

Material Safety Data Sheet

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Infosafe No. ACQWZ

Issue Date: January 2008

ISSUED by SOUTHBIOL

Product Name: Congo Red 0.1%

Classified as hazardous according to criteria of NOHSC

COMPANY DETAILS

Company Name Southern Biological (ABN 25 838 926 933)
Address 19-21 Worrell Street Nunawading Vic 3131 Australia
Tel/Fax Tel: +61 3 9877 4597 Fax: +61 3 9894 2309

IDENTIFICATION

Product Name Congo Red 0.1%
Proper Shipping Name ETHANOL (ETHYL ALCOHOL)
UN Number 1170
DG Class 3
Packing Group II
Hazchem Code 2(Y)E
Poisons Schedule Not Scheduled
Product Use Dye, general laboratory reagent

Physical Data

Appearance Brownish-red liquid
Melting Point -177°C*
Boiling Point 78°C*
Vapour Pressure 44 mm Hg @ 20°C*
Specific Gravity 0.79-0.80*
Flash Point 40°C (Abel closed cup)*
Flamm. Limit LEL 3.5%*
Flamm. Limit UEL 19.0%*
Solubility in Water Soluble

Other Properties

Volatile Component 100%*
Autoignition Temp. 392°C*
Evaporation Rate 253 (n-butyl acetate = 100)*
Vapour Density 1.59*
Materials to Avoid Strong oxidizing agents, strong bases, acid halides and anhydrides.
Other Information *Data for Special methylated spirits F3.

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Ingredients

<u>Ingredients</u>	<u>Name</u>	<u>CAS</u>	<u>Proportion</u>
	Water		60-100%
	Ethyl alcohol (ethanol)	64-17-5	10-30%
	Methyl alcohol (methanol)	67-56-1	0-1%
	Congo Red	573-58-0	0-0.1%

HEALTH HAZARD INFORMATION

Health Effects

- Acute - Swallowed** Unlikely under normal occupational exposures, but swallowing ethanol may cause harmful central nervous system effects. Effects may include excitation, euphoria, headache, dizziness, drowsiness, blurred vision, fatigue, tremors, convulsions, loss of consciousness, coma, respiratory arrest and death, including optical nerve (visual) damage. Severe acute intoxication may cause hypoglycaemia, hypothermia and extensor rigidity. Other effects may include decreased blood pressure, vomiting blood and blood changes. Aspiration into the lungs may cause pneumonitis.
- Acute - Eye** May cause irritation in contact with the eye, which can result in redness, stinging and lachrymation.
- Acute - Skin** May cause irritation in contact with the skin. Brief contact may cause redness. A small proportion of people exposed to repeated skin contact may develop an allergic skin reaction.
- Acute - Inhaled** May cause irritation to the respiratory tract and mucous membranes. Inhalation of the vapour may result in headache, nausea and vomiting. High concentrations may cause central nervous system symptoms similar to 'swallowed' above.
- Chronic -** Although no specific information is available from the IARC on Congo Red itself, Congo Red is a benzidine-based dye and benzidine has been classified by the IARC as a Group 1 carcinogen, therefore this product has been classified as a possible carcinogen. In addition this material is classified as a Category 2 Carcinogen according to NATIONAL OCCUPATIONAL HEALTH & SAFETY COMMISSION (NOHSC). That is, there is sufficient evidence, on the basis of appropriate long term animal studies or other relevant information, to provide a strong presumption that human exposure to that substance may result in the development of cancer.
- Repeated or prolonged contact may lead to dermatitis with redness, itching, swelling and possible secondary infection. Chronic intoxication by swallowing or repeated inhalation, may cause degenerative changes in the liver, kidneys, hair, gastrointestinal tract and heart muscle. Persons with pre-existing liver impairment, skin and respiratory disorders may be at an increased risk from exposure. Ethanol may also cause adverse reproductive effects. Concurrent absorption of ethanol and some drugs may cause adverse health effects. Ingestion of beverages containing ethanol by pregnant women is associated with 'foetal alcohol syndrome' in their babies.
- Other Information** Note: The denaturant used in this product is methanol(methyl alcohol). The presence of a low percentage of methanol will not alter the safety of the product during the industrial use, but drinking the product may cause optic nerve (visual) damage.

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First Aid

Swallowed Do NOT induce vomiting. Contact a Poisons Information Centre (Phone 131 126) or a doctor at once.

Eye If in eyes wash out immediately with water. If symptoms persist seek medical attention.

Skin Wash affected area thoroughly with soap and water. If symptoms develop seek medical attention.

Inhaled Remove the source of contamination or move the victim to fresh air. Ensure airways are clear and have qualified person give oxygen through a face mask if breathing is difficult. Apply artificial respiration if not breathing. Seek medical attention.

First Aid Facilities Eye wash and normal washroom facilities.

Advice to Doctor

Advice to Doctor Treat symptomatically or consult a Poisons Information Centre (Phone 131 126). Gastric lavage may be indicated if ingested. Do not wait for symptoms to develop. General measures should be taken to control acidosis and maintain urine output.

Other Health Hazard Information

PRECAUTIONS FOR USE

Exposure Limits	Name	STEL		TWA		Footnote
		mg/m3	ppm	mg/m3	ppm	
	Ethyl alcohol(ethanol)			1880	1000	
	Methyl alcohol(methanol)	328	250	262	200	

Eng. Controls Local exhaust and or mechanical (general) exhaust is recommended, provided these are fitted with flame and explosion proof electrical fittings.

Personal Protection

Respirator Type (AS 1716) None should be needed under normal circumstances. In high vapour concentration such as empty vessels or confined spaces, use air supplied hood, or if concentration likely to exceed 500 ppm, wear an approved organic vapour respirator (AS/NZS 1715 and 1716).

Eye Protection Avoid eye contact by wearing splash resistant monogoggles or face shield (AS/NZS 1336) whenever exposed to vapour or mist or if there is a risk of splashing liquid in the eyes. Safety showers with eye-wash should be provided in all areas where product is handled.

Glove Type Avoid skin contact by the use of approved gloves and aprons - PVC or Neoprene rubber gloves (AS2161) are recommended.

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Flammability

Fire Hazards Flammable. Keep away from heat, sparks or naked flames.

SAFE HANDLING INFORMATION

Storage and Transport

Storage Precautions Store in a cool, dry, well ventilated area away from sources of ignition. This product should be stored away from foodstuffs and strong oxidizing agents. For information on the design of the store-room, reference should be made to Australian Standard AS1940, The storage and handling of flammable and combustible liquids. Reference should also be made to any relevant Commonwealth, State or Territory regulations.

Transport This material is a Class 3 - Flammable Liquid according to The Australian Code for the Transport of Dangerous Goods by Road and Rail.

Class 3 - Flammable Liquids are incompatible in a placard load with any of the following:

- Class 1, Explosives
- Class 2.1, Flammable Gases, if both the Class 3 and Class 2.1 dangerous goods are in bulk
- Class 2.3, Toxic Gases
- Class 4.2 Spontaneously Combustible Substances
- Class 5.1 Oxidising Agents and Class 5.2, Organic Peroxides
- Class 6 Toxic Substances (where the flammable liquid is nitromethane)
- Class 7 Radioactive Substances.

Handling Use approved combustible liquid storage containers in the work area. Keep material away from sparks, flames and other ignition sources. Post 'NO SMOKING' signs in area of use. Do not use near welding operations, flames or hot surfaces. Prevent release of vapours and mists into workplace air. Use smallest possible amounts in designated areas with adequate ventilation. Have emergency equipment (for fires, spills, leaks, etc.) readily available. Label containers. Keep containers closed when not in use. Empty containers may contain residues which are hazardous. Ensure a high level of personal hygiene is maintained when using this product. That is; always wash hands before eating, drinking, smoking or using the toilet.

Proper Shipping Name ETHANOL (ETHYL ALCOHOL)

EPG Number 3A1

IERG Number 14

Packaging Method 5.9.3RT1

Spills and Disposal

Spills & Disposal Eliminate all sources of ignition. Stop and contain the spill for salvage or absorb in inert absorbent material. Wash with copious volumes of water, ethanol mixes completely with water. Ventilate area well and ensure adequate personal protection as above. Incinerate under controlled conditions if permitted by local authorities; otherwise disposal must be in accordance with local waste authority requirements.

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Fire/Explosion Hazard

Fire/Explos. Hazard Burns with a colourless flame.
The vapour is heavier than air and may travel along the ground; distant ignition and flashback are possible. Run off to sewers and drains may cause explosions. Isolate for at least 800 metres in all directions if tanks or tankers are involved.
The use of compressed air for filling, discharging, mixing or handling is prohibited due to the vapour hazard.
All vessels must be earthed to avoid generation of static charges when agitating or transferring solvents.
Containers previously holding ethanol products must be degassed before entry of subjected to sources of ignition, refer AS 1940

Hazardous Decomposition Or Byproducts Burning can produce carbon dioxide and/or carbon monoxide.

Fire Fighting Precautions Wear self contained breathing apparatus (SCBA) and full protective clothing to minimize skin exposure.

Extinguishing Media Use water, dry chemical, carbon dioxide or alcohol stable foam.

Hazchem Code 2(Y)E

Conditions to Avoid Light sensitive, will discolour on exposure to light.

OTHER INFORMATION

Toxicology Ethanol
LD50; ROUTE: Oral; DOSE: 7060 mg/kg; Rat
LC50; ROUTE: Inhalation; DOSE: 20000 ppm/10H; Rat
LD50; ROUTE: Oral; DOSE: 6300 mg/kg; Rabbit
1-Naphthol
LD50; ROUTE: Oral; DOSE: 1870 mg/kg; Rat

Risk Statement R10 Flammable.
R45(2) May cause cancer.

Pkg. & Labelling Class 3 labels in accordance with the Australian Code for the Transport of Dangerous Goods.

Hazard Category Toxic

CONTACT POINT

Contact Southern Biological
Peter Ball
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0425 725 875 (AH)

...End of MSDS...