Neoprene GNA M1 and GNA M2

TECHNICAL INFORMATION – November 2015

A sulfur modified polychloroprene stabilized with a thiuram disulfide and a staining antioxidant. Should not be used in application where resistance to staining or discoloration of finishes is necessary.

Physical Form	Chips
Color	Amber Light yellow to tan
Specific Gravity at 25/4°C, ASTM D7920-66 (1979)	1.23
Mooney Viscosity, ML 1+4 at 212 °F [100 °C] GNA M1 GNA M2	 44 – 52 47 - 59
Crystallization Rate	Medium
Storage Stability	Good. May undergo some viscosity change during storage.

* These data are presented to describe Neoprene GNA and are not intended to serve as specifications.

Processing and Performance Features

- **Moderate Polymer breakdown**
  Neoprene GNA 'breaks down", or softens, under the mechanical shear imposed during mixing to produce smooth-processing compounds. It does no break down quite as rapid as does Neoprene GRT, so its compounds are less sticky and have somewhat less build tack than do compounds of other G types.
- **Fast Cure Rate Without Accelerators**
  Compounds of Neoprene GNA cured with metal oxides alone have excellent processing safety, yet cure rapidly. Although not required, cure accelerators can be used and are advantageous for some applications.
- **Vulcanizates Resistant to Flexing and Other Dynamic Stresses**
  Properly compounded vulcanizates of Neoprene GNA have high resilience, tear strength and flex cracking resistance.

Handling Precautions

Neoprene GNA has no known health hazards. However, it should be handled in accordance with good industrial hygiene pracities. For additional information, read Denka Performance Elastomer LLC reference " Guide for Safety and Handling and FDA Status of Neoprene Solid Polymers", and observed the precautions noted therein.

The information about compounding ingredients used with Neoprene GNA to prepare finished products may present health hazards in handling and use. Before proceeding with any compounding work, consult and follow label directions and handling precautions from supplies of all ingredients. Read and heed the product labels.

Neoprene can accumulate a static charge during shipping, unloading, conveying, or pouring from the bag. To avoid hazards associated with a static electric discharge, provide adequate grounding of equipment and personnel while handling Neoprene GNA in the vicinity of flammable vapors or dusts. See National Fire Protection Association (NFPA) RP77 "Recommended Practice on Static Electric."

Information on European Union Dangerous Preparations Directive 1999/45/EC related to Colophony Skin Sensitizaton

Colophony is classified as a skin contact sensitizer under European Union Dangerous Preparations Directive 1999/45/EC effective July 30, 2002. This Directive requires labeling of products that contain colophony at levels equal to or greater than 0.1% (refer to the Directives for specific details). Solid (dry type) Neoprene adhesives grade products manufactured by Denka Performance Elastomer LLC contain about 4% colophony (CAS No. 8050-09-7). Toxicological tests have demonstrated that dry Neoprene is not a skin sensitizer. Because of this testing, dry Neoprene polymer is not subject to mandatory labeling under the above Directive despite the presence of the colophony. However, when these Neoprene adhesive grade products are dissolved in organic solvents, the colophony may still be present at concentrations up to 0.8% depending on the solids content of the solutions. In the absence of data showing the adhesive is not a skin sensitizer, the adhesive could be subjext to the above EU regulation.

We recommend that manufactures and marketers of adhesive solutions based on Denka Performance Elastomers' Neoprene (dry type) adhesive grade products determine whether the colophony level is above 0.1%. If the manufactured preparation has a colophony content of less than 0.1% it will not be subject to mandatory labeling (provided no other consitituents necessitate mandatory labeling). Manufactured preparations that contain higher colophony contents will require the labeling and/or container notices described in the Directive.

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Caution: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, discuss with your Denka Performance Elastomer customer service representative.

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