

NEOPRENE WRT & WD

CHLOROPRENE RUBBER

Description:

Neoprene WRT and WD are nonstaining, crystallization-resistant copolymers of chloroprene and 2,3-dichloro-1,3-butadiene. The two types differ only in Mooney viscosity.

Processing and Performance Features:

SUPERIOR LOW-TEMPERATURE PROPERTIES

Neoprene WRT and WD are designed for use in finished products that must remain flexible for long periods at low temperatures. The excellent crystallization resistance of these types helps counteract the increase in rate of crystallization-induced stiffening that is caused by ester plasticizers. Therefore, higher levels of ester plasticizers can be tolerated for increased resistance to thermal stiffening.

BROAD COMPOUNDING LATITUDE

The availability of two viscosity grades in these crystallization-resistant polymers makes it possible to accommodate considerable variation in filler and plasticizer loading while still maintaining workable compound viscosity. Because cure accelerators must be used with these types to achieve practical cure rates, processing safety and cure rates can be varied to suit processing requirements. **Slightly greater amounts of accelerators are required with Neoprene WRT and WD to achieve cure rates comparable to those of Neoprene W and WHV.**

Figure 1. Neoprene Selection Guide

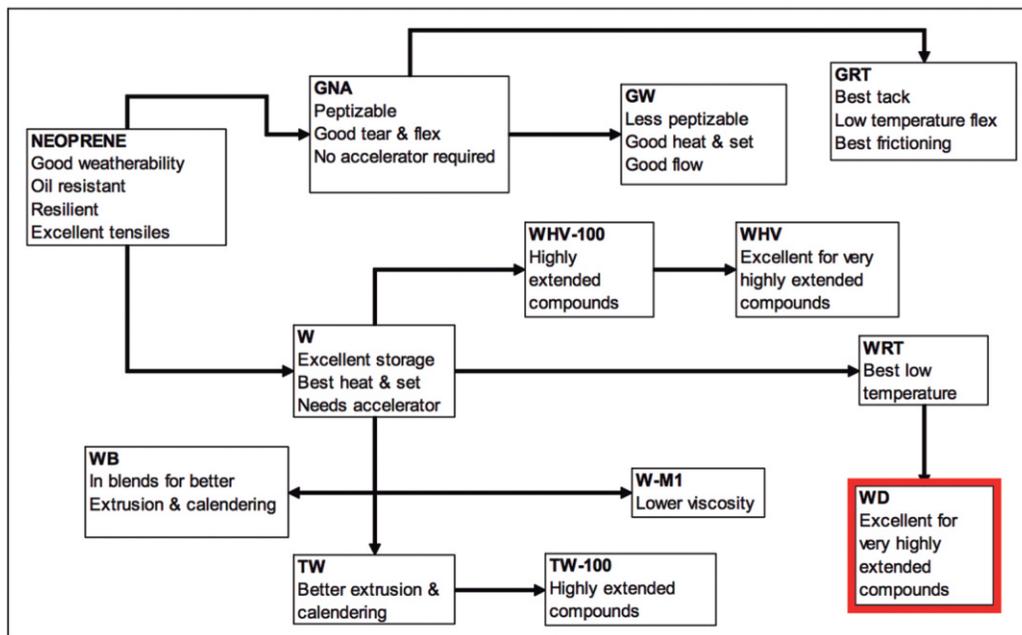


Table 2. Relative Property Comparisons of Neoprene Types

Properties	GW	GNA	GRT	W	W M1	WHV 100	WHV	WRT	WD	WB	TW	TW 100
Raw Polymer												
Crystallization Resistance	VG	G	VG	P	P	P	P	E	E	P	P	P
Extendable	G	G	G	G	G	VG	E	G	E	G	G	VG
Peptizable	G	E	E	P	P	P	P	P	P	P	P	P
Viscosity*	Lo	Lo	Lo	Lo	VLo	M	Hi	Lo	Hi	Lo	Lo	M
Stability	G	G	G	E	E	E	E	E	E	E	E	E
Uncured Compound												
Cure Rate	E	E	E	VG	VG	VG	VG	G	G	VG	VG	VG
Green Strength	VG	G	G	VG	P	E	E	G	E	G	VG	E
Processability	G	G	G	G	G	VG	VG	G	VG	E	E	E
Vulcanizate												
Compression Set Resistance	G	P	P	E	E	E	E	E	E	E	E	E
Good Flex	E	E	E	G	G	G	G	G	G	P	G	G
Good Tear	E	E	E	G	G	G	G	G	G	P	G	G
Heat-Aging Resistance	VG	G	G	E	E	E	E	E	E	E	E	E
Low-Temperature Properties	G	G	VG	G	G	G	G	E	E	G	G	G

Property Rating: E = Excellent, VG = Very Good, G = Good, S = Satisfactory, P = Poor

*Viscosity Rating: Hi = High, M = Medium, Lo = Low, VLo = Very Low