Safety Data Sheet
KINYOUN'S CARBOL FUCHSIN SOLUTION

Section 1 - Chemical Product and Company Identification

SDS Name: Kinyoun's Carbol Fuchsin Solution
Catalog Numbers: SO-359, A-101-1, J-608-1
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
H303-Acute toxicity, oral: 5
H314-Skin corrosion/irritation: 1B
H318-Serious eye damage/eye irritation: 1
H341-Germ cell mutagenicity: 2
H351-Carcinogenicity: 2
H361-Reproductive toxicity: 2
H373-Specific target organ toxicity, repeated exposure: 2
H412-Hazardous to the aquatic environment, chronic toxicity: 3

Pictograms or Hazard symbols and Hazard statement(s):

Signal word: Danger

Hazard Statements:

H225-Highly flammable liquid and vapour
H303-May be harmful if swallowed
H314-Causes severe skin burns and eye damage
H318-Causes serious eye damage
H341-Suspected of causing genetic defects

H351-Suspected of causing cancer
H361-Suspected of damaging fertility or the unborn child
H373-May cause damage to organs through prolonged or repeated exposure (target organs: kidney, liver, and blood)
H412-Harmful to aquatic life with long lasting effects

Precautionary Statements:

P201-Obtain special instructions before use.
P202-Do not handle until all safety precautions have been read and understood.
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.
P260-Do not breathe dust/fume/gas/mist/vapours/spray.
P264-Wash thoroughly after handling.
P273-Avoid release to the environment.
P280-Wear protective gloves/protective clothing/eye protection/face protection.
P281-Use personal protective equipment as required.
P301+P330+P331-If swallowed: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353-If on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340-If inhaled: Remove victim to fresh air and keep at rest in a position 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.
P308+P313-If exposed or concerned: Get medical advice/attention.
P310-Immediately call a Poison Center or doctor/physician.
P312-Call a Poison Center or doctor/physician if you feel unwell.
P314-Get medical advice/attention if you feel unwell.
P363-Wash contaminated clothing before reuse.
P370+P378-In case of fire: Use dry chemical, carbon dioxide, water spray, or alcohol-resistant foam for extinction.
P403+P235-Store in a well-ventilated place. Keep cool.
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
632-99-5	Basic Fuchsin	3.1 w/v
64-17-5	Ethyl Alcohol	14.3 v/v
67-56-1	Methyl Alcohol	0.75 v/v
108-95-2	Phenol	6.25 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. Seek immediate 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. Seek medical attention.

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

Inhalation Exposure: If inhaled, remove to fresh air. Seek medical attention.

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.

Hazardous Combustion Products: Carbon oxides, nitrogen oxides, hydrogen chloride gas, irritating 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: 3; Instability: 0

NOTE: Static discharge could act as an ignition source.

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. Keep away from heat. Eliminate all sources of ignition.

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. Use with 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 in a cool, dry, and well-ventilated area. Keep away from heat, sparks, open flame, or other ignition sources. Use explosion-proof equipment and non-sparking tools. Take precautionary measures against static discharges. Keep away from incompatible materials. Vapors heavier than air may travel considerable distance and ignite or explode.

NOTE: Static discharge could act as an ignition source.

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
Basic Fuchsin CAS#632-99-5	Not listed	Not listed	Not listed
Ethanol CAS#64-17-5	1000 ppm STEL	1000 ppm TWA 1900 mg/m3 TWA 3300 ppm IDLH	1000 ppm TWA 1900 mg/m3 TWA
Methanol CAS#67-56-1	200 ppm TWA 250 ppm STEL	200 ppm TWA 260 mg/m3 TWA 250 ppm STEL 325 mg/m3 STEL 6000 ppm IDLH	200 ppm TWA 260 mg/m3 TWA 250 ppm STEL 325 mg/m3 STEL
Phenol CAS#108-95-2	5 ppm Skin TWA	15.6 ppm Ceiling 60 mg/m3 Ceiling 5 ppm TWA 19 mg/m3 TWA	5 ppm TWA 19 mg/m3 TWA

		250 ppm IDLH	

OSHA Vacated PELs: Ethanol: 1000 ppm TWA; 1900 mg/m3 TWA
Methanol: 200 ppm TWA; 260 mg/m3 TWA; 250 ppm STEL; 325 mg/m3 STEL
Phenol: 5 ppm TWA; 19 mg/m3 Skin TWA

Section 9 - Physical and Chemical Properties

Physical State: Liquid
Appearance: Purple-Red
Odor: Pungent. Phenolic.
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: 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
Auto-ignition temperature: Not available
Decomposition temperature: Not available
Viscosity: Not available
Specific Gravity/Density: Not available

NOTE: Static discharge could act as an ignition source.

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.
Conditions to Avoid: Incompatible materials, ignition sources, excess heat.
Incompatibilities with Other Materials: Strong oxidizing agents, bases, acids, strong reducing agents, 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, and potassium dioxide, halogens, lead, and metals.
Hazardous Decomposition Products: Carbon oxides, nitrogen oxides, hydrogen chloride gas, irritating toxic fumes and gases.

Section 11 - Toxicological Information

CAS#632-99-5 Basic Fuchsin: RTECS#: CX9850000
LD50 Oral: 5000 mg/kg (mouse)
LD50 Dermal: Not available
LC50 Inhalation: Not available

Carcinogenicity: Basic Fuchsin CAS#632-99-5 is not listed by NTP, ACGIH, OSHA, or California Prop 65. Basic Fuchsin is listed by IARC (Group 2B, Possibly Carcinogenic to Humans).

CAS#64-17-5 Ethyl Alcohol: RTECS#: KQ6300000
LD50 Oral: 7060 mg/kg (rat)
LD50 Dermal: Not available
LC50 Inhalation: 20000 ppm 10h (rat)

Draize test, rabbit, eye: 500 mg Severe.
Draize test, rabbit, eye: 500 mg/24H Mild.
Draize test, rabbit, skin: 20 mg/24H Moderate.

Carcinogenicity: Ethyl Alcohol CAS#64-17-5 is listed by IARC (Group 1, Carcinogenic to Humans), NTP, and ACGIH (A3, Animal Carcinogen). Ethyl Alcohol is listed by California Prop. 65 as a developmental carcinogen (alcoholic beverages).

CAS#67-56-1 Methyl Alcohol: RTECS#: PC1400000
LD50 Oral: 6200 mg/kg (rat)
LD50 Dermal: 15800 mg/kg (rabbit)
LC50 Inhalation: 64000 ppm 4h (rat)

Carcinogenicity: Methyl Alcohol CAS#67-56-1 is not listed by IARC, NTP, ACGIH, or OSHA. Methyl Alcohol is listed by California Prop. 65 as a developmental carcinogen.

CAS#108-95-2 Phenol:
LD50 Oral: 340 mg/kg (rat)
LD50 Dermal: 630 mg/kg (rabbit)
LC50 Inhalation: 0.5667 mg/L 4h -dust/mist (calculation method)

Carcinogenicity: Phenol CAS#108-95-2 is not listed by IARC, NTP, ACGIH, OSHA, or California Prop 65.

Mutagenic Effects: Possible risk of irreversible effects.
Reproductive Effects: Experiments with Phenol have shown reproductive toxicity effects on laboratory animals.
Developmental Effects: Not available
Teratogenicity: Not available
Specific Organ Toxicity, Single Exposure: Respiratory system, central nervous system, and optic nerve.
Specific Organ Toxicity, Repeated Exposure: Kidney, liver, and blood.

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. Toxic to aquatic life with long lasting effects.

CAS#64-17-5 Ethyl Alcohol:
EC50, freshwater algae: 275 mg/L 72h (chlorella vulgaris)
LC50, freshwater fish: 14200 mg/L 96h (pimephales promelas)(fathead minnow)
EC50, water flea: 9268 mg/L 48h, 10800 mg/L 24h
EC50, water flea: 10800 mg/L 24h
IC50, bacteria: >1000 mg/L 3h (activated sludge)
EC50, microtox: 34634 mg/L 30min (photobacterium phosphoreum)
EC50, microtox: 35470 mg/L 5min (photobacterium phosphoreum)

CAS#67-56-1 Methyl Alcohol:
LC50, freshwater fish: >10000 mg/L 96h (pimephales promelas)(fathead minnow)
EC50, water flea: >10000mg/L 24h
ErC50, algae: 22000 mg/L 96h (pseudokirchneriella subcapitata)(green algae)
IC50, bacteria: >1000 mg/L 3h (activated sludge)
EC50, microtox: 39000 mg/L 25min
EC50, microtox: 40000 mg/L 15min
EC50, microtox: 43000 mg/L 5min

CAS#108-95-2 Phenol:
LC50, freshwater fish: 4-7 mg/L 96h
LC50, freshwater fish: 32 mg/L 96h
EC50, freshwater algae: 0.0188-0.1044 mg/L 96h static (pseudokirchneriella subcapitata)
EC50, freshwater algae: 187-279 mg/L 72h static (desmodesmus subspicatus)
EC50, freshwater algae: 46.42 mg/L 96h (pseudokirchneriella subcapitata)
EC50, water flea: 10.2-15.5 mg/L 48h (daphnia magna)
EC50, water flea: 4.24-10.7 mg/L 48h static (daphnia magna)
EC50, microtox: 21-36 mg/L 30min
EC50, microtox: 25.61 mg/L 15min
EC50, microtox: 23.28 mg/L 5min

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: Alcohols, N.O.S.
UN1987
PG ll
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 SDS contains all the information required by the CPR.

Section 16 - Additional Information

SDS Creation Date: 1/18/11
Revision #1. 10/10/13 MH
Revision #2. 6/9/15 RC
Revision #3. 7-2-18
Revision #4. 7-15-22

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