

Safety Data Sheet

MODIFIED EA COUNTERSTAINING SOLUTION

Section 1 - Chemical Product and Company Identification

SDS Name: Modified EA Counterstaining Solution

Catalog Numbers: M-801-5

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

H225-Flammable liquids: 2

H302-Acute toxicity, oral: 4

H319-Serious Eye damage/Eye Irritation: 2A

Pictograms or Hazard symbols and Hazard statement.



Signal word: Danger

Hazard statements:

H225-Highly flammable liquid and vapour

H302-Harmful if swallowed

H319-Causes serious eye irritation

Precautionary Statements:

P210-Keep away from heat/sparks/open flames/hot surfaces.-No smoking.

P233-Keep container tightly closed.

P240-Ground/bond container and receiving equipment.

P241-Use explosion-proof electrical/ventilating/lighting/equipment.

P242-Use only non-sparking tools.

P243-Take precautionary measures against static discharge.

P264-Wash thoroughly after handling.

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

P280-Wear protective gloves/eye protection/face protection.

P301+P312-If swallowed: Call a poison center or doctor/physician if you feel unwell.

P303+P361+P353-If on skin (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

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

P330-Rinse mouth.

P337 + P313 If eye irritation persists, get medical advice/attention.

P370+P378-In case of fire: Use appropriate media to extinguish.

P403+P235-Store in a well-ventilated place. Keep cool.

P501-Dispose of contents/container in accordance with all federal, state, and local regulations.

Section 3 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent
64-17-5	Ethyl alcohol	63 v/v
67-56-1	Methyl alcohol	28 v/v
12501-23-4	Phosphotungstic Acid Hydrate	0.2 w/v
17372-87-1	Eosin Y	0.4 w/v
5141-20-8	Light Green	0.04 w/v
64-19-7	Glacial Acetic Acid	2 v/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.

Oral Exposure: If Swallowing 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: Containers can build up pressure if exposed to heat and/or fire. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Flammable Liquid. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. For large fires, use water spray, fog, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water.

Flash Point: 16.6 deg C (61.88 deg F)

Autoignition Temperature: 363 deg C (685.40 deg F)

Explosion Limits, Lower:3.3 vol %

Upper: 19.0 vol %

NFPA Rating: (estimated) Health: 2; Flammability: 3; Instability: 0

Section 6 - Accidental Release Measures

Procedure(s) of Personal Precaution(s):

Wear protective gear. Eliminates all sources of ignition.

Methods for Cleaning up: Absorb with sand, earth or vermiculite. Carefully sweep up and containerize for proper disposal.

Section 7 - Handling and Storage

Use care when handling. Wash thoroughly after handling. Store capped at room temperature. Keep away from incompatible materials. Protect from heat. Vapors heavier than air, may travel considerable distance and ignite or explode.

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.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
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Ethanol	1000 ppm TWA	1000 ppm TWA; 1900 mg/m ³ TWA 3300 ppm IDLH	1000 ppm TWA; 1900 mg/m ³ TWA
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OSHA Vacated PELs: Ethanol: 1000 ppm TWA; 1900 mg/m³ TWA

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.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: olive green - orange

Odor: Alcohol-like

pH: N/A

Vapor Pressure: 44.6 mm Hg at 20 degrees C (68 F)

Vapor Density: N/A

Evaporation Rate: N/A

Viscosity: N/A

Boiling Point: 78 C (174 F)

Freezing/Melting Point: 113.8 C (237 F)

Decomposition Temperature: N/A

Solubility: Soluble in water.

Specific Gravity/Density: 0.7906 at 20 degrees C

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Reacts violently with oxidizers: Risk of fire/explosion.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Open flame. Incompatible materials, ignition sources, excess heat, oxidizers.

Incompatibilities with Other Materials: Strong oxidizing agents, acids, alkali metals, ammonia, hydrazine, peroxides, sodium, acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, perchloric acid, silver nitrate, mercuric nitrate, potassium-tert-butoxide, magnesium perchlorate, acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate, potassium dioxide.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, phosphorus oxides.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:**CAS#** 64-17-5: KQ6300000**LD50/LC50:**

CAS# 64-17-5:

- Draize test, rabbit, eye: 500 mg Severe.
- Draize test, rabbit, eye: 500 mg/24H Mild.
- Draize test, rabbit, skin: 20 mg/24H Moderate.
- Inhalation, mouse: LC50 = 39 gm/m³/4H.
- Inhalation, rat: LC50 = 20000 ppm/10H.
- Oral, mouse: LD50 = 3450 mg/kg.
- Oral, rabbit: LD50 = 6300 mg/kg.
- Oral, rat: LD50 = 7060 mg/kg.
- Oral, rat: LD50 = 9000 mg/kg; <BR.

CAS# 67-56-1

- Rabbit oral: 5628
- Rabbit skin: 15800
- Rabbit inhalation: 64000/ 4 hours.

Solution Carcinogenicity: N/A

Epidemiology: Ethanol has been shown to produce fetotoxicity in the embryo or fetus of laboratory animals. Prenatal exposure to ethanol is associated with a distinct pattern of congenital malformations that have collectively been termed the "fetal alcohol syndrome".

Teratogenicity: Oral, Human - woman: TDLo = 41 gm/kg (female 41 week(s) after conception) Effects on Newborn - Apgar score (human only) and Effects on Newborn - other neonatal measures or effects and Effects on Newborn - drug dependence.

Reproductive Effects: Intrauterine, Human - woman: TDLo = 200 mg/kg (female 5 day(s) pre-mating) Fertility - female fertility index (e.g. # females pregnant per # sperm positive females; # females pregnant per # females mated).

Neurotoxicity: No information available.

Mutagenicity: DNA Inhibition: Human, Lymphocyte = 220 mmol/L.; Cytogenetic Analysis: Human, Lymphocyte = 1160 gm/L.; Cytogenetic Analysis: Human, Fibroblast = 12000 ppm.; Cytogenetic Analysis: Human, Leukocyte = 1 pph/72H (Continuous).; Sister Chromatid Exchange: Human, Lymphocyte = 500 ppm/72H (Continuous).

Other Studies: Standard Draize Test(Skin, rabbit) = 20 mg/24H (Moderate) Standard Draize Test: Administration into the eye (rabbit) = 500 mg (Severe).

Section 12 - Ecological Information

Ecology: Readily biodegrades. Evaporates to moderate extent. Does not bioaccumulate.

Toxicity: LC50 Fish 1 12.0-16.0 ml/l (Exposure time: 96 h- species: Oncorhynchus mykiss [static])

EC50 Daphnia 1 9268 – 14221 mg/l (Exposure time: 48 h – species: Daphnia Magna)

LC 50 Fish 2 >100 mg/l (Exposure time: 96 h- species: Pimephales promelas [static])

Mobility in Soil: Not available

Other Adverse Effects: Avoid release to the environment.

Section 13 - Disposal Considerations

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

Section 14 – Transport Information

DOT

Proper shipping name: Alcohols, N.O.S. (SD Alcohol, Methyl Alcohol)

UN1987

PG II

Hazard class 3 (flammable)

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 MSDS contains all the information required by the CPR.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols:

F

Risk Phrases:

R 11 Highly flammable.

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed

R36/38 Irritating to eyes and skin

R51 Toxic to aquatic organisms

R61 May cause harm to the unborn child

Safety Phrases:

S20/21 When using do not eat, drink or smoke

S2 Keep out of the reach of children

S 16 Keep away from sources of ignition - No smoking.

S 33 Take precautionary measures against static discharges.

S 7 Keep container tightly closed.

S 9 Keep container in a well-ventilated place

Section 16 - Additional Information

SDS Creation Date: 2-13-18

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