NORTH METAL & CHEMICAL COMPANY

***World Class* Molybdenum & Tungsten Compounds**

Since 1921

POLYMER

Technical Bulletin

NORTH*QUEST* 5000

About us.....

- Founded in York, PA in 1921, NM&C remains a financially stable, family owned producer of *World Class* Molybdenum & Tungsten compounds serving the Metal Finishing, Agriculture, Water Treatment, Pigment, and Antifreeze markets worldwide.
- NM&C maintains over $2 million inventory of finished goods and ore concentrates to guarantee our customers a stable and secure source of molybdate in the event of a crisis or shortage.
- All orders for one drum to truckload quantities are shipped the next business day or as requested.
- NM&C molybdates are American Made and backed by full 'Cradle-to-Grave' product liability.
- NM&C is unrivaled in customer service and technical support.
- Strict Quality Assurance programs and ISO 9002 practices assure products of the highest quality and consistency.

AWT ASSOCIATION OF WATER TECHNOLOGIES

Description: North*Quest* 5000 is a low molecular weight carboxylate sulfonate terpolymer. It can be used in water treatment formulations to control calcium carbonate and calcium phosphate deposition even in the presence of heavy metals. North*Quest* 5000 is able to hold high levels of ortho phosphate in solution even at a pH of 9.0. This property enables operating cooling water systems at alkaline pH to minimize corrosion without having phosphate deposits. North*Quest* 5000 has very high dispersing properties towards silt, clay, silica and metal oxides.

Technical Specifications: (Carboxylate/Sulfonate/Maleic Terpolymer)

Appearance	Amber Color, Clear Liquid
Nature	Carboxylate/Sulfonate/Maleic Terpolymer
Molecular weight	5000
Solid content, % wt.	44.0% min
pH Value (1% solution)	1.5 - 3.0
Specific Gravity @ 25º C	1.15 - 1.25
Viscosity; Brookfield @ 25º C, cps	500 cps max
KOH Acidity; (mg KOH/mL)	500 mg max.

APPLICATIONS: North*Quest* 5000 provides excellent dispersions due to Sulphonate, carboxylate and maleic groups. These different groups offer different properties such as adsorption on the particle, ionic repulsion and static repulsion resulting in prevention of settling. High iron and silica tolerance.

PACKAGING: Available in 250kg. (551.15 lb.) non-returnable drums.

SAFETY: Refer to MSDS for precautions.

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NORTH*QUEST* 5000 - Technical Data Sheet

The information contained herein is based on the data available to us and is believed to be accurate as of the date prepared however, North Metal & Chemical Co. makes no warranty, expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof.