



NORTH METAL & CHEMICAL COMPANY

World Class Molybdenum & Tungsten Compounds

Since 1921

Technical Bulletin

Hydroxyphosphono Acetic Acid (HPA)

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: HPA (Hydroxyphosphono Acetic Acid) is a viscous dark brown, 50% active solution that is soluble in water, ethylene, methanol, and 50% caustic soda.

Technical Specifications:

(CAS No. 23783-26-8)

Element	Specification
Form	Brown viscous liquid
Odor	Slight
Solids content; % wt.	50% Min.
Specific Gravity	1.32 - 1.42
Phosphonate; % wt	30% Min.
Phosphorous Acid; % wt.	3% Max.
Phosphoric Acid, % wt.	2% Max.
Freezing point	-5° C (22° F)
pH of 1% Solution	2 Max.

Applications: HPA is an organic corrosion inhibitor for mild steel in cooling water treatment programs.

Packaging: Available in 250 Kg (551.16 lbs.) drums.

Safety: HPA is corrosive to the skin and eyes. Refer to MSDS for additional precautions.



NORTH METAL & CHEMICAL CO.
P.O. Box 1904, 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