SAFETY DATA SHEET

PQ BLUE (#3087) Product ID: FP335200 Revised: 06-25-2014 Replaces: 06-24-2014

1. IDENTIFICATION

Product Name: PQ BLUE (#3087)

Synonyms: R11619
CAS Number: MIXTURE

Recommended Use: No data available. **Restrictions on Use:** No data available.

Hydrite Chemical Co. EMERGENCY RESPONSE NUMBERS: 300 N. Patrick Blvd. 24 Hour Emergency #: (414) 277-1311 Brookfield, WI 53008-0948 CHEMTREC Emergency #: (800) 424-9300

(262) 792-1450

2. HAZARD(S) IDENTIFICATION



Signal Word: Warning

GHS Classification: Skin Corrosion/Irritation Category 2

Serious Eye Damage/Eye Irritation Category 2A

Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3

Acute Toxicity - Inhalation Dust / Mist Category 4

Hazard Statements: Causes skin irritation.

Causes serious eye irritation.

Harmful if inhaled.

May cause respiratory irritation.

Precautionary Statements:

Prevention: Avoid breathing dust, gas, mist, vapors or spray.

Wash thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear gloves, eye and face protection and protective clothing.

Response: IF ON SKIN: Wash with plenty of soap and water.

IF INHALED: Remove victim to fresh air and keep at rest in a position

comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.
Call a POISON CENTER or doctor if you feel unwell.
Specific treatment (see First Aid on SDS or on this label).
If skin irritation occurs: Get medical advice or attention.
If eye irritation persists: Get medical advice or attention.
Take off contaminated clothing and wash before reuse.

Storage: Store in a well-ventilated place. Keep container tightly closed.

Store in a secure manner.

Disposal: Dispose of in accordance with local, regional and international regulations.

Hazards Not Otherwise Classified: May react with various food sugars to form carbon monoxide.

Percentage of Components with Unknown Acute Toxicity:

Dermal: 10.1 % Inhalation Vapor: 10.1 % Inhalation Dust/Mist: 10.1 %

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS Number	% by Wt.
Sodium Carbonate	497-19-8	< 95 %
Urea	57-13-6	< 10 %
Alkyl (60% C14, 30% C16, 5% C12, 5% C18) dimethyl benzyl ammonium	68391-01-5	< 3 %
chloride Alkyl (68% C12, 32% C14) dimethyl ethyl benzyl ammonium chloride	68956-79-6	< 3 %

4. FIRST-AID MEASURES

Eye Contact: If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention.

Skin Contact: If on skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. Wash with soap and water. Do not apply oils or ointments unless ordered by the physician.

Inhalation: If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

Ingestion: If swallowed: If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Note to Physicians:

There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

Most Important Symptoms/Effects:

Eye Contact: May be corrosive to the eyes. Severe irritation and burns may result.

Skin Contact: May cause moderate to severe irritation. Inhalation: May cause moderate to severe irritation.

Ingestion: May be corrosive to the gastrointestinal tract. Severe irritation and burns may result.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Not combustible. For fires in area use appropriate media. For example: Water spray. Dry chemical. Carbon dioxide. Foam.

Fire Fighting Methods: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors.

Fire and Explosion Hazards: None known.

Hazardous Combustion Products: Carbon dioxide. Sodium oxide. Ammonia. Biuret. Nitrogen oxides. Carbon oxides. Cyanuric acid. Unidentified toxic and/or irritating compounds. Irritating and/or toxic gases.

6. ACCIDENTAL RELEASE MEASURES

Spill Clean-Up Procedures: Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit. Shut off source of leak if safe to do so. Avoid dust formation. Sweep or shovel up, recover, and use, if uncontaminated. Prevent large quantities from contacting vegetation. Keep animals away from large spills. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs. Product will promote algae growth which may degrade water quality and taste. Notify downstream users. CAUTION: Spilled material is slippery when wet.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust, or liquid) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other source of ignition. They may explode and cause injury or death. Avoid dust or mist formation.

Storage: Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. HYGROSCOPIC MATERIAL. Avoid contact with moisture. Store in closed containers. Do not use aluminum equipment for storage and/or transfer. Deadly carbon monoxide gas can form in enclosed or poorly ventilated areas or tanks when alkaline products contact food, beverage, or dairy products. Do not enter such areas until they have been well ventilated and carbon monoxide and oxygen levels have been determined to be within OSHA acceptable limits. If carbon monoxide and oxygen levels cannot be measured, wear NIOSH-approved, self-contained breathing apparatus. Avoid containers, piping or fittings made of brass, bronze, or other copper-bearing alloys, or galvanized metal. See Section 10 for incompatible materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

<u>Component</u> <u>Limits</u>

No components found.

ACGIH Exposure Guidelines:

<u>Component</u> <u>Limits</u>

No components found.

Note:

* Recommend exposure limits for Particulates Not Otherwise Regulated/Particulates (Insoluble or Poorly Soluble) Not Otherwise Specified: 15 mg/m3 (Total Dust), 5 mg/m3 (Respirable Fraction)(OSHA); 3 mg/m3 (Respirable particles), 10 mg/m3 (Inhalable particles)(ACGIH).

Engineering Controls: General room ventilation and local exhaust are required. Maintain adequate ventilation. Do not use in closed or confined spaces. Avoid creating dust or mist. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

Eye/Face Protection: Wear chemical safety goggles while handling this product. Do not wear contact lenses. Wear additional eye protection such as a face shield when the possibility exists for eye contact with splashing or spraying liquid, or airborne material.

Skin Protection: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Chemical-resistant. Impervious.

Respiratory Protection: Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH-Approved respirator for dusts and mists. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

Other Protective Equipment: Eye-wash station. Safety shower. Rubber apron. Chemical safety shoes.

Protective clothing.

General Hygiene Conditions: Wash with soap and water before meal times and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Powder.

Color: Blue.

Odor: Fragrant odor. Odor Threshold: N.D.

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Freezing Point (deg. F): N.D. Melting Point (deg. F): N.D.

Initial Boiling Point or Boiling Range: N.D.

Flash Point: N.A.

Flash Point Method: N.A.

Evaporation Rate (nBuAc = 1): N.D. Flammability (solid, gas): N.D. Lower Explosion Limit: N.A. Upper Explosion Limit: N.A. Vapor Pressure (mm Hg): N.D. Vapor Density (air=1): N.D.

Specific Gravity or Relative Density: N.D.

Solubility in Water: Appreciable

Partition Coefficient (n-octanol/water): N.D.

Autoignition Temperature: No Data **Decomposition Temperature:** N.D.

Viscosity: N.D.

% Volatile (wt%): N.D. VOC (wt%): N.D. VOC (lbs/gal): N.D. Fire Point: N.D.

10. STABILITY AND REACTIVITY

Reactivity: No data available.

Chemical Stability: Stable under normal conditions.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions. Reacts with acids and releases large volumes of carbon dioxide gas and heat. Reactions with various food sugars may form carbon monoxide. Slow hydrolysis may produce acids corrosive to metals. Reacts with Sodium or Calcium Hypochlorite to form explosive Nitrogen Trichloride. May react with other hypochlorites to form explosive Nitrogen Trichloride. Undergoes thermal decomposition at elevated temperatures to produce solid cyanuric acid.

Conditions to Avoid: HYGROSCOPIC MATERIAL. Avoid contact with moisture. Avoid elevated temperatures. May slowly hydrolyze to ammonium carbamate after a long period of time which decomposes to ammonia and carbon dioxide.

Incompatible Materials: Acids. Fluorine. Lithium. Aluminum. Magnesium. Steel. Phosphorous pentoxide. 2,4,6-Trinitrotoluene. Sulfuric acid. Soda ash and lime dust (calcium oxide) in the presence of moisture may form corrosive caustic soda. Food sugars. Strong oxidizing agents. Bases. Nitrates. Sodium hypochlorite. Calcium hypochlorite. Hypochlorites. Halogens. Reducing agents. Alkalies. Caustics. Nitric Acid. Gallium perchlorate. Moisture. Mild steel. Zinc. Copper. Oxidizing agents.

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Hazardous Decomposition Products: Carbon dioxide. Sodium oxide. Carbon monoxide. Biuret. Ammonia. Nitrogen oxides. Cyanuric acid.

11. TOXICOLOGICAL INFORMATION

ComponentOral LD50Dermal LD50Inhalation LC50Sodium CarbonateRat: 4090 mg/kgMouse: 2210 mg/kg2H Rat: 2,300.0

mg/m3

Urea Rat: 8471 mg/kg No Data No Data

Acute Toxicity Estimate (ATE):
Inhalation Dust/Mist: 2.3000 mg/L

Routes of Exposure: Eyes. Skin. Inhalation. Ingestion.

Eye Contact: May be corrosive to the eyes. Severe irritation and burns may result. May cause: permanent eye

damage.

Skin Contact: May cause moderate to severe irritation. Contact may cause: redness. swelling. May cause a

more severe response if skin is damp.

Skin Absorption: No data available.

Inhalation: May cause moderate to severe irritation. Dusts may irritate: mucous membranes. lungs. respiratory

tract.

Ingestion: May be corrosive to the gastrointestinal tract. Severe irritation and burns may result. May cause: nausea. vomiting. diarrhea. abdominal cramps. gastrointestinal irritation. corrosion. May irritate or burn: mouth. esophagus. May cause damage to the: stomach.

Medical Conditions Aggravated by Exposure to Product: Skin disorders. Respiratory system disorders. Eye disorders.

Other: Urea is a naturally occurring chemical in the body. It is an end product of protein metabolism and is excreted in the urine.

Cancer Information:

This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: No data available. **Chemical Fate Information:** No data available.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: N.A.

Disposal Method: Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Disposal methods identified are for the product as sold. For proper disposal of used material, an assessment must be completed to determine the proper and permissible waste management options permitted under applicable rules, regulations and/or laws governing your location.

14. TRANSPORT INFORMATION

DOT (Department of Transportation):

Identification Number: UN1759

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Proper Shipping Name: CORROSIVE SOLID, N.O.S. (CONTAINS QUATERNARY AMMONIUM SALTS)

Hazard Class: 8
Packing Group: |||

Label Required: CORROSIVE

15. REGULATORY INFORMATION

TSCA Inventory Status: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA Title III Section 311/312 Category Hazards:

Immediate (Acute)
YesDelayed (Chronic)
YesFire Hazard
NoPressure Release
NoReactive
No

Regulated Components: CAS CERCLA SARA SARA U.S. WI Prop Component Number **EHS** 313 **HAP HAP** 65 RQ

No components found.

*Prop 65 - May Contain the Following Trace Components:

Lead Arsenic

16. OTHER INFORMATION

Hazard Rating System

Health: 2*
Flammability: 0
Reactivity: 0

* = Chronic Health Hazard

NFPA Rating System

Health: 2 Flammability: 0 Reactivity: 0 Special Hazard: None

MSDS Abbreviations

N.A. = Not Applicable N.D. = Not Determined

HAP = **Hazardous** Air Pollutant

VOC = Volatile Organic Compound

C = Ceiling Limit

N.E./Not Estab. = Not Established

MSDS Prepared by: JAK

Reason for Revision: New format.

Revised: 06-25-2014 **Replaces**: 06-24-2014

The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.