



3770 EMBASSY PARKWAY AKRON, OHIO 44333  
330-535-2100 ♦ 800-321-2260 ♦ FAX 330-535-8947

## ELASTOMERS -NATURAL RUBBER-

### SUPERPOLY

#### PRODUCT DESCRIPTION:

The Superpoly (SP) line of specialty polyisoprene natural rubbers is partially pre-crosslinked, high performance elastomers available in bale form. These elastomers are produced by blending specific proportions of vulcanized and unvulcanized natural rubber during the latex phase of production. The latex phase blending ensures a homogeneous, uniform mix of the two components. Due to their unique two-phase structure, SP natural rubbers are very clean, light in color and contain low levels of volatile matter.

#### TYPICAL PROPERTIES:

<i>Superpoly Grade:</i>	<b>20</b>	<b>40</b>	<b>50</b>
% Vulcanized Rubber	20	40	50
Dirt on 44 μ aperture	0.01	0.01	0.01
Nitrogen Content, %	0.50	0.50	0.49
Volatile Matter, %	0.65	0.65	0.32
MS (1+4) 100°C <sup>1</sup>	75.00 <sup>2</sup>	40.00	50.00
Initial Wallace Plasticity (Po) <sup>1</sup>	30.00	40.00	---
Total Sulfur, %	0.50	1.00	1.15
Free Sulfur, %	0.08	0.25	0.25

<sup>1</sup> at time of production, <sup>2</sup> ML (1+4) 100°C

#### APPLICATIONS:

Superpoly natural rubbers are used in quality formulations as either the sole elastomer or as a blend (process aid) with other natural or synthetic elastomers. These natural rubbers have the ability to improve flow characteristics and increase mix viscosities which are advantageous properties to mixing, preforming and molding rubber. For extruded goods, SPs create fast throughput, low die swell, smooth surfaces and increase dimensional stability. Applications include: wiper blades, tubing, hoses, sponge, surgical articles, gaskets, windscreen seals, etc. For calendered parts, SPs reduced shrinkage and improve surface finish and gauge consistency. Uses include: sheeting, tape, cut threads, railway pad ballast, etc. With the use of SPs, molded goods benefit with less air and volatile entrapment (blisters), gauge consistency, surface appearance, etc. SP-20S is a special grade used in solvent adhesive systems to develop body, resistance to cold flow, and high temperature resistance. This grade has the special ability to maintain a lower solution viscosity compared to a conventional natural rubber with the same mooney viscosity and concentration; thus, higher solids levels are possible with the same viscosity.

jh 0900, t-superpoly

Included with its product literature and upon the request of its customers, Akrochem provides product specifications and evaluations, suggested formulations and recommendations and other technical assistance, both orally and in writing (collectively the "Technical Information"). Although Akrochem believes all Technical Information to be true and correct, it makes no warranty, either express or implied, as to the accuracy, completeness, or fitness of the Technical Information for any intended use, or the results which may be obtained by any person using the Technical Information. Akrochem will not be liable for any cost, loss or damage, in tort, contract or otherwise, arising from customer's use of Akrochem products or Technical Information. It is the customer's sole responsibility to test the products and any Technical Information provided to determine whether they are suitable for the customer's needs. Before working with any product, the

customer must read and become familiar with available information concerning its hazards, proper use, storage and handling, including all health, safety, and hygiene precautions recommended by the manufacturer. Nothing in the Technical Information is intended to be a recommendation to use any product, method, or process in violation of any intellectual property rights governing such product, method, or process. No license is implied or granted by Akrochem as to any such product, method, or process. AKROCHEM CORPORATION DISCLAIMS ANY AND ALL WARRANTIES, EXPRESS AND IMPLIED, INCLUDING WITHOUT LIMITATION, WARRANTIES OF MERCHANTABILITY AND FITNESS FOR ANY PARTICULAR PURPOSE, RELATED TO ANY PRODUCTS OR TECHNICAL INFORMATION PROVIDED BY AKROCHEM.