

Rhenocure® LDB/C

Specialty and standard chemicals

Function

Ultra accelerator for the vulcanization of natural and synthetic rubber

Product description

Composition:	zinc dibutyl dithiocarbamate (ZDBC), oil coated
Appearance:	white to yellowish powder
Density, 20 °C:	approx. 1.26 g/cm ³
Solubility:	insoluble in petrol (gasoline) and water, soluble in acetone, toluene
Melting point:	ca. 106°C
Physiological properties:	see safety data sheet.

Use

Mode of action: Rhenocure LDB/C causes very rapid vulcanization of natural and synthetic rubbers, e.g. SBR, NBR, and EPDM. The addition of thiuram and thiazole accelerators can retard the curing rate and, hence, increase processing safety. Rhenocure LDB/C has a shorter scorch time and a slower total curing time than Rhenocure L. Basic accelerators have an activating effect on Rhenocure LDB/C.

Rhenocure LDB/C is also used in small amounts for secondary acceleration and activation of mercapto or thiuram accelerators. Rhenocure LDB/C gives the vulcanizates very good tensile and resilience properties. It is recommended to add antioxidants to improve resistance to aging especially of NR and IR.

According regulation XXI of the Bundesamt für Risikobewertung (BfR) the use of zinc-dithiocarbamates is approved in the production of rubber goods which come into contact with food, provided the amount used does not exceed 1.2 parts by weight, calculated on the finished article.

Processing: Rhenocure LDB/C disperses well in rubber. It is not decomposed, even at elevated processing temperatures, as long as no sulfur is present. If, however, only very small additions of zinc-dithiocarbamates are needed, it is advisable to use a batch or mix them with fillers. Zinc oxide must be included in compounds in which zinc-dithiocarbamates are used. Stearic acid has also beneficial effects in compounds containing zinc-dithiocarbamates.

Dosage: In NR:
0.6-1.0 phr; as secondary accelerator: 0.1-0.2 phr

In SBR/NBR:
0.6-1.2 phr; as secondary accelerator: 0.1-0.2 phr

Application: All kinds of mechanical goods, footwear, cables, surgical and hygienic articles, goods which come into contact with foodstuffs, pharmaceuticals or cosmetics, fabric proofings, dipped goods and self-vulcanizing compounds and solutions

Packaging

20 kg paper bags on 500 kg skid

Storage stability

In original closed containers under cool and dry conditions 730 days from date of production

Handling

For additional handling information on Rhenocure LDB/C please consult current safety data sheet.

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