

TECHNICAL INFORMATION – November 2015

Denka Neoprene types W, WM1, WHV and WHV-100 are non-staning general-purpose polychloroprenes. The four grades differ only in Mooney viscosity.

| Typical Polymer Properties | |
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| Physical Form | Chips |
| Color | White to silvery grey |
| Specific Gravity at 25/4°C, ASTM D7920-66 (1979) | 1.23 |
| Mooney Viscosity, ML 1+4 at 212 °F [100 °C] | |
| WM1 | 34 - 41 |
| W | 40 – 49 |
| WHV | 106 – 125 |
| WHV100 | 90 – 110 |
| Crystallization Rate | Fast |
| Storage Stability | Excellent. Little or no change in viscosity or scorch charateristics during storage, especially if stored under cool, dry conditions. |

* These data are presented to describe Neoprene W and its various viscosity grades, and are not intended to serve as specifications.

Processing and Performance Features

• Resist Mechanical Breakdown

Neoprene W synthetic rubber and its various viscosity grades do not decrease in molecular weight, either under mechanical shear or with chemical peptization. However, some reductin in viscosity may occur under high shear conditions. The degree of softening is greater for the higher molecular weight polymers, Neoprene WHV and WHV-100.

• Broad Compounding Latitude

The wide range of viscosity available with these polymers makes it possible to accommodate virtually and desired loading of fillers and plasticizers while still maintaining workable compound viscosity. Since cure accelerators must be used with these types of achieve practical cure rates, processing safety and cure rate can be varied to suit processing requirements.

• Optimum Heat and Compression Set Resistance

Neopren W and its viscosiy grades can be compounded to provide the best resistance to heat aging and lowest compression set possible with Neoprene.

Handling Precautions

Neoprene W, WM1, WHV and WHV-100 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 compounding ingredients used with Neoprene W, WM1, WHV and WHV-100 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 W in the vicinity of flammable vapors or dusts. See National Fire Protection Association (NFPA) RP77 "Recommended Practice on Static Electric."

Contact Denka at the following location:

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<u>Caution</u>: 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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