

# 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.  
P280-Wear protective gloves/protective clothing/eye protection/face protection.  
P304+P312-If inhaled: Call a Poison Center/doctor 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. 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.

**Hazardous Combustion Products:** Carbon oxides, sulfur oxides, sulfides, formaldehyde, hydrogen, nitrogen oxides, oxygen, 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: 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. Keep in a tightly closed container. Store in a cool, dry, and well-ventilated area. Protect from heat, open flames, hot surfaces, and sources of ignition. 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
DMSO CAS#67-68-5	Not listed	Not listed	Not listed
Glacial Acetic Acid CAS#64-19-7	10 ppm TWA 15 ppm STEL	10 ppm TWA 25 mg/m <sup>3</sup> TWA 15 ppm STEL 37 mg/m <sup>3</sup> STEL 50 ppm IDLH	10 ppm TWA 25 mg/m <sup>3</sup> TWA
Hydrogen Peroxide 30% CAS#7722-84-1	1 ppm TWA	1 ppm TWA 1.4 mg/m <sup>3</sup> TWA 75 ppm IDLH	1 ppm TWA 1.4 mg/m <sup>3</sup> 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/m<sup>3</sup> TWA  
Hydrogen Peroxide: 1 ppm TWA; 1.4 mg/m<sup>3</sup> TWA

Section 9 - Physical and Chemical Properties
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**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**Autoignition Temperature:** Not available**Decomposition Temperature:** Not available**Viscosity:** Not available**Specific Gravity/Density:** Not available

Section 10 - Stability and Reactivity
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**Chemical Stability:** Stable under normal temperatures and pressures.**Conditions to Avoid:** Incompatible materials, ignition sources, excess heat, and open flames.**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, and alkali metals.

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

Section 11 - Toxicological Information
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**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 4h (rabbit)

**Investigated as a mutagen, reproductive effector.**

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

Serious eye damage/eye irritation: eyes (rabbit), corrosive to eyes, and causes serious eye damage.

**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% CAS#7722-84-1 is not listed by IARC, NTP, OSHA, or California Prop. 65. Hydrogen Peroxide 30% 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.

**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:** Symptoms associated with overexposure may include headache, dizziness, tiredness, nausea, vomiting, redness of skin, itching, burning. May cause cancer.

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

Section 12 - Ecological Information
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**Ecotoxicity:** Do not release to the environment. Do not release to drains. Harmful to aquatic life.

**CAS#67-68-5 DMSO:**

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

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

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)(bluegill)

EC50, water flea: 95 mg/L 24h

EC50, microtox: 8.8 mg/L 5min (photobacterium phosphoreum)

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

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

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

**Revision #2:** 1-3-25

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