



NORTH Metal and Chemical Co.

1. Company Identification and Product Hazard Overview:

Product Name : NorthQuest 5410; Polyacrylic Acid Na Salt
Synonyms : Poly (acrylic acid sodium salt) Powder
Recommended Use : Used as a scale inhibitor and dispersing agent in industrial water treatment and detergent programs.
Manufactured for : NORTH Metal and Chemical Company
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York, PA USA 17405 York, PA USA 17403
Tel: 717-845-8646 Fax: 717-846-7350
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In Case of Emergency: Call CHEMTREC (24H): 1-800-424-9300

2. Hazard Identification:

GHS Classification:

Eye Damage/irritation (Category 2)

Skin Corrosion/Irritation (Category 3)

Signal Word: WARNING

Pictograms: None

Hazard Statements:

H313 : May be harmful in contact with skin.
H316 : Causes mild skin irritation.
H320 : Causes eye irritation.

Prevention:

P264 : Wash contact area thoroughly after handling
P280 : Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P332 + P313 : IF SKIN irritation occurs: Get medical advice/attention from a physician.
P305 + P351 + P338 : IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 : If eye irritation persists: Get medical advice/attention.
P312 : Call a POISON CENTER or doctor/physician if feeling unwell

Emergency Overview: NQ5410 is a fine white polymer powder that yields a gel-like material with the addition of water. It causes extremely slippery conditions when wet. Although not regulated as a hazardous material, the respirable dust is a potential respiratory tract irritant. The manufacturer recommends an eight hour exposure of 0.05 mg/m³.

Potential Health Effects:

Eyes: Dust may cause burning, drying, itching and other discomfort, resulting in reddening of the eyes.

Skin: Exposure to the dust, such as in manufacturing may aggravate existing skin conditions due to the drying effect.

Inhalation: Exposure to the respirable dust may cause respiratory tract and lung irritation and may aggravate existing respiratory conditions.

Ingestion: May be harmful if swallowed. Do Not Swallow.

3. Composition/Information on Ingredient:

Chemical Name : NorthQuest 5410; Sodium Polyacrylate powder, Poly (acrylic acid sodium salt) Powder
Chemical Family : Acrylic HomoPolymer
Chemical Formula : Not applicable

Component:	Hazard:	Composition (%)
Sodium Polyacrylate (Powder)	See section 2	94.0 min

4. First Aid Measures:

Eyes : Flush with running water for at least fifteen minutes, periodically lifting upper and lower eyelids. Remove any contact lenses if safe to do so. If irritation persists, get medical aid.

Skin : Flush skin with plenty of running water and soap. Remove contaminated clothing. If irritation persists, get medical aid. Clean and dry contaminated clothing thoroughly before reuse.

Ingestion : If the product is swallowed, rinse mouth with water and call doctor/poison center immediately. 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) : No data available.

Flammable Limits : Not established.

Auto ignition Temp. : Not applicable.

Decomposition Temp. : No data available.

General Hazard : Evacuate personnel in-order to avoid inhalation of irritating and/or harmful fumes and smoke. Dust at sufficient concentrations can form explosive mixtures with air. 5410 can create extremely slippery conditions when wet.

Extinguishing Media : Dry chemical, foam, carbon dioxide, and water fog. Do not use a solid stream of water.

Special hazards arising from the substance : Oxides of carbon (CO_x) and Sodium may be evolved during fires.

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 fires. Evacuate area and fight fire from safe distance or a protected location. Move fire-exposed containers, if allowable without sacrificing the safety of others and firefighters. If possible with out risk, firefighters should control run-off water to prevent environmental contamination.

Sensitivity to Static Discharge : No data available.

Sensitivity to Mechanical Impact : No data available.

6. Accidental Release Measures:

Protective Gear for Personnel:

For Small Spill : Safety glasses or chemical splash goggles, respirator, chemically resistant gloves, 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 Hazard (s) : AVOID INHALATION OF DUST DURING CLEAN UP. ENSURE ADEQUATE VENTILATION. WEAR APPROPRIATE RESPIRATOR. EXTREMELY SLIPPERY CONDITIONS ARISE WHEN THIS PRODUCT IS IN CONTACT WITH WATER.

Spill Clean-Up : In the event of a spill, material should be swept or shoveled (if possible) and placed in a properly labeled waste disposal container immediately. Pick up and arrange disposal without creating dust. Dispose waste according to state, federal and local regulations.

Environmental Precaution

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

: Use appropriate personal protective equipment as specified in Section 8. Handle in a well-ventilated area. Handle in a manner consistent with good industrial/manufacturing techniques and practices. Avoid contact with skin and eyes. Avoid dust formation. 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. Avoid all sources of ignition. Moisture sensitive - Keep Dry.

Recommended Storage Temperature (deg. C) : 1.0 — 49.0

8. Exposure Controls and Personal Protection:

Engineering Controls

: Use appropriate engineering controls to minimize exposure to vapors or dust generated via routine use. Maintain adequate ventilation of workplace and storage areas.

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 chemically resistant gloves, apron, boots or whole bodysuit when handling this product.

Respiratory: Avoid breathing vapor or dust. Use respirators and components tested and approved under appropriate government standards such as NIOSH or CEN. Wear respirator with a high efficiency filter such as N95/N100 (US) if particulate concentration in the work area exceeds 0.05 mg/m³ over an eight hour period. If the respirator is the sole means of protection, use a full-face supplied air respirator.

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.

Control of Environmental Exposure

: Although no exposure limits were found in literature, the manufacturer recognizes the potential for respiratory tract irritation and recommends an eight hour exposure limit of 0.05 mg/m³.

9. Chemical and Physical Properties:

Appearance: Powder	Decomposition Temp. : >200 °C
Odor : Mild Odor	Evaporation Rate : No data available
Odor threshold : Not available	Lower Explosive Limit : No data available
Color : White to light yellow	Upper Explosive Limit : No data available
pH (45% Soln.) : 6.5 - 7.5	Flammability : No data available
Melting Point : No data available	Vapor Pressure : No data available
Freezing Point : No data available	Boiling Range : Not applicable.
Viscosity (mPa.s) : No data available	Vapor Density : No data available
Flash Point : Not applicable	Solubility : No data available

10. Stability and Reactivity:

Stability	: The product is stable under normal ambient conditions of temperature and pressure.
Hazardous Polymerization	: Polymerization will not occur
Hazardous Decomposition Products	: Thermal decomposition may yield acrylic monomers. Fire may yield toxic fumes of CO and CO ₂ .
Incompatible Materials	: Strong oxidizing 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 (Rat)	: > 5000 mg/kg
Dermal LD ₅₀	: > 2000 mg/kg
Inhalation LD ₅₀	: No data available

Corrosion/Irritation:

Skin	: Slight irritant (Rabbit); OECD 404
Eyes	: Slight irritant (Rabbit); OECD 405

Sensitization:

Respiratory	: No data available.
Skin	: Not a skin sensitizer (Guinea Pig); OECD 406

Carcinogenicity	: No data available.
Mutagenicity	: No data available.
Reproductive Effects	: No data available.
Teratogenic Effects	: No data available.

Routes of Exposure : Eyes, Skin, Inhalation.

Acute Effects from Overexposure: Product is not expected to be irritating to the eyes and skin.

Chronic Effects from Overexposure: Chronic inhalation exposure to rates for a lifetime (two years) using sodium polyacrylate that had been micronized to a respirable particle size (less than 10 microns) produced non-specific inflammation and chronic lung injury at 0.2 mg/m³ and 0.8 mg/m³. Also, at 0.8 mg/m³, tumors were seen in some test animals. In the absence of chronic inflammation, tumors are not expected. There were no adverse effects detected at 0.05 mg/m³.

12. Ecological Information:

All work practices must be aimed at eliminating environmental contamination.

Biodegradability: No data available.

Bio accumulative Potential: No data available.

Terrestrial Ecotoxicity : This material may be harmful or fatal to contaminated plants or animals, especially if large volumes are released into the environment,

Aquatic Ecotoxicity : This material may be harmful or fatal to the aquatic environments if large volumes are released.

Aquatic Invertebrates : No data available

Mobility in Soil : No data available.

Other Adverse Effects : No data available.

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 containers should be labeled and disposed in accordance to local, state and federal laws and regulations.

General Comments : Refer to section 6, accidental release measures for additional information.

14. Transport Information:

Regulatory Information	UN No.	Proper Shipping Name	UN Class	Packing Group	Labels
US DOT	None	Not Regulated	None		None

15. Regulatory Information:

U.S. Federal Regulations:

TSCA Status: All components of this product are in compliance with TSCA

CERCLA Section 103 (40 CFR 302.4): No components of this products are listed.

SARA Section 311 Categorizations (40 CFR 370): Chronic Health Hazards

SARA Section 312 Threshold Planning Quantity (40 CFR 370): 10,000 LBS

SARA Section 313: No components of this products are listed.

16. Other Information:

SAFETY DATA SHEET (SDS) LIABILITY WAIVER

Safety Data Sheets (SDS) are provided with shipment. It is Buyer's responsibility to read and adhere to all recommended safety instructions for handling of goods. Buyer assumes all risk and liability in handling all items. All information provided in the SDS is believed to be accurate, however, Penn Chemicals, Inc., makes no express or implied warranties regarding the accuracy of such information. Buyer is solely responsible for determining his activities compliance with all local, state and federal laws. Buyer is solely responsible for the safety of any end products made with materials/goods purchased from Penn Chemicals, Inc.