Material Safety Data Sheet

Section 1. Product Identification and Use

Product Name - Trade Name **194-451 W/B RED BROWN DYE**

Supplier - Manufacturer

Chemcraft International Inc.,
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Canada L1A 3Z3

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For Transport Emergency or After Hours

CANUTEC (613) 996-6666

Code	194-451
Synonym	W/B RED BROWN DYE
Chemical Name	Not applicable.
Chemical Family	Pigments. (Coloring material.)
Chemical Formula	Not applicable.
Material Uses	Coatings: Manufacture of surface coatings.
Product Identification Number (PIN)	1993 FLAMMABLE LIQUID, N.O.S. (ETHOXYPROPANOL)

Section 2. Hazardous Ingredients

			Exposure Limits	
Name	**CAS #**	**% by Weight**	**LC_{50}/LD_{50}**	**TLV/PEL**
Propylene glycol monoethyl ether	1569-02-4	10-30	Not available.	Not available.
Diethylene glycol monobutyl ether	112-34-5	0.5-1	ORAL (LD50): Acute: 6560 mg/kg [Rat.]. 7292 mg/kg [Rat]. 5717 mg/kg [Rat]. DERMAL (LD50): Acute: 4120 mg/kg [Rabbit.]. 2764 mg/kg [Rabbit]. 4040 mg/kg [Rabbit].	Not available.

Trace impurities and additional material names not listed above may appear in other sections of this MSDS. These materials may be listed for toxicological concerns, local compliance, or other reasons.

Section 3. Physical Data

Physical State and Appearance	Liquid.
Color	Not available. **Odor** Not available. **Taste** Not available.
Molecular Weight	Not applicable.
pH (1% soln/water)	7 [Neutral.]
Boiling Point	The lowest known value is 100°C (212°F) (Water). Weighted average: 103.86°C (218.9°F)
Melting Point	May start to solidify at 0°C (32°F) based on data for: Water. Weighted average: -2.01°C (28.4°F)
Critical Temperature	Not available.
Specific Gravity	Weighted average: 0.97 (Water = 1)
Vapor Pressure	The highest known value is 2.3 kPa (17.2 mmHg) (at 20°C) (Water). Weighted average: 2.23 kPa (16.73 mmHg) (at 20°C)
Vapor Density	Greater than air.
Volatility	Not available.

Continued on Next Page

Odor Threshold	Not available.
Water/Oil Dist. Coeff.	The product is much more soluble in water.
Ionicity (in Water)	Not available.
Dispersion Properties	See solubility in water, methanol, diethyl ether.
Solubility	Easily soluble in cold water, hot water, methanol. Soluble in diethyl ether. Insoluble in n-octanol.

Section 4. Fire and Explosion Hazard

The Product is:	Flammable.
Fire Hazards in Presence of Various Substances	Not available.
Fire Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
Special Remarks on Fire Hazards	When heated to decomposition, it emits acrid smoke and irritating fumes. (Ethanol, 2-(2-butoxyethoxy)-)
Flash Points	The lowest known value is Closed cup: Between 37.8°C (100°F) and 61°C (142°F).. (Tagliabue.). (2-Propanol, 1-ethoxy-)
Flammable Limits	The greatest known range is LOWER: 0.85% UPPER: 24.6% (Ethanol, 2-(2-butoxyethoxy)-)
Auto-Ignition Temperature	The lowest known value is 227.78°C (442°F) (Ethanol, 2-(2-butoxyethoxy)-).
Products of Combustion	These products are carbon oxides (CO, CO2).
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Special Remarks on Explosion Hazards	Not available.

Section 5. Reactivity Data

Stability	The product is stable.
Decomposition products	Not available.
Conditions of Instability	Not available.
Incompatibility with various substances	Not available.
Corrosivity	Not available.
Special Remarks on Reactivity	Not available.
Special Remarks on Corrosivity	Not available.

Section 6. Toxicological Properties

Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	Acute oral toxicity (LD50): 5717 mg/kg [Rat]. (Ethanol, 2-(2-butoxyethoxy)-). Acute dermal toxicity (LD50): 2764 mg/kg [Rabbit]. (Ethanol, 2-(2-butoxyethoxy)-).
Effects of Acute Exposure	Slightly hazardous in case of ingestion.
Chronic Effects on Humans	**CARCINOGENIC EFFECTS**: Not available. **MUTAGENIC EFFECTS**: Not available. **TERATOGENIC EFFECTS**: Not available. **DEVELOPMENTAL TOXICITY**: Not available. The substance is toxic to blood, kidneys, lungs, the nervous system, liver, skin, eyes. Repeated or prolonged exposure to the substance can produce target organs damage.
Special Remarks on Toxicity to Animals	Not available.

Continued on Next Page

Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on Other Toxic Effects on Humans	Material is destructive to tissue of the mucous membranes and upper respiratory tract. (Ethanol, 2-(2-butoxyethoxy)-)
Exposure Limits	Not available.

Section 7. Preventive Measures

Personal Protection	Safety glasses. Lab coat. Impervious gloves.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Chemical resistant gloves, such as Norfoil should be used when handling this product. Please consult a Glove Manufacturer for alternate choices. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.
Small Spill	Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.
Large Spill	Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed.
Waste Disposal	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Precautions	Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. If ingested, seek medical advice immediately and show the container or the label.
Storage	Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).
TDG Classification	3
PIN	1993 FLAMMABLE LIQUID, **PG:** III N.O.S. (ETHOXYPROPANOL)
Special Provisions for Transport	
Federal and State Regulations	No products were found.
Other Regulations	OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).
Other Classifications	**WHMIS (Canada)**: **Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C (200°F).** **Class D-2A: Material causing other toxic effects (VERY TOXIC).** **Class D-2B: Material causing other toxic effects (TOXIC).** **HCS (U.S.A.)**: Class: Target organ effects. Class: Combustible liquid having a flash point between 37.8°C (100°F) and 93.3°C (200°F).

Hazardous Material Information System (U.S.A.)

Health Hazard	* 0
Fire Hazard	2
Reactivity	0
Personal Protection	A

National Fire Protection Association (U.S.A.)

Health	0
Fire Hazard	2
Reactivity	0
Specific Hazard	

Continued on Next Page

Section 8. First Aid Measures

Eye Contact Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention.

Skin Contact Wash with soap and water. Get medical attention if irritation develops. Cold water may be used.

Hazardous Skin Contact Not available.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Hazardous Inhalation Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion Do not induce vomiting. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Hazardous Ingestion Not available.

Section 9. Preparation Information

References -Manufacturers Material Safety Data Sheets.

Other Special Considerations This material contains Chromium (CAS No7440-47-3) at <2% w/w.

Related Information This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by CPR.

Preparation Information **Validated by C.M. Kelly on 7/14/2003.**

Verified by C.M. Kelly.

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