

Safety Data Sheet

Nuclear Fast Red Solution

Section 1 - Chemical Product and Company Identification

SDS Name: Nuclear Fast Red Solution

Catalog Numbers: SO-130, B-169-4, C-211-2, C-212-3, E-323-2, E-325-2, F-356-2, F-392-4, F-394-3, F-395-5, G-484-4, H-502-3, J-601-3, J-605-3, J-606-3, J-612-4, J-615-6

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

Based on available data, the GHS classification criteria are not met.

13.5% of the mixture consists of ingredients of unknown acute dermal toxicity.

13.5% of the mixture consists of ingredients of unknown acute inhalation toxicity.

Pictograms or Hazard symbols and Hazard statement(s):

No GHS Hazard Symbols.

Hazard Statements:

No GHS Hazard Statements.

Precautionary Statements:

No GHS Precautionary Statements.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
6409-77-4	Nuclear Fast Red	0.11 w/v
7784-24-9	Aluminum Potassium Sulfate Dodecahydrate	13.4 w/v
89-83-8	Thymol	< 0.02 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. Seek immediate medical advice.

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

Oral Exposure: If swallowed, seek immediate medical advice.

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.

Hazardous Combustion Products: Carbon oxides, nitrogen oxides, sulfur oxides, sodium oxides, potassium oxides, aluminum oxides, irritating and toxic fumes.

Flash Point: Not available

Autoignition Temperature: Not available

Explosion Limits, Lower: Not available

Upper: Not available

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

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.

Section 7 - Handling and Storage

Use care when handling. Wear personal protective equipment. Wash thoroughly after handling. Ensure adequate ventilation. 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.

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
Nuclear Fast Red CAS#6409-77-4	Not listed	Not listed	Not listed
Aluminum Potassium Sulfate Dodecahydrate CAS#7784-24-9	Not listed	2 mg/m ³ TWA	Not listed
Thymol CAS#89-83-8	Not listed	Not listed	Not listed

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: Dark Red
Odor: Odorless
Vapor Pressure: Not available
Odor Threshold: Not available
Vapor Density: Not available
pH: Approx. 2.9
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 available
Partition coefficient: n-octanol/water: Not available
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.
Incompatibilities with Other Materials: Strong oxidizing agents, bases, metals, steel, aluminum, copper, and zinc.
Hazardous Decomposition Products: Carbon oxides, nitrogen oxides, sulfur oxides, sodium oxides, potassium oxides, aluminum oxides, irritating and toxic fumes.

Section 11 - Toxicological Information

CAS#6409-77-4 Nuclear Fast Red:

LD50 Oral: Not available
LD50 Dermal: Not available
LC50 Inhalation: Not available

Carcinogenicity: Nuclear Fast Red CAS#6409-77-4 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

CAS#7784-24-9 Aluminum Potassium Sulfate Dodecahydrate:

RTECS#: WS5690000
LD50 Oral: >2 g/kg (mouse)
LD50 Dermal: Not available
LC50 Inhalation: Not available

Carcinogenicity: Aluminum Potassium Sulfate Dodecahydrate CAS#7784-24-9 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop. 65.

CAS#89-83-8 Thymol: RTECS#: XP2275000

LD50 Oral: 980 mg/kg (rat)

LD50 Dermal: >2000 mg/kg (rat)

LD50 Inhalation: Not available

Carcinogenicity: Thymol CAS#89-83-8 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: Exposure may irritate eyes, skin, respiratory system. Ingestion may cause gastrointestinal disturbances, swelling. Overexposure may cause cough, shortness of breath, headache, nausea, vomiting, CNS disorders, cardiovascular disorders. May damage kidney, liver.

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.

CAS#7784-24-9 Aluminum Potassium Sulfate Dodecahydrate:

LC50, freshwater fish: 1000-10000 mg/L 96h static (pimephales promelas)(fathead minnow)

CAS#89-83-8 Thymol:

LC50, freshwater fish: 3.2-4.2 mg/L 96h (pimephales promelas)(fathead minnow)

EC50, water flea: 1.7-3.2 mg/L 96h

EC50, algae: 14 mg/L 72h (pseudokirchneriella subcapitata)(green algae)

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

Non-Regulated

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. 1-16-14 YM

Revision #2. 3-8-17

Revision #3. 11-8-21

Revision #4. 5-9-23

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