and mechanical goods.

General

Availability ¹	<ul style="list-style-type: none"> ▪ Africa & Middle East ▪ Asia Pacific 	<ul style="list-style-type: none"> ▪ Europe ▪ Latin America 	<ul style="list-style-type: none"> ▪ North America
Appearance	<ul style="list-style-type: none"> ▪ Uniform, white to light amber in color; free of contamination 		
Form(s)	<ul style="list-style-type: none"> ▪ Bale 		
Revision Date	<ul style="list-style-type: none"> ▪ 02/06/2023 		

Resin Properties

	Typical Value (English)	Typical Value (SI)	Test Based On
Density	0.92 g/cm ³	0.92 g/cm ³	ASTM D297
Mooney Viscosity ² (ML 1+8, 257°F (125°C))	40 MU	40 MU	ASTM D1646 (mod)
Antioxidant (non-staining)	0.05 wt% min	0.05 wt% min	ExxonMobil Method
Chlorine	1.50 wt%	1.50 wt%	ExxonMobil Method
Calcium	0.10 wt%	0.10 wt%	ExxonMobil Method
Water	0.3 wt% max	0.3 wt% max	ExxonMobil Method
Volatiles	< 0.6 wt%	< 0.6 wt%	ASTM D5668 (mod)
Ash	< 0.4 wt%	< 0.4 wt%	ASTM D5667 (mod)

Cure Characteristics (Rheometer)

	Typical Value (English)	Typical Value (SI)	Test Based On
ts ² ³	2.0 min	2.0 min	ASTM D5289
t' ⁵⁰ ³	2.6 min	2.6 min	ASTM D5289
t' ⁹⁰ ³	7.3 min	7.3 min	ASTM D5289
Minimum Torque ³	2.3 dN·m	2.3 dN·m	ASTM D5289
Maximum Torque ³	7.5 dN·m	7.5 dN·m	ASTM D5289

Additional Information

Storage: All inventory must be stored in dry conditions in an enclosed warehouse, protected from contaminants, and outdoor light exposure (including during shipment and transfers). Shipping Policy: 3 years from date of production. Packaging: 34 +/-0.68 kg bales in dispersible EVA film or release film, in metal crates of 36 bales (1224 kgs). For material with dispersible film wrap, Vicat softening point less than or equal to 85°C (ASTM 1525-87).

Legal Statement

For detailed product compliance information, please contact customer Service.

This product is not intended for use in food contact applications.

This product, including the product name, shall not be used or tested in any medical application without prior written acknowledgement of ExxonMobil Chemical as to the intended use.

Exxon™ Chlorobutyl 5066 Rubber

Notes

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

¹ Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete Country Availability.

² MV 2000 or equivalent

³ Rotor less curemeter (cure conditions - 160°C, 30 min; preheat - none; oscillation - 1.7 Hz, Arc ±0.5°), Standard compound : ASTM D3958 (Test Formulation - Exxon™ Chlorobutyl 5066 (100 phr), Carbon black IRB 8 (40 phr), Zinc Oxide IRM 91 (5 phr), Stearic Acid IRM 021 (1 phr), mill mixed compound)

For additional technical, sales and order assistance: www.exxonmobilchemical.com/ContactUs

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