



# NORTH METAL & CHEMICAL COMPANY

World Class Molybdenum & Tungsten Compounds

Since 1921

NQ5660

## Technical Bulletin

### NorthQuest 5660 (HEDP-Na<sub>4</sub>)

#### 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 5660 is the Sodium Salt of HEDP. Primarily used as a scale and corrosion inhibitor, targeting calcium carbonate, it is highly stable in boilers and cooling towers, even in the presence of halogens. As a non-hazardous phosphonate, NorthQuest 5660 is easy to transport and apply; it will not freeze and performs in temperatures up to 250 degrees Celsius.

**Technical Specifications:** Tetra Sodium Salt of 1-Hydroxy Ethylidene-1,1-Diphosphonic Acid (CAS No. 3794-83-0) Molecular Formula: C<sub>2</sub>H<sub>4</sub>O<sub>7</sub>P<sub>2</sub>Na<sub>4</sub> Molecular weight: 294

Form	White Powder
Active content as HEDP; % wt	57.0 - 62.0 (60 typical)
Total active content as Na <sub>4</sub> salt; % wt	80.0 - 87.0 (86 typical)
Moisture content; % wt	7.0 - 11.0 (8 typical)
pH (1% solution)	11.0 - 12.0 ( 11.2 typical)
Iron (Fe) content; ppm	< 50 (6 ppm typical)
Chloride (Cl); % wt.	1.0% max.

**Application:** NorthQuest 5560 is used as scale and corrosion inhibitor, deflocculant, sequestant, water stabilizer in water treatment pipeline, detergent under high temperature and high pH value

**Packaging:** Available in 55 lb. bags.

**Shelf Life:** At least one year when properly stored in unopened container.

**Safety:** Dust may cause burning, drying, itching and other discomfort, resulting in reddening of the eyes. Exposure to the respirable dust may cause respiratory tract and lung irritation. Refer to MSDS for additional precautions.



NORTH METAL & CHEMICAL CO.  
P.O. Box 1985, 609 E. King St.  
York, PA 17402

Phone: (717) 845-8646

FAX: (717) 846-7350

Email: north@nmc-nic.com

Web: www.nmc-nic.com



