



North Metal and Chemical Company

1. Company Identification and Product Hazard Overview:

Product Name : NorthQuest 200; Homopolymer of maleic acid; Polymaleic acid; Hydrolyzed Polymaleic Anhydride

Recommended Use : Scale deposit control and dispersing agent for use in industrial water treatment programs.

Manufactured for : **NORTH Metal and Chemical Company**
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In Case of Emergency: Call CHEMTREC (24H): 1-800-424-9300

2. Hazard Identification:

GHS Classification:

- Acute Toxicity, Oral (Category 5)
- Acute Toxicity, Inhalation (Category 5)
- Skin Corrosion (Category 2)
- Skin Sensitization (Category 1)
- Eye Damage (Category 2A)
- Acute Aquatic Toxicity (Category 4)
- Physical, Corrosive to Metals (Category 1)

Signal Word: WARNING

Pictogram: Corrosive, Acute Toxicity



Hazard Statements:

- H290** : May be corrosive to metals
- H317** : May cause allergic skin reaction
- H315** : Causes skin irritation
- H319** : Causes serious eye irritation
- H303** : May be harmful if swallowed
- H333** : May be harmful if inhaled
- H412** : May cause long lasting harmful effects to aquatic life

Precautionary Statements:

- P261** : Avoid breathing fumes/mist/vapors/spray
- P280** : Wear protective gloves/protective clothing/eye protection/face protection.
- P303 + P353 + P363** : IF ON SKIN OR HAIR: Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
- P305 + P351 + P338** : IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present
- P304 + P340 + P310** : IF INHALED: Remove person to fresh air and keep in position comfortable for breathing and easy to do. Continue rinsing.
- P301 + P330 + P331** : IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
- P309 + P310** : IF exposed or if you feel unwell: Immediately call a POISON CENTER or doctor/physician.
- P403 + P235 + 234** : Store in a well-ventilated place. Keep cool. Keep in original container
- P273 + P405** : Avoid release to the environment. Store Locked Up.
- P501** : Dispose of contents/container in accordance with local/state/federal regulations.

3. Composition/Information on Ingredient:

Chemical Name : **NorthQuest 200**: Polymaleic acid; Homopolymer of maleic acid, Hydrolyzed polymaleic anhydride
Chemical Family : Maleic based homopolymer.
Chemical Formula/ Structure : N/A

Substance:	CAS Number:	Hazard	Compo. (%)
Polymaleic acid	26099-09-2	Skin Corr./Serious Eye Damage	Proprietary
Water	7732-18-5	—	Proprietary

4. First Aid Measures:

Eyes : Flush skin with running water for at least fifteen minutes. Remove any contact lenses. If irritation persists, get medical aid.
Skin : Remove contaminated clothing. Flush skin with running water for fifteen minutes. If irritation persists, get medical aid.
Ingestion : If the product is swallowed, call doctor/physician/poison center. Never give anything by mouth to an unconscious person.
Inhalation : If safe to do so, remove individual from further exposure. Keep warm and at rest. If cough or other symptoms develop, call doctor/poison center immediately.
PPE for first responders : Gloves and safety goggles are highly recommended.

5. Fire Fighting Measures:

Flash Point (°C) : Above 143°C.
Flammable Limits : Not applicable.
Auto ignition Temp. : Not applicable.
Flammable Class : Not applicable.
Flame Propagation or Burning Rate of Solids : Not available.
General Hazard : Evacuate personnel downwind in-order to avoid inhalation of irritating and/or harmful fumes and smoke.
Extinguishing Media : Water spray, fog or mist, chemical-type foam, carbon dioxide, or dry powder. **Do not use a high power water jet.**
Hazardous Combustion Products : **Carbon monoxide and carbon dioxide.**
Unusual Fire or Explosion Hazards : Material can splatter at 100°C/212°F. Cool exposed containers with water spray to prevent over heating. Dry residue of the product may also burn.
Fire Fighting Procedures: This product is a non-flammable substance. However, hazardous decomposition and combustion products such as carbon oxides are formed if product is burning. Cool exposed containers with water spray to prevent over heating.
Fire Fighting Equipment: Respiratory and eye protection are required for fire fighting personnel. Full protective equipment (bunker gear) and self-contained breathing apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. Evacuate area and fight fire from safe distance or a protected location. Move fire-exposed containers, if allowable without sacrificing the safety of the firefighters. If possible, firefighters should control run-off water to prevent environmental contamination.
Sensitivity to Static Discharge : Not sensitive.
Sensitivity to Mechanical Impact : Not sensitive.

6. Accidental Release Measures:

Protective Gear for

Personnel:

For Small Spill : Safety glasses or chemical splash goggles, chemically resistant gloves (rubber/latex), chemically resistant boots, and any appropriate body protection to minimize direct contact to the skin.

For Large Spill : Triple gloves (rubber and nitrile over latex), chemical resistant suit, boots, hard hat, full face mask/an air purifying respirator (NIOSH approved). Self contained breathing apparatus must be worn in situations where fumigant gas generation and low oxygen levels are a consequence of contamination from the leak.

Spill Clean-up

Procedures:

For Small Spill : In the event of a small spill, the leak should be contained with an absorbent pad and placed in a properly labeled waste disposal container immediately. Clean the spill area with water. Do not let chemical/spill waste enter the environment.

For Large Spill : In the event of a large spill, contain the spill immediately and dispose according to state, federal, and local hazardous waste regulation. Do not let chemic/spill waste enter the environment.

Environmental

Precaution

: Water spill: use appropriate containment to avoid run off or release to sewer or other waterways.

Land spill: use appropriate containment to avoid run off or release to ground.

General precaution: remove containers of strong acid and alkali from the release area.

Release Notes

: If spill could potentially enter any waterway, including intermittent dry creeks, contact local authorities.

7. Handling and Storage:

Handling

: Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Do not inhale vapor or mist. Use with adequate ventilation. For industrial use only! Keep away from sources of ignition. Handle in a manner consistent with good industrial/manufacturing techniques and practices. Wash hands thoroughly with soap and water after use. Remove contaminated clothing and protective equipment before entering eating areas.

Storage

: Store in a cool, dry well-ventilated area. Keep containers closed when not in use. Keep product isolated from incompatible materials/conditions. Keep only in original container. Do not store with sulfite, nitrites, or bases. Keep away from food, drink, and animal feeding.

8. Exposure Controls and Personal Protection:

Engineering Controls

: Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Eye wash facilities and emergency shower must be available when handling this product.

Personal Protective

Equipment

: **Eyes and face:** Wear safety glasses with side shields or goggles when handling this material.

Skin: Avoid direct contact with skin. Wear rubber gloves, apron, boots or whole bodysuit when handling this product.

Respiratory: Avoid breathing vapor or mist. Use NIOSH approved respiratory protection equipment when air borne exposure is excessive. If used, full face-piece replaces the need for face shield and/or chemical goggles. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application.

Work Hygienic Practices : Facilities storing or using this material should be equipped with emergency eyewash, and a safety shower. Good personal hygiene practices should always be followed.

Exposure Limits:

Substance:	CAS No.:	OSHA STEL	OSHA PEL	ACGIH TLV	ACGIH STEL
Polymaleic acid	26099-09-2	N/A	N/A	N/A	N/A

9. Chemical and Physical Properties:

Appearance	: Transparent Liquid	Decomposition Temp.	: Not available
Odor	: Characteristic	Evaporation Rate	: Not available
Odor threshold	: Not available	Flammability	: Not flammable
Color	: Yellow to Amber Liquid	Upper Explosive Limit	: Not available
pH	: 2.0 - 3.0 (1% Solution in water)	Vapor Pressure	: 3.2 kPa @ 25 °C (Water)
Melting Point	: > -5°C	Vapor Density	: Not available
Freezing Point	: < -5 °C	Specific Gravity	: 1.18 - 1.24
Boiling Range	: 100 to 102°C	Solubility	: Soluble in water
Flash Point	: > 143 °C	Partition Coefficient	: Not available
Viscosity (cPs) @ 25 °C	: 10 - 30	Auto Ignition Temp.	: Not available

10. Stability and Reactivity:

Stability	: The product is stable under normal ambient conditions of temperature and pressure. Protect from freezing
Polymerization	: Will not occur
Hazardous Decomposition Products	: Carbon monoxide and carbon dioxide.
Incompatible Materials	: Strong alkalis, amines, nitrites, sulfites, reducing agents, oxidizing and reducing agents.
Conditions to Avoid	: Avoid exposure to extreme temperatures, contact with incompatible chemicals, uncontrolled contact with accelerants.

11. Toxicological Information:

Acute Toxicity Data:

Oral LD ₅₀	: 12,500 mg/kg
Dermal LD ₅₀	: No data available
Inhalation LD ₅₀	: No data available

Corrosion/Irritation:

Skin	: Rabbit, Moderately irritating
Eyes	: Rabbit, irritant—Corrosive to eyes

Sensitization:

Respiratory	: Irritating to respiratory system
Skin	: Irritating to skin

Carcinogenicity	: Not listed
Mutagenicity	: No data available.
Reproductive Effects	: No data available.
Teratogenic Effects	: No data available.

Routes of Exposure : Eyes, Skin, Inhalation, Ingestion

Long Term Exposure Health Effects:

Eyes	: Can cause severe damage to the eyes if exposure is prolonged.
Skin	: Can cause significant irritation if exposure is prolonged.
Inhalation	: Can lead to coughing, nasal congestion, tightness of chest and /or shortness of breath.
Ingestion	: Can lead to possible nausea or vomiting.

12. Ecological Information:

All work practices must be aimed at eliminating environmental contamination. Do not allow undiluted product or large quantities to enter ground water or sewage systems. Release of large amounts of this product into aquatic environments may lead to a decrease in pH, which can be harmful to aquatic organisms.

Aquatic Toxicity:

Information about CAS No. 26099-09-2:

Fish Toxicity: LC50 *Oncorhynchus mykiss*: >100 mg/L/96 h

Daphnia Toxicity: EC50 *Daphnia magna* (Big Water Flea): >1000 mg/L/48 h

Respiratory inhibition test, applied on activated sludge: IC50: >1000 mg/L

Information about CAS No. 110-16-7:

Daphnia Toxicity: EC50 *Daphnia magna* (Big Water Flea): 316,2 mg/L/48 h

Fish Toxicity: LC50 *Pimephales promelas* (fathead minnow): 5 mg/L/96 h. Source Ecotox Database

Persistence and Degradability:

Information about CAS No. 26099-09-2:

Zahn-Wellens test: 18%/35 d (OECD 302B)

Bioaccumulation is unlikely

Information about CAS No. 110-6-7:

Biodegradation: 92%/20 d

Product is readily biodegradable

Additional Ecological information:

Chemical oxygen demand (COD): (CAS No. 26099-09-2) 650 mg/L

13. Disposal Considerations:

Disposal Method : Dispose of waste at an appropriate waste disposal facility according to current applicable laws and regulations.

For Large Spills : Contain material and call local authorities for emergency assistance.

Product Disposal : Dispose of at a supervised incineration facility or an appropriate waste disposal facility according to current applicable local, state and federal laws, regulations and product characteristics at time of disposal.

Empty Container : Contaminated container should be labeled and disposed in accordance to local, state and federal laws and regulations.

14. Transport Information:

Regulatory Information	UN No.	Proper Shipping Name	UN Class	Packing Group	Label
US DOT	3265	Corrosive Liquid (Polymaleic Acid), Acidic, Organic, N.O.S.	8	III	CORROSIVE
IMDG	3265	Corrosive Liquid (Polymaleic Acid), Acidic, Organic, N.O.S.	8	III	CORROSIVE
IATA	3265	Corrosive Liquid (Polymaleic Acid), Acidic, Organic, N.O.S.	8	III	CORROSIVE

15. Regulatory Information:

U.S. Federal Regulations:

TSCA: All components of this product are listed on the TSCA inventory. 2-Butenedioic acid (2Z)-, homopolymer (26099-09-2) [48-52%]

Reportable Quantity (5000 lbs), Maleic Acid (110-16-7) [<5%] CSWS, MASS, PA, TSCA, CERCLA, TXAIR

SARA TITLE III (EPCRA) Section 302/304: No components of this product were found to be on the hazardous chemicals list.

SARA TITLE III (EPCRA) Section 311/312: Acute health hazard.

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	3
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	C

RATING	HEALTH	FIRE HAZARD	PHYSICAL HAZARD
0	No significant risk to	Will not burn	Product stable under ambient temperature
1	Can cause irritation or minor reversible injury.	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 of strong initiating source.
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

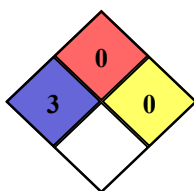
Personal Protection Code C: Gloves + Safety Goggles + Apron

NFPA: National Fire Protection Association

Numeric Scale for Health (Blue), Fire Hazard (Red), and Reactivity (Yellow):

Special (White): None

NFPA Rating:*



RATING	HEALTH	FIRE HAZARD	REACTIVITY
0	Minimal Hazard	Will not burn	Normally Stable
1	Can cause significant irritation	Must be preheated to burn	Unstable at high temperatures
2	Can cause temporary incapacitation or residual injury	Ignites when moderately heated	Normally unstable. Can readily go under violent chemical reaction but do not detonate.
3	Can cause permanent injury.	Ignition occurs at normal temperature	Capable of detonation, or of explosive reaction, but requires a strong ignition source.
4	Can be lethal.	Extremely flammable	May explode at normal temperatures and pressures

Revision Date: November 5, 2018

Reason for Revision: Added additional information to Section 9

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