

Safety Data Sheet

3-Amino-9-Ethylcarbazole Staining Solution

Section 1 - Chemical Product and Company Identification

SDS Name: 3-Amino-9-Ethylcarbazole Staining Solution

Catalog Numbers: B-173-2

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

H316-Skin corrosion/irritation: 3

H320-Serious eye damage/eye irritation: 2B

H333-Acute toxicity, inhalation: 5

H350-Carcinogenicity: 1B

Pictograms or Hazard symbols and Hazard statement(s):



Signal word: Danger

Hazard Statements:

H316-Causes mild skin irritation

H320-Causes eye irritation

H333-May be harmful if inhaled

H350-May cause cancer

Precautionary Statements:

P201-Obtain special instructions before use.

P202-Do not handle until all safety precautions have been read and understood.

P264-Wash thoroughly after handling.

P270-Do not eat, drink, or smoke when using this product.

P281-Use personal protective equipment as required.

P304+P312-If inhaled: Call a Poison Center or doctor/physician if you feel unwell.

P305+P351+P338-If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P313-If exposed or concerned: Get medical advice/attention.

P332+P313-If skin irritation occurs: Get medical advice/attention.

P337+P313-If eye irritation persists: Get medical advice/attention.

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
67-68-5	DMSO	10.7 v/v
64-19-7	Glacial Acetic Acid	0.10 v/v
7722-84-1	Hydrogen Peroxide 30%	<0.01 v/v
132-32-1	3-Amino-9-Ethylcarbazole	<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. Call a physician.

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 attention.

Oral Exposure: If swallowed, seek immediate medical advice. Do NOT induce vomiting.

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, sulfur oxides, sulfides, formaldehyde, hydrogen, nitrogen oxides, oxygen, irritating 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: 1; 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. Protect from heat.

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 at room temperature. Protect from heat, open flames, hot surfaces, and sources of ignition. Keep away from incompatible materials.

Note: Acetic acid is extremely destructive to all body tissue. In concentrated form (glacial acetic acid), it is corrosive and flammable. Inhalation of concentrated vapors may cause serious damage to the lining of the nose, throat, and lungs. Breathing difficulties may occur. Ingestion of concentrated acetic acid causes severe swelling, severe damage to the tissue and danger of perforation. Contact with concentrated acetic acid may cause serious damage to the skin. Eye contact with concentrated acetic acid may cause severe eye damage followed by loss of sight. Exposure to vapor may cause intense watering and irritation to eyes.

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	NIOSH	OSHA - Final PELs
DMSO CAS#67-68-5	Not listed	Not listed	Not listed
Glacial Acetic Acid CAS#64-19-7	15 ppm STEL 10 ppm TWA	10 ppm TWA 25 mg/m ³ TWA 50 ppm IDLH 15 ppm STEL 37 mg/m ³ STEL	10 ppm TWA 25 mg/m ³ TWA
Hydrogen Peroxide 30% CAS#7722-84-1	1 ppm TWA	1 ppm TWA 1.4 mg/m ³ TWA 75 ppm IDLH	1 ppm TWA 1.4 mg/m ³ TWA
3-Amino-9-ethylcarbazole CAS#132-32-1	Not listed	Not listed	Not listed

OSHA Vacated PELs: Glacial Acetic Acid: 10 ppm TWA; 25 mg/m³ TWA
Hydrogen Peroxide: 1 ppm TWA; 1.4 mg/m³ TWA

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: Pale

Odor: Not available

Vapor Pressure: Not available

Odor threshold: Not available

Vapor Density: Not available

pH: Not available

Relative Density: Not available

Melting point/freezing point: Not available

Solubility: Not available

Boiling Point: Not available

Flash Point: Not available

Evaporation Rate: Not available

Flammability (solid, gas): Not available

Partition coefficient: n-octanol/water: Not available

Auto-ignition 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, and open flames, and sources of ignition.

Incompatibilities with Other Materials: Strong oxidizing agents, strong bases, metals, chromic acid, nitric acid, ethylene glycol, perchloric acid, phosphorus trichloride, sodium peroxide, metals, carbonates, hydroxides, oxides, phosphates, copper, finely powdered metals, reducing agents, combustible material, acids, alkali metals.

Hazardous Decomposition Products: Carbon oxides, sulfur oxides, sulfides, formaldehyde, hydrogen, nitrogen oxides, oxygen, toxic fumes and gases.

Section 11 - Toxicological Information

CAS#67-68-5 DMSO: RTECS#: PV6210000

LD50 Oral: 28300 mg/kg (rat)

LD50 Dermal: 40000 mg/kg (rat)

LC50 Inhalation: >5.33 mg/L 4h (rat)

Carcinogenicity: DMSO CAS#67-68-5 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

CAS#64-19-7 Glacial Acetic Acid: RTECS#: AF1225000

LD50 Oral: 3310 mg/kg (rat)

LD50 Dermal: 1060 mg/kg (rabbit)

LC50 Inhalation: 11.4 mg/L (rat) 4h

Investigated as a mutagen, reproductive effecter.

Skin corrosion/irritation: skin (rabbit), causes severe burns

Serious eye damage/eye irritation: eyes (rabbit), corrosive to eyes

Carcinogenicity: Glacial Acetic Acid CAS#64-19-7 is not listed by IARC, NTP, ACGIH, OSHA or California Prop 65.

CAS#7722-84-1 Hydrogen Peroxide 30%:

LD50 Oral: 2312 mg/kg

LD50 Dermal: >5000 mg/kg

LC50 Inhalation: 37 mg/L 4h

Carcinogenicity: Hydrogen Peroxide 30% is not listed by IARC, NTP, OSHA, or California Prop 65. Hydrogen Peroxide is listed by ACGIH (A3, Animal Carcinogen).

CAS#132-32-1 3-Amino-9-ethylcarbazole:

LD50 Oral: 144 mg/kg (rat)

LD50 Dermal: Not available

LC50 Inhalation: Not available

Carcinogenicity: 3-Amino-9-ethylcarbazole CAS#132-32-1 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

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

Note: Acetic acid is extremely destructive to all body tissue. In concentrated form (glacial acetic acid), it is corrosive and flammable. Inhalation of concentrated vapors may cause serious damage to the lining of the nose, throat, and lungs. Breathing difficulties may occur. Ingestion of concentrated acetic acid causes severe swelling, severe damage to the tissue and danger of perforation. Contact with concentrated acetic acid may cause serious damage to the skin. Eye contact with concentrated acetic acid may cause severe eye damage followed by loss of sight. Exposure to vapor may cause intense watering and irritation to eyes.

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. Harmful to aquatic life.

CAS#67-68-5 DMSO:

LC50, freshwater fish: 40 g/L 96h

LC50, freshwater fish: >25000 mg/L 96h static (danio rerio)(zebra fish)

EC50, water flea: 7000 mg/L 24h

EC50, water flea: 24600 mg/L 48h static (daphnia magna)

EC50, freshwater algae: 12350-25500 mg/L 96h

ErC50, algae: 17000 mg/L 72h static (pseudokirchneriella subcapitata)(green algae)

EC50, microtox: 77 mg/L 5min (photobacterium phosphoreum)

EC50, bacteria: 10-100 mg/L 30min (activated sludge)

CAS#64-19-7 Glacial Acetic Acid:

LC50, freshwater fish: 88 mg/L 96h (pimephales promelas)(fathead minnow)

LC50, freshwater fish: 75 mg/L 96h (lepomis macrochirus)

EC50, water flea: 95 mg/L 24h

CAS#7722-84-1 Hydrogen Peroxide 30%:

LC50, freshwater fish: 16.4 mg/L 96h (pimephales promelas)(fathead minnow)

EC50, freshwater algae: 2.5 mg/L 72h

ErC50, algae: 1.38 mg/L 72h static (skeletonema costatum)(marine diatom)

EC50, water flea: 7.7 mg/L 24h
EC50, bacteria: 466 mg/L 30min static (activated sludge)

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: 12/11/17

Revision #1. 7-13-22

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