



NORTH Metal and Chemical Co.

1. Company Identification and Product Hazard Overview:

Product Name : NorthQuest 4450; Homopolymer of acrylic acid
Synonyms : Polyacrylic acid
Recommended Use : Dispersant Polymer
Manufactured for : NORTH Metal and Chemical Company
P. O. Box 1985 609 E. King St.
York, PA USA 17403 York, PA USA 17403
Tel: 717-845-8646 Fax: 717-846-7350
Email: north@nmc-nic.com Website: www.nmc-nic.com

In Case of Emergency: Call CHEMTREC (24H): 1-800-424-9300

2. Hazard Identification:

GHS Classification:

This product is not hazardous per the Globally Harmonized System of Classification and Labelling (GHS).

Other Hazards:

No data available

3. Composition/Information on Ingredient:

Chemical Name : NorthQuest 4450; 2-Propenoic acid, homopolymer, sodium salt
Chemical Family : Acrylic Homopolymer
Chemical Formula : Not applicable

Substance:	CAS Number:	Hazard	Compo. (%)
2-Propenoic acid, homopolymer, sodium salt	9003-01-4	See section 2	>= 40.0 — < 50.0%

4. First Aid Measures:

General Advice: : Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Eyes : Rinse with plenty of water. If eye irritation persists, consult a specialist.

Skin : Wash with water and soap as a precaution. If skin irritation persists, call a physician.

Ingestion : Drink 1 or 2 glasses of water. Consult a physician if necessary. Never give anything by mouth to an unconscious person.

Inhalation : Move to fresh air

Note to Physician : Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

PPE for first responders : Gloves and safety goggles are highly recommended.

5. Fire Fighting Measures:

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: Not applicable

Special hazards arising from the substance or mixture

Hazardous combustion products: No data available

Unusual Fire and Explosion Hazards: Material can splatter above 100C/212F. Dried product can burn.

Advice for firefighters Fire Fighting Procedures: No data available

Special protective equipment for firefighters: Wear self-contained breathing apparatus and protective suit

6. Accidental Release Measures:

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Keep people away from and upwind of spill/leak. Material can create slippery conditions.

Environmental precautions: CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water

Methods and materials for containment and cleaning up: Contain spills immediately with inert materials (e.g., sand, earth). Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

7. Handling and Storage:

Precautions for safe handling: Monomer vapors can be evolved when material is heated during processing operations. See SECTION 8, for types of ventilation required.

Conditions for safe storage: Keep from freezing - product stability may be affected. STIR WELL BEFORE USE.

Storage stability

Storage temperature: 1 - 49 °C

8. Exposure Controls and Personal Protection:

Exposure controls

Engineering controls: Use local exhaust ventilation with a minimum capture velocity of 150 ft/min. (0.75 m/sec.) at the point of dust or mist evolution. Refer to the current edition of "Industrial Ventilation: A Manual of Recommended Practice" published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Protective measures: Facilities storing or utilizing this material should be equipped with an eyewash facility.

Individual protection measures

Eye/face protection: Safety glasses with side-shields Eye protection worn must be compatible with respiratory protection system employed.

Skin protection/Hand protection: The glove(s) listed below may provide protection against permeation. (Gloves of other chemical-resistant materials may not provide adequate protection): Neoprene gloves

Respiratory protection: A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. For dust or mist up to 5 times the exposure limit, wear a properly fitted NIOSH approved (or equivalent) single use N95 filtering facepiece. If oil mist is present, wear a single use R95 or P95 filtering facepiece.

8. Exposure Controls and Personal Protection:

Exposure Limits: It contains no known hazardous ingredients. No specific occupational exposure limit has been established.

	Regulation	Type of Listing	Value/Notation
Product	Dow IHG	TWA Respirable Fraction	0.5 mg/m3

9. Chemical and Physical Properties:

Appearance	: Clear to hazy liquid	Decomposition Temp.	: > 230.00 °C
Odor	: Mild Odor	Evaporation Rate	: <1.00 Water
Odor threshold	: Not available	Flammability	: Not flammable
Color	: Colorless	Upper Explosive Limit	: Not available
pH (1% Soln.)	: 6.5-7.0	Vapor Pressure	: 2,266.480800 Pa @20°C Water
Melting Point	: > 0°C Water	Vapor Density	: 1.2400
Freezing Point	: < 0°C	Specific Gravity	: 1.26 - 1.36
Boiling Range	: 100.00 °C	Solubility	: Soluble in water
Flash Point	: Noncombustible	Molecular Weight	: N/A
Viscosity (mPa.s)	: 1000 max		

10. Stability and Reactivity:

Reactivity:	No data available
Chemical stability:	No data available
Possibility of hazardous reactions:	None known. Product will not undergo polymerization. Stable.
Conditions to avoid:	No data available
Incompatible materials:	There are no known materials which are incompatible with this product.
Hazardous decomposition products:	Carbon Monoxide, Carbon Dioxide

11. Toxicological Information:

Acute toxicity

Acute oral toxicity

LD50, Rat, > 5.000 mg/kg

Acute dermal toxicity

LD50, Rabbit, > 5.000 mg/kg

Acute inhalation toxicity

Product test data not available. Refer to component data.

11. Toxicological Information continued:

Skin corrosion/irritation

Slight irritation

Serious eye damage/eye irritation

Slight irritation

Sensitization

Did not cause allergic skin reactions when tested in guinea pigs. For respiratory sensitization: No relevant data found.

Specific Target Organ Systemic Toxicity (Single Exposure)

Product test data not available. Refer to component data.

Specific Target Organ Systemic Toxicity (Repeated Exposure)

Product test data not available. Refer to component data.

Carcinogenicity

Product test data not available. Refer to component data.

Teratogenicity

Product test data not available. Refer to component data.

Reproductive toxicity

Product test data not available. Refer to component data.

Mutagenicity

Ames mutagenicity: Negative

Aspiration Hazard

Product test data not available. Refer to component data.

COMPONENTS INFLUENCING TOXICOLOGY:

2-Propenoic acid, homopolymer, sodium salt

Acute inhalation toxicity:

The LC50 has not been determined.

Specific Target Organ Systemic Toxicity (Single Exposure) :

Available data are inadequate to determine single exposure specific target organ toxicity.

Specific Target Organ Systemic Toxicity (Repeated Exposure):

No relevant data found.

Carcinogenicity :

No relevant data found.

Teratogenicity:

No relevant data found.

Reproductive toxicity:

No relevant data found.

Aspiration Hazard:

Based on physical properties, not likely to be an aspiration hazard.

12. Ecological Information:

Ecotoxicological information appears in this section when such data is available.

Ecotoxicity

Acute toxicity to fish

LC50, Oncorhynchus mykiss (rainbow trout), 96 Hour, 700 mg/l, OECD Test Guideline 203

LC50, Bluegill sunfish (Lepomis macrochirus), 96 Hour, >1.000 mg/l, OECD Test Guideline 203

LC50, Zebra fish (Danio/Brachydanio rerio), 96 Hour, >200 mg/l, OECD Test Guideline 203

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, >1.000 mg/l, OECD Test Guideline 202

Acute toxicity to algae/aquatic plants

EC50, Algae, 96 Hour, Growth rate, >180 mg/l, OECD Test Guideline 201

Persistence and degradability

2-Propenoic acid, homopolymer, sodium salt

Biodegradability: No relevant data found.

Bioaccumulative potential

2-Propenoic acid, homopolymer, sodium salt

Bioaccumulation: No relevant data found

Mobility in Soil

2-Propenoic acid, homopolymer, sodium salt

No relevant data found.

Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Other adverse effects

2-Propenoic acid, homopolymer, sodium salt

This substance is not on the Montreal Protocol list of substances that deplete the ozone layer

13. Disposal Considerations:

Disposal methods: For disposal, incinerate or landfill at a permitted facility in accordance with local, state, and federal regulations.

14. Transport Information:

Classification for ROAD and Rail transport:

Not regulated for transport

Classification for SEA transport (IMO-IMDG):

Not regulated for transport

Transport in bulk according to

Annex I or II of MARPOL 73/78 and the IBC or IGC Code:

Consult IMO regulations before transporting ocean bulk

Classification for AIR transport (IATA/ICAO):

Not regulated for transport

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. Regulatory Information:

US. Toxic Substances control Act (TSCA): All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

16. Other Information:

HMIS and NFPA Rating Scale:

HMIS: Hazardous Materials Identification System

Numeric Scale for Health (Blue), Flammability (Red), and Physical Hazard (Yellow):

HMIS Rating:*

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	A

RATING	HEALTH	FIRE HAZARD	PHYSICAL HAZARD
0	No significant risk to health	Will not burn	Product stable under ambient temperature and condition.
1	Can cause irritation or minor reversible	Must be preheated to burn	Product can become unstable at high temperatures and pressures.
2	Can cause temporary or residual injury	Ignites when moderately heated	Product can become unstable and cause violent chemical reaction at normal pressures and temperatures
3	Can cause serious injury	Ignition occurs at normal temperature	Product capable of forming explosive mixtures and is capable of detonation in presence
4	Can be lethal from single or repeated exposure.	Extremely flammable	Product is highly explosive and unstable. Exothermic reactions possible with decomposition, polymerization, reaction with water or self reaction

Revision Date: November 9, 2018

Reason for revision: Added additional information to Section 9