

Material Safety Data Sheet

194-451 W/B RED BROWN DYE

1. Product and company identification

Common name : 194-451 W/B RED BROWN DYE
Synonym : W/B RED BROWN DYE
Material uses : Coatings: Manufacture of surface coatings.
Manufacturer : Chemcraft International, Inc.
155 Rose Glen Road North
Port Hope, Ontario, Canada L1A 3Z3
Ph:905-885-6388 Fax:905-885-7587

Code : 194-451
MSDS # : Not available.
Validation date : **12/21/2005.**
Print date : 1/18/2006.
Responsible name : **A. Davis**
In case of emergency : 1-613-996-6666

2. Hazards identification

Physical state : Liquid.
Odor : Not available.
Emergency overview : Warning!
CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE FOLLOWING ORGANS:
BLOOD, KIDNEYS, LUNGS, NERVOUS SYSTEM, LIVER, SKIN, EYES.
MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED.
COMBUSTIBLE LIQUID AND VAPOR.
VAPOR MAY CAUSE FIRE.
Do not ingest. Avoid prolonged contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eyes : No known significant effects or critical hazards.

Skin : Harmful in contact with skin.

Inhalation : No known significant effects or critical hazards.

Ingestion : Harmful if swallowed.

Potential chronic health effects : **CARCINOGENIC EFFECTS:** Classified 4 (Probably not for humans.) by IARC, None. by OSHA [2-Furanmethanol, tetrahydro-].

MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available.

Medical conditions aggravated by over-exposure : Repeated or prolonged exposure to the substance can produce target organs damage.

Over-exposure signs/symptoms : Not available.

See toxicological information (section 11)

3. Composition/Information on ingredients

<u>Name</u>	<u>CAS number</u>	<u>%</u>
Ethanol, 2-(2-butoxyethoxy)-	112-34-5	30 - 50
Ethanol, 2-propoxy-	2807-30-9	15 - 30
Propanol, 1(or 2)-(2-methoxymethylethoxy)-	34590-94-8	1 - 5
1,2-Propanediol	57-55-6	1 - 5
2-Furanmethanol, tetrahydro-	97-99-4	1 - 5

4. First aid measures

- Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention.
- Skin contact** : Flush contaminated skin with plenty of water. Continue to rinse for at least 10 minutes. Get medical attention. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Inhalation** : Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if symptoms occur. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

Antidote information

Product/ingredient name

Antidote information

Notes to physician : Not available.

5. Fire-fighting measures

- Flammability of the product** : Flammable.
- Products of combustion** : These products are carbon oxides (CO, CO₂).
- Extinguishing media**
- Suitable** : Use dry chemical, CO₂, water spray (fog) or foam.
- Not suitable** : Do not use water jet.
- Special exposure hazards** : Not available.
- Combustible liquid and vapor. Vapor may cause flash fire. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Fire Hazards in Presence of Various Substances**

5 . Fire-fighting measures

- : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
 - Flammable in the presence of the following materials or conditions: heat, oxidizing materials, reducing materials and combustible materials.
 - : Slightly explosive in the presence of the following materials or conditions: oxidizing materials.
 - :
- Explosion Hazards in Presence of Various Substances**

6 . Accidental release measures

- Personal precautions** : Immediately contact emergency personnel. Eliminate all ignition sources. Keep unnecessary personnel away. Use suitable protective equipment. Do not touch or walk through spilled material.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Methods for cleaning up** : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials) and use a non-sparking or explosion-proof means to transfer material to a sealable, appropriate container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

7 . Handling and storage

- Handling** : Do not ingest. Avoid prolonged contact with eyes, skin and clothing. Keep container closed. Use only with adequate ventilation. Keep away from heat, sparks and flame. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Wash thoroughly after handling.
- 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).

8 . Exposure controls/personal protection

Product name

Not available

Exposure limits

Consult local authorities for acceptable exposure limits.

- Engineering measures** : Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Personal protection

- Eyes** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

8 . Exposure controls/personal protection

- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Other protection** : Not available.
- Personal protective equipment (Pictograms)** :
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9 . Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : The lowest known value is Closed cup: Between 37.8°C (100°F) and 61°C (142°F)..
Open cup: 49°C (120.2°F). (Cleveland). (Ethanol, 2-propoxy-)
- Auto-ignition temperature** : The lowest known value is 227.78°C (442°F) (Ethanol, 2-(2-butoxyethoxy)-).
- Flammable limits** : The greatest known range is Lower: 0.85% Upper: 24.6% (Ethanol, 2-(2-butoxyethoxy)-)
- Color** : Not available.
- Odor** : Not available.
- Taste** : Not available.
- Molecular weight** : Not applicable.
- Molecular formula** : Not applicable.
- pH** : 7 [Neutral.]
- Boiling/condensation point** : The lowest known value is 149.5°C (301.1°F) (Ethanol, 2-propoxy-). Weighted average: 199.19°C (390.5°F)
- Melting/freezing point** : May start to solidify at -60°C (-76°F) based on data for: 1,2-Propanediol. Weighted average: -75.36°C (-103.6°F)
- Critical temperature** : Not available.
- Relative density** : Weighted average: 0.95 (Water = 1)
- Vapor pressure** : The highest known value is 0.2 kPa (1.3 mm Hg) (at 20°C) (Ethanol, 2-propoxy-).
Weighted average: 0.07 kPa (0.53 mm Hg) (at 20°C)
- Vapor density** : Greater than air.
- Volatility** : 70% (w/w)
- Odor threshold** : The lowest known value is 34.6 ppm (Propanol, 1(or 2)-(2-methoxymethylethoxy)-)
- Evaporation rate** : Not available.
- VOC** : 70 (%)
- Viscosity** : Not available.
- Ionicity (in water)** : Not available.
- Dispersibility properties** : See solubility in water, methanol, diethyl ether, n-octanol.
- Solubility** : Easily soluble in hot water, methanol, diethyl ether.
Soluble in cold water, n-octanol.
- Physical/chemical properties comments** : Not available.

10 . Stability and reactivity

- Stability and reactivity** : The product is stable.
- Conditions of instability** : Not available.
- Incompatibility with various substances** : Reactive or incompatible with the following materials: oxidizing materials, reducing materials, organic materials, acids and alkalis.
Non-reactive or compatible with the following materials: combustible materials, metals and moisture.
- Hazardous decomposition products** : Not available.
- Hazardous polymerization** : Not available.
- Conditions of reactivity** : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
Flammable in the presence of the following materials or conditions: heat, oxidizing materials, reducing materials and combustible materials.
Slightly explosive in the presence of the following materials or conditions: oxidizing materials.

11 . Toxicological information

Toxicity data

- Chronic effects on humans** : **CARCINOGENIC EFFECTS:** Classified 4 (Probably not for humans.) by IARC, None. by OSHA [2-Furanmethanol, tetrahydro-].
Contains material which causes damage to the following organs: blood, kidneys, lungs, the nervous system, liver, skin, eyes.
- Other toxic effects on humans** : Hazardous in case of skin contact (permeator), of ingestion, of inhalation.
- Special remarks on toxicity to animals** : Not available.
- Special remarks on chronic effects on humans** : May contain traces of ethylene oxide . Ethylene oxide has been reported to be a potential carcinogen. (Ethanol, 2-propoxy-)
- 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)-)
- Specific effects**
- Carcinogenic effects** : No known significant effects or critical hazards.
- Mutagenic effects** : No known significant effects or critical hazards.
- Teratogenicity / Reproductive toxicity** : No known significant effects or critical hazards.
- Sensitization**
- Ingestion** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Eyes** : No known significant effects or critical hazards.
- Skin** : No known significant effects or critical hazards.
- Synergistic products** : Not available.

12. Ecological information

Ecotoxicity data

<u>Product/ingredient name</u>	<u>Species</u>	<u>Period</u>	<u>Result</u>
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Environmental precautions : No known significant effects or critical hazards.

Octanol/water partition coefficient : The product is equally soluble in octanol and water.

Bioconcentration factor : Not available.

BOD and COD : Not available.

Biodegradable/OECD : Not available.

Mobility : Not available.

Products of degradation : These products are carbon oxides (CO, CO₂) and water.

Toxicity of the products of biodegradation : The products of degradation are less toxic than the product itself.

Special remarks on the products of biodegradation : Not available.

13. Disposal considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Waste stream : Not available.


RCRA classification : Not available.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Class	PG*	Label	Additional information
TDG Classification	1993 FLAMMABLE LIQUID, N.O.S. (ETHOXYPROPANOL)	3	III		-

PG* : Packing group

15 . Regulatory information

- 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-2B: Material causing other toxic effects (Toxic).
CEPA DSL: Nerosol Red Brown 4 RM New

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

EU regulations

Hazard symbol/symbols :



- Risk phrases** : R21- Harmful in contact with skin.
Safety phrases : S2- Keep out of the reach of children.
S36/37- Wear suitable protective clothing and gloves.
S46- If swallowed, seek medical advice immediately and show this container or label.

International regulations

International lists : No products were found.

16 . Other information

- References** : -Manufacturer's Material Safety Data Sheet.
Other special considerations : This material contains Chromium (CAS No7440-47-3) at <2% w/w.
Date of printing : 1/18/2006.
Date of issue : 12/21/2005.
Version : 3

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.