

# Safety Data Sheet

## ALCOHOLIC CONGO RED

### Section 1 - Chemical Product and Company Identification

**SDS Name:** Alcoholic Congo Red

**Catalog Numbers:** SO-275, E-300-1, SO-1295

**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

H301-Acute toxicity, oral: 3

H315-Skin corrosion/irritation: 2

H319-Serious Eye damage/Eye Irritation: 2A

H336-Specific target organ toxicity, single exposure; Narcotic effects: 3

H350-Carcinogenicity: 1B

H361-Reproductive toxicity: 2

H370-Specific target organ toxicity, single exposure: 1

H372-Specific target organ toxicity, repeated exposure: 1

#### Pictograms or Hazard symbols and Hazard statement.



Signal word: Danger

#### Hazard statements:

H225-Highly flammable liquid and vapour

H301-Toxic if swallowed

H315-Causes skin irritation

H319-Causes serious eye irritation

H336-May cause drowsiness or dizziness

H350-May cause cancer  
 H361-Suspected of damaging fertility or the unborn child  
 H370-Causes damage to organs (target organs: respiratory system, central nervous system, optic nerve).  
 H372-Causes damage to organs through prolonged or repeated exposure (target organs: kidney, liver, blood).

**Precautionary Statements:**

P201-Obtain special permission 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.  
 P261-Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P264-Wash thoroughly after handling.  
 P270-Do not eat, drink or smoke when using this product.  
 P271-Use only outdoors or in a well-ventilated area.  
 P280-Wear protective gloves/eye protection/face protection.  
 P281-Use personal protective equipment as required.  
 P301+P310-If swallowed: Immediately call a Poison Center or doctor/physician.  
 P302+P352-If on skin: Wash with plenty of soap and water.  
 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.  
 P307+P311-If exposed: Call a Poison Center or doctor/physician.  
 P308+P313-If exposed or concerned: Get medical advice/attention.  
 P312-Call a Poison Center or doctor/physician if you feel unwell.  
 P314-Get medical advice/attention if you feel unwell.  
 P330-Rinse mouth.  
 P332+P313-If skin irritation occurs: Get medical advice/attention.  
 P337 + P313 If eye irritation persists, get medical advice/attention.  
 P362-Take off contaminated clothing and wash before reuse.  
 P370+P378-In case of fire: Use dry chemical, carbon dioxide, dry sand, water spray or alcohol-resistant foam to extinguish.  
 P403+P233-Store in a well-ventilated place. Keep container tightly closed.  
 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		
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CAS#	Chemical Name	Percent
573-58-0	Congo Red	<0.4 w/v
64-17-5	Ethyl alcohol	68 v/v

67-63-0	Isopropyl alcohol	8 v/v
67-56-1	Methyl alcohol	3.6 v/v
7647-14-5	Sodium chloride	<2 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 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:** 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, dry sand, 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:** Ethyl alcohol CAS#64-17-5: 16.6 deg C (61.88 deg F)

**Autoignition Temperature:** Ethyl alcohol CAS#64-17-5: 363 deg C (685.40 deg F)

**Explosion Limits, Lower:** Ethyl alcohol CAS#64-17-5: 3.3 vol %

**Upper:** Ethyl alcohol CAS#64-17-5: 19.0 vol %

**NFPA Rating:** (estimated) Health: 2; Flammability: 4; 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 gear. Ensure adequate ventilation. 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. Use explosion-proof equipment and non-sparking tools.

## Section 7 - Handling and Storage

Use care when handling. Do not handle until all safety precautions have been read and understood. Avoid contact with skin, eyes, and clothing. Do not ingest. Do not breathe vapor or mist. Use only under chemical fume hood to ensure adequate ventilation. Wash thoroughly after handling. Store capped at room temperature in a cool, dry, well-ventilated area. Keep away from incompatible materials. Protect from heat. Vapors heavier than air, may travel considerable distance and ignite or explode. Use explosion-proof equipment. Use non-sparking tools.

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.

### Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Ethanol	1000 ppm STEL	1000 ppm TWA; 1900 mg/m <sup>3</sup> TWA 3300 ppm IDLH	1000 ppm TWA; 1900 mg/m <sup>3</sup> TWA
Methyl alcohol	250 ppm STEL 200 ppm TWA	20 ppm TWA 260 mg/m <sup>3</sup> TWA 6000 ppm IDLH 250 ppm STEL 325 mg/m <sup>3</sup> STEL	200 ppm TWA 260 mg/m <sup>3</sup> TWA
Isopropyl alcohol	200 ppm TWA; 400 ppm STEL	2000 ppm IDLH; 400 ppm TWA	400 ppm TWA, 980 mg/m <sup>3</sup> TWA

### OSHA Vacated PELs:

Ethanol: 1000 ppm TWA; 1900 mg/m<sup>3</sup> TWA

Isopropyl alcohol: 400 ppm TWA; 980 mg/m<sup>3</sup> TWA

Methyl alcohol: 200 ppm TWA; 260 mg/m<sup>3</sup> TWA; 250 ppm STEL; 325 mg/m<sup>3</sup> STEL

### 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:** Red

**Odor:** Alcohol-like

**Vapor Pressure:** No information available

**Odor threshold:** No information available

**Vapor Density:** No information available

**pH:** No information available

**Relative density:** No information available

**Melting point/freezing point:** No information available

**Solubility:** soluble in water

**Boiling Point:** No information available

**Flash point:** No information available

**Evaporation Rate:** No information available

**Flammability (solid, gas):** No information available

**Partition coefficient: n-octanol/water:** No information available

**Auto-ignition temperature:** No information available

**Decomposition temperature:** No information available

**Viscosity:** No information available

**Specific Gravity/Density:** No information available

NOTE: Static discharge could act as an ignition source.

## 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, strong reducing 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:** Nitrogen oxides, Carbon oxides, Sulfur oxides, Sodium oxides, Nitrogen, irritating and toxic fumes and gases.

**Hazardous Polymerization:** Will not occur.

## Section 11 - Toxicological Information

**Congo Red CAS# 573-58-0: RTECS#:** QK1400000

**LD50/LC50:** LD50 Oral = 15,200 mg/kg (rat)

**Draize test, rabbit, eye:** 100 mg Moderate

**Carcinogenicity:** Not listed by ACGIH, IARC, NTP, OSHA. However, Congo Red is a benzidine-based dye and benzidine has been classified by IARC as Group 1 (Carcinogenic to humans). Congo Red is listed by California Prop. 65 as known to cause cancer.

**Teratogenicity:** Developmental abnormalities in the central nervous and urogenital systems and in the eye and ear have been reported in tests with laboratory animals. See RTECS entry QK1400000.

**RTECS#: Ethyl Alcohol CAS# 64-17-5:** KQ6300000  
**Ethyl Alcohol CAS# 64-17-5:**

LD50 Oral: 7060 mg/kg (Rat)  
LD50 Dermal: not listed  
LC50 Inhalation: 20000 ppm (Rat) 10 h

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 the IARC (Group 1, Carcinogenic to Humans), the NTP, and the ACGIH (A3, Animal Carcinogen). Ethyl Alcohol is listed by California Prop. 65 as a developmental carcinogen (alcoholic beverages).

**RTECS#: Isopropyl Alcohol CAS# 67-63-0:** Not Available  
**Isopropyl Alcohol CAS# 67-63-0:**

LD50 Oral: 5840 mg/kg (Rat)  
LD50 Dermal: 12870 mg/kg (Rabbit); 13900 mg/kg (Rat)  
LC50 Inhalation: 72.6 mg/L (Rat) 4 h

**Carcinogenicity: Isopropyl Alcohol CAS# 67-63-0** is not listed by the IARC, the NTP, the ACGIH, or California Prop. 65.

**RTECS#: Methyl Alcohol CAS# 67-56-1:** PC1400000  
**Methyl Alcohol CAS# 67-56-1:**

LD50 Oral: 6200 mg/kg (Rat)  
LD50 Dermal: 15800 mg/kg (Rabbit)  
LC50 Inhalation: 64000 ppm (Rat) 4 h

**Carcinogenicity: Methyl Alcohol CAS# 67-56-1** is not listed by the IARC, the NTP, or the ACGIH. Methyl Alcohol is listed by California Prop. 65 (developmental).

**Epidemiology: Ethyl Alcohol CAS# 64-17-5:** 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: Ethyl Alcohol CAS# 64-17-5:** 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: Ethyl Alcohol CAS# 64-17-5:** 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: Ethyl Alcohol CAS# 64-17-5:** 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: Ethyl Alcohol CAS# 64-17-5:** Standard Draize Test(Skin, rabbit) = 20 mg/24H (Moderate) Standard Draize Test: Administration into the eye (rabbit) = 500 mg (Severe).

**RTECS#: Sodium Chloride CAS# 7647-14-5: VZ4725000**

**LD50/LC50:**

Sodium Chloride CAS# 7647-14-5:

LD50 Oral: 3 g/kg (rat)

LD50 Oral: 4 g/kg (mouse)

LD50 Dermal: >10 g/kg (rabbit)

LC50 Inhalation: >42 g/m<sup>3</sup> (rat) 1h

Skin corrosion/irritation: no data available

Serious eye damage/eye irritation: no data available

Symptoms: Sodium Chloride CAS# 7647-14-5:

Skin contact: May cause skin irritation.

Eye contact: May cause eye irritation.

Inhalation: No data available.

Ingestion: Ingestion of large quantities can irritate the stomach. May cause abdominal pain, nausea, vomiting, diarrhea. May cause dehydration. May cause thirst. May affect the cardiovascular system. May affect metabolism (changes in sodium level). May increase sodium levels. May affect behavior/central nervous system.

**Carcinogenicity: Sodium Chloride CAS# 7647-14-5:**

Sodium Chloride CAS# 7647-14-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Chronic Toxicity: no data available

Sensitization: no data available

Mutagenic Effects: May affect genetic material. Mutagenic effects in mammalian somatic cells. Mutations in microorganisms.

Reproductive Toxicity: no data available

Specific Target Organ Toxicity (single exposure/repeated exposure): no data available

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

## Section 12 - Ecological Information

**Ecology:** Do not release to the environment. Do not release to drains.

**Ecotoxicity: Ethyl Alcohol CAS# 64-17-5:**

EC50 Freshwater Algae = 275 mg/l (Chlorella vulgaris) 72 h

LC50 Freshwater Fish = 14200 mg/l (fathead minnow, Pimephales promelas) 96 h

EC50 Water Flea = 9268 mg/L 48 h, 10800 mg/L 24 h

**Ecotoxicity: Isopropyl Alcohol CAS# 67-63-0:**

EC50 Freshwater Algae = >10000 mg/L (Desmodesmus subspicatus) 72 h

LC50 Freshwater Fish = 11130 mg/l (fathead minnow, Pimephales promelas) 96 h

EC50 Water Flea = 13299 mg/L 48 h, 9714 mg/L 24 h

**Ecotoxicity: Methyl Alcohol CAS# 67-56-1**

EC50 Freshwater Algae = not listed

LC50 Freshwater Fish = >10000 mg/l (fathead minnow, Pimephales promelas) 96 h

EC50 Water Flea = >10000mg/L 24 h

**Ecotoxicity: Congo Red CAS# 573-58-0:**

LC50 water flea 4 mg/l (Daphnia magna) 48h

**Ecotoxicity: Sodium Chloride CAS# 7647-14-5:**

LC50 freshwater fish: 7650 mg/L 96h (Pimephales promelas)

EC50 water flea: 1000 mg/L 48h

**Mobility in Soil:** No information available.

**Other Adverse Effects:** Avoid release to the environment. Do not release to drains. Will likely be mobile in the environment due to its volatility.

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 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 SDS contains all the information required by the CPR.

Section 16 - Additional Information

**SDS Creation Date:** 10/21/12

**Revision #1.** 8/20/13 RC

**Revision #2.** 3/28/17 RC

**Revision #3.** 9-27-19

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