



NORTH METAL & CHEMICAL COMPANY

World Class Molybdenum & Tungsten Compounds

Since 1921

POLYMER

Technical Bulletin

NORTHQUEST 499 - Technical Data Sheet

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.



NORTHQUEST 499

Description: NorthQuest 499 is a low molecular weight, multifunctional, organic terpolymer for deposit control in industrial water treatment. NorthQuest 499 is a unique combination of five monomers comprised of various properties for inhibiting calcium carbonate, calcium phosphate, iron oxide and particle dispersancy with corrosion inhibition properties with low phosphorous content 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. 499 has very high dispersing properties towards silt, clay, silica and metal oxides.

Technical Specifications: (Ter-Polymer)

Appearance	Yellow color, clear liquid
Mol. Wt.	5000
pH (neat) @ 25° C	1.5—2.0
Density @ 25° C	1.20 ±0.05 gm/cc
Viscosity, cps @ 25° C Brookfield	100—200 cps
Total Solids, (%)	48.5 ±1.5%
Solubility in Water	Complete

APPLICATIONS: NorthQuest 499 provides excellent dispersions due to multifunctional groups and low phosphorous contents. Excellent thermal and chemical stability offering increased shelf life with high iron and silica tolerance.

PACKAGING: Available in 551.15 lb. (250 Kg) drums.

SAFETY: Refer to MSDS for precautions.



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