



**NORTH METAL & CHEMICAL COMPANY**  
*World Class Molybdenum & Tungsten Compounds*  
 Since 1921

POLYMER

NORTH QUEST 2000 / AR545 - Technical Data Sheet

TBS\_051909

# Technical Bulletin

## NORTHQUEST 2000/AR545

**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.



**Description:** NorthQuest 2000/AR545 is a low molecular weight Carboxylate Sulphonate Copolymer. Due to the presence of strong acid (sulfonate) and weak acid (carboxylate) functional groups, NORTHQUEST 2100/AR545 shows optimal scale inhibition efficiency through solubility enhancement by threshold effect, crystal modification and higher dispersing activity. It is designed to provide superior stabilization of Calcium Phosphate and demonstrates excellent stabilization of Zinc and Calcium Carbonate.

**Features:**

- Excellent calcium phosphate inhibition
- Moderate calcium carbonate inhibition
- Excellent zinc stabilization
- High Iron tolerance
- Excellent thermal & chemical stability
- Widely used in cooling water for phosphate/zinc or all organic based treatment programs.

**Technical Specifications:** (Copolymer of acrylic acid/AMPS )

Appearance	Clear colorless to pale yellow liquid
Nature	Acidic
pH (neat)	3.00—4.00
Specific Gravity @ 25° C	1.18—1.20
Viscosity @ 25° C, cps	100 cps
Molecular weight	≈ 4500
Total Solids (%)	≈ 43

**APPLICATIONS:** NorthQuest 2000/AR545 is widely used in Cooling Water for phosphate/zinc or all organic based treatment programs. It works as a strong dispersant, holding silt and other suspended solids in suspension and preventing fouling. 2000/AR545 has a synergistic effect with other additives in preventing scale as well as corrosion. It provides superior Iron tolerance in the presence of soluble Iron in the system.

**PACKAGING:** Available in 551.15 lb. drums.

**SAFETY:** Refer to MSDS for precautions.



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