

Poly DNB[®] Rubber Conditioner

Description

LORD Poly DNB[®] rubber conditioner is a dispersion of poly-p-dinitroso benzene (DNB) in wax. It is used as a conditioner for butyl and EPDM compounds to impart age resistance, and improve green strength and processing safety.

Poly DNB conditioner is used in compounds designed to make inner tubes, curing bladders, cements, molded goods, mechanical goods, wire/cable covers, electrical blankets, membranes, hose, tank liners, gaskets, tapes and load bearing pads.

Note: Butyl and EPDM do not undergo significant break-down during high temperature processing and are better suited for use with Poly DNB conditioner than other rubbers.

Features and Benefits

Broad Temperature Range – improves resilience over a broad temperature range, allowing compounds to be used in dynamic applications in which they were previously unsuitable.

Electrically Resistant – improves electrical resistivity; reduces dynamic heat buildup.

Process Enhancer – improves filler dispersion, enhances filler-polymer interaction; improves fabrication properties.

Durable – decreases stress relaxation or creep; improves vibration isolation characteristics.

Typical Properties*

Appearance	Brown, Waxy Chips
Specific Gravity	0.96
Solids Content by Weight, %	99 min
DNB Content, % Weight	21-26
Flash Point, °C (°F)	110 (230)
Chip Size, % 1/2" mesh screen	1.0 max
Ash, %	1.0 max

*Data is typical and not to be used for specification purposes.

LORD TECHNICAL DATA

Application

Compounding/Mixing – The amount of Poly DNB conditioner needed will vary depending on the application. Concentration in butyl inner tube stocks will range from 0.1 to 0.4 phr. Other compounds may require concentration as high as 0.5 to 0.6 phr. With higher concentrations of Poly DNB conditioner, large amounts of filler and plasticizer are used to reduce the nerve of the compound. Since Poly DNB conditioner discolors light stocks, only use it in black formulations.

Poly DNB conditioner is most effective when Banbury temperatures are 135-163°C (275-325°F), and stock temperatures are 154-182°C (310-360°F).

Poly DNB conditioner can be added to the mixer with the polymer alone or with the polymer, zinc oxide and part of the filler. After one or two minutes, the remainder of the filler can be added. Plasticizer, if used, may be added after three to five minutes. Due to high temperature encountered, add sulfur and accelerator during a second cycle operation after the stock has cooled.

Shelf Life/Storage

Shelf life is two years from date of shipment when stored at temperatures below 38°C (100°F) in original, unopened container.

Cautionary Information

Before using this or any LORD product, refer to the Material Safety Data Sheet (MSDS) and label for safe use and handling instructions.

For industrial/commercial use only. Must be applied by trained personnel only. Not to be used in household applications. Not for consumer use.

Values stated in this technical data sheet represent typical values as not all tests are run on each lot of material produced. For formalized product specifications for specific product end uses, contact the Customer Support Center.

Information provided herein is based upon tests believed to be reliable. In as much as LORD Corporation has no control over the manner in which others may use this information, it does not guarantee the results to be obtained. In addition, LORD Corporation does not guarantee the performance of the product or the results obtained from the use of the product or this information where the product has been repackaged by any third party, including but not limited to any product end-user. Nor does the company make any express or implied warranty of merchantability or fitness for a particular purpose concerning the effects or results of such use.

Poly DNB and "Ask Us How" are trademarks of LORD Corporation or one of its subsidiaries.

LORD provides valuable expertise in adhesives and coatings, vibration and motion control, and magnetically responsive technologies. Our people work in collaboration with our customers to help them increase the value of their products. Innovative and responsive in an ever-changing marketplace, we are focused on providing solutions for our customers worldwide ... Ask Us How.

LORD Corporation World Headquarters

111 Lord Drive
Cary, NC 27511-7923
USA

Customer Support Center (in United States & Canada)

+1 877 ASK LORD (275 5673)

www.lord.com

For a listing of our worldwide locations, visit LORD.com.

©2010 LORD Corporation OD DS3014 (Rev.3 12/10)

LORD
AskUsHow™