Safety Data Sheet
Aniline Blue, 0.04% in Saturated Picric Acid

Section 1 - Chemical Product and Company Identification

SDS Name: Aniline Blue, 0.04% in Saturated Picric Acid
Catalog Numbers: F-355-2
Company Identification: Transene Company, Inc., DBA ROWLEY BIOCHEMICAL, Inc.
10 ELECTRONICS AVENUE
DANVERS, MA 01923
For information, call: 978-739-4883
Emergency Number: 800-424-9300
For CHEMTREC assistance, call: 800-424-9300

Section 2 - Hazards Identification

GHS Classifications

H314-Skin corrosion/irritation: 1A
H317-Sensitisation, skin: 1A
H318-Serious eye damage/eye irritation: 1

Pictograms or Hazard Symbols and Hazard Statement(s):

Signal Word: Danger

Hazard Statements:

H314-Causes severe skin burns and eye damage
H317-May cause an allergic skin reaction
H318-Causes serious eye damage

Precautionary Statements:

P260-Do not breathe dusts or mists.
P261-Avoid breathing dust/fume/gas/mist/vapours/spray.
P264-Wash thoroughly after handling.
P272-Contaminated work clothing should not be allowed out of the workplace.
P280-Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331-If swallowed: Rinse mouth. Do NOT induce vomiting.
P302+P352-If on skin: Wash with plenty of soap and water.
P303+P361+P353-If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340-If inhaled: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310-Immediately call a Poison Center/doctor.
P333+P313-If skin irritation or rash occurs: Get medical advice/attention.
P362+P364-Take off contaminated clothing and wash it before reuse.
P363-Wash contaminated clothing before reuse.
P405-Store locked up.
P501-Dispose of contents/container in accordance with local, regional, national, international regulations.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
28983-56-4	Aniline Blue	0.04 w/v
88-89-1	Picric Acid	2.4 w/v
7732-18-5	Water	Balance

Section 4 - First Aid Measures

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Get medical attention.

Dermal Exposure: In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention.

Oral Exposure: If swallowed, get immediate medical advice. Do NOT induce vomiting. Rinse mouth with water.

Inhalation Exposure: If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During

a fire, irritating gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use dry chemical, carbon dioxide, dry sand, water spray, or alcohol-resistant foam. Do not scatter spilled material with high pressure water streams.
Hazardous Combustion Products: Carbon oxides, nitrogen oxides, nitrogen, sulfur oxides, sodium oxides, ammonia, nitrogen, irritating and toxic fumes and gases.

Flash Point: Not available
Autoignition Temperature: Not available
Explosion Limits, Lower: Not available
Upper: Not available
NFPA Rating: (estimated) Health: 2; Flammability: 0; Instability: 0

Note: Picric acid can explode on contact when dry. Do not allow this material to dry out. Do not let dry picric acid (crystals) form in container or on the cap threads of the container. A severe explosion hazard when shocked or exposed to heat. Dried out picric acid may explode if exposed to heat, flame, friction, or shock. May form shock-sensitive mixtures on contact with metals. Can violently decompose at elevated temperatures.

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):
Wear personal protective equipment. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Ensure adequate ventilation.

Methods for Cleaning up: Absorb with sand, earth, or vermiculite. Carefully sweep up and containerize for proper disposal. Do not release to the environment. Do not release to drains. Take precautionary measures against static discharges. Eliminate all ignition sources. Do not touch, walk through, or scatter spilled material.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Ensure adequate ventilation. Wash thoroughly after handling. Do not ingest or inhale. Do not get on skin or clothing. Do not get in eyes. Store in a tightly closed container in a cool, dry, and well-ventilated area. Keep away from incompatible materials. Take precautionary measures against static discharges. Eliminate all ignition sources. Use spark-proof tools and explosion-proof equipment.

Note: Picric acid can explode on contact when dry. Do not allow this material to dry out. Do not let dry picric acid (crystals) form in container or on the cap threads of the container. A severe explosion hazard when shocked or exposed to heat. Dried out picric acid may explode if exposed to heat, flame, friction, or shock. May form shock-sensitive mixtures on contact with metals. Can violently decompose at elevated temperatures.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Exposure Limits:

Chemical Name	ACGIH - TLV	NIOSH - IDLH	OSHA - Final PELs
Aniline Blue CAS#28983-56-4	10 ppm TWA 15 ppm STEL	10 ppm TWA 15 ppm STEL	10 ppm TWA
Picric Acid CAS#88-89-1	0.1 mg/m3 TWA	0.1 mg/m3 TWA 0.3 mg/m3 STEL	0.1 mg/m3 TWA

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: Dark blue-green
Odor: Odorless
Vapor Pressure: Not available
Odor Threshold: Not available
Vapor Density: Not available
pH: Approx. 1.4
Relative Density: Not available
Melting point/freezing point: Not available
Solubility: Soluble in water
Boiling Point: Not available
Flash Point: Not available
Evaporation Rate: Not available
Flammability (solid, gas): Not applicable
Partition coefficient: n-octanol/water: Not applicable
Autoignition Temperature: Not available
Decomposition Temperature: Not available
Viscosity: Not available
Specific Gravity/Density: Not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, ignition sources, excess heat, sparks, flame, and freezing. An explosive mixture results when the aqueous solution crystallizes. Do not let dry picric acid (crystals) form in container or on the cap threads of container. Dry picric acid is explosive. Do not allow to dry out. Picric acid forms salts with many metals which are sensitive to heat, friction, or impact.
Incompatibilities with Other Materials: Oxidizing agents, reducing agents, bases, strong acids, metals, alkalis, copper, lead, nickel, zinc, heavy metal salts, ammonia, amines, and concrete.
Hazardous Decomposition Products: Carbon oxides, nitrogen oxides, nitrogen, sulfur oxides, sodium oxides, ammonia, nitrogen, irritating and toxic fumes and gases.

Note: Picric acid can explode on contact when dry. Do not allow this material to dry out. Do not let dry picric acid (crystals) form in container or on the cap threads of the container. A severe explosion hazard when shocked or exposed to heat. Dried out picric acid may explode if exposed to heat, flame, friction, or shock. May form shock-sensitive mixtures on contact with metals. Can violently decompose at elevated temperatures.

Section 11 - Toxicological Information

CAS#28983-56-4 Aniline Blue: RTECS#: DB4958000
LD50 Oral: Not available
LD50 Dermal: Not available
LC50 Inhalation: Not available

Carcinogenicity: Aniline Blue CAS#28983-564 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

CAS#88-89-1 Picric Acid: RTECS#: TJ7875000
LD50 Oral: 200 mg/kg (rat)
LD50 Dermal: 461.54 mg/kg (estimate, calculation method)
LC50 Inhalation: 0.7708 mg/L (estimate, calculation method)
May cause skin sensitization.

Carcinogenicity: Picric Acid CAS#88-89-1 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

Information on the likely routes of exposure: Routes of entry anticipated: oral, dermal, inhalation and eye.

Epidemiology: Not available.
Teratogenicity: Not available.
Reproductive Effects: Not available.
Developmental Effects: Not available.
Neurotoxicity: Not available.
Mutagenicity: Not available.

Specific Target Organ Toxicity, Single Exposure: Not available.
Specific Target Organ Toxicity, Repeated Exposure: Not available.

Symptoms associated with exposure: Corrosive material. Picric acid causes skin irritation and it may be absorbed through the skin. May cause itching, rashes, hives, redness, and burning sensation. Picric acid has been shown to cause symptoms when absorbed through the skin; like those when ingested. Will cause eye irritation and may result in corneal injury leading to blindness. If swallowed, may cause gastrointestinal tract irritation with abdominal pain, nausea, vomiting, diarrhea, dizziness, headache, and stomach irregularities. May affect behavior/central nervous system (vertigo, headache, stupor, tremor, convulsions), cardiovascular system, metabolism, kidneys/urinary system (anuria, oliguria, renal lesions, hemorrhagic nephritis), liver (acute hepatitis, jaundice). Prolonged or repeated skin contact may cause allergic or sensitization dermatitis. May cause conjunctivitis in the eyes and yellow staining of the skin and eyes. This is also called "yellow vision". May cause redness and tearing of the eyes. May affect liver, kidney, eyes, skin, blood, central nervous system, and cardiovascular system.

The toxicological properties of this material have not been thoroughly investigated.

Section 12 - Ecological Information

Ecotoxicity: Do not release to the environment. Do not release to drains.

Persistence and degradability: Not available.
Bio-accumulative potential: Not available.
Mobility: Will likely be mobile in the environment due to its water solubility.

Section 13 - Disposal Considerations

DISPOSAL: Dispose of in accordance with all federal, state, and local regulations.

Section 14 – Transport Information

DOT
Proper shipping name: Corrosive Liquid, Acidic, Inorganic, N.O.S. (Picric Acid Solution)
UN3264
PG II
Hazard class 8

Section 15 - Regulatory Information

Canada Regulatory Information

WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: 10/15/12
Revision #1: RC 12-1-15
Revision #2: 12-10-19
Revision #3: 2-13-23
Revision #4: 1-5-26

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