

CariflexTM
Polyisoprene Products

Clear, Colorless and Transparent
Compounds



Cariflex polyisoprene rubber, properly compounded, can be used to produce clear, colorless and transparent rubber parts and sheets. The compounds can be used in application areas such as:

- Transparent shoe soles
- Medical sheets
- Electronic insulation

Cariflex polyisoprene compounds, cured with similar peroxide-based formulations as used for Ziegler-Natta rubber and Natural rubber are clear, colorless and transparent, while Ziegler-Natta and Natural rubber compounds are hazy, translucent or yellow. The lack of (almost no) impurities or gels in Cariflex polyisoprene rubber makes the difference.

Cariflex IR



Ziegler-Natta IR



Natural Rubber



Low temperature formulation

Cariflex IR0307	phr	100
1,1-bis(tert-butylperoxy)cyclohexane	phr	3 - 6
Fumed Silica (pH> 5) ¹⁾	phr	0 - 20
Ethylene glycoldimethacrylate (Activator) ²⁾	phr	4 - 10
Lauric acid	phr	0.5
Antioxidant ³⁾		

High temperature formulation

Cariflex IR-307	phr	100
2,5-dimethyl-2,5-bis(tert-butylperoxy)hexane	phr	1 - 3
Fumed Silica (pH> 5) ¹⁾	phr	0 - 20
Ethylene glycoldimethacrylate (Activator) ²⁾	phr	1 - 6
Lauric acid	phr	0.5
Antioxidant ³⁾		

Vulcanization temperature 160 °C (320 °F)
Vulcanization time 10-15 min

Vulcanization temperature 180 °C (356 °F)
Vulcanization time 10-15 min

Note:

- 1) Fumed silica can be used for increasing the hardness of the compounds.
- 2) Ethylene glycoldimethacrylate can be used in for instance shoe sole applications with the purpose to increase hardness and to improve abrasion.
- 3) Antioxidant packages are necessary if compounds are exposed to UV and/or Heat.

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