Date Printed: 6/11/2013 Page 1 / 5



Material Safety Data Sheet

CHEMTREC Transportation Emergency Phone: 800-424-9300

Pittsburgh Poison Control Center Health Emergency No.: 412-681-6669

NOTE: The CHEMTREC Transportation Emergency Phone is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals

1. Identification

Product Name: C-FLEX 1-2-3 AF RED Revision Date: 6/11/2013

Identification Number: C111S1NL Supercedes Date: 12/19/2008

Product Use/Class: FOR INDUSTRIAL USE ONLY

Manufacturer: Carboline Company Preparer: Regulatory Department

2150 Schuetz Road St. Louis, MO 63146

800-848-4645

2. Hazard Identification

EMERGENCY OVERVIEW: Contains Copper which may cause hemolysis of red blood cells and lung injury. Irritating to eyes and skin. WARNING! - FLAMMABLE LIQUID AND VAPOUR. Keep away from heat and sources of ignition. Harmful if inhaled. Use with adequate ventilation. Vapours may cause drowsiness and dizziness. Keep container closed. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling. Harmful if swallowed. Risk of serious damage to the lungs (by aspiration).

EFFECTS OF OVEREXPOSURE - EYE CONTACT: May cause eye irritation.

EFFECTS OF OVEREXPOSURE - SKIN CONTACT: May cause skin irritation. May cause allergic skin reaction. May be harmful if absorbed through the skin.

EFFECTS OF OVEREXPOSURE - INHALATION: Harmful if inhaled. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Vapours may be irritating to eyes, nose, throat, and lungs.

EFFECTS OF OVEREXPOSURE - INGESTION: Harmful if swallowed.

EFFECTS OF OVEREXPOSURE - CHRONIC HAZARDS: Repeated and prolonged exposure to solvents may cause brain and nervous system damage. Prolonged or repeated inhalation of high concentrations of metal fumes may cause metal fume fever, characterized by headache, dizziness, metallic taste in the mouth, and general flu-like symptoms.

MEDICAL CONDITIONS PRONE TO AGGRAVATION: No information available.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Absorption, Skin Contact

3. Composition/Information On Ingredients

Hazardous Ingredients

Chemical Name	CAS-No.	Weight % Less Than	ACGIH TLV- TWA	ACGIH TLV- STEL	OSHA PEL-TWA	OSHA PEL- CEILING
CUPROUS OXIDE (Cu2O)	1317-39-1	55.0	1 MG/M3	NE	1 MG/M3	NE
TERT-BUTYL ACETATE	540-88-5	15.0	200 PPM	N/E	950 MGM3	N/E
META-XYLENE	108-38-3	10.0	100 PPM	150 PPM	435 MG/M3	N/E
ZINC OXIDE	1314-13-2	5.0	2 MGM3	10 MGM3	5 MGM3	N/E
PARA-XYLENE	106-42-3	5.0	100 PPM	150 PPM	435 MGM3	N/E
ETHYL BENZENE	100-41-4	5.0	20 PPM	N/E	435 MGM3	N/E
ORTHO-XYLENE	95-47-6	5.0	100 PPM	150 PPM	435 MG/M3	N/E

Date Printed: 6/11/2013 Page 2 / 5

4. First-aid Measures

AFTER EYE CONTACT: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

AFTER SKIN CONTACT: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. If skin irritation persists, call a physician.

AFTER INHALATION: Give oxygen or artificial respiration if needed. Remove person to fresh air. If signs/symptoms continue, get medical attention.

AFTER INGESTION: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. If swallowed, call a poison control centre or doctor immediately.

5. Fire-fighting Measures

Flash Point, °F: 79F (26C) Lower Explosive Limit, %: 1.0 (Setaflash) Upper Explosive Limit, %: 7.3

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam

UNUSUAL FIRE AND EXPLOSION HAZARDS: Flammable liquidVapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air. Vapors may travel to areas away from work site before igniting/flashing back to vapor source.*Provide adequate ventilation. Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Electrical installations / working materials must comply with the technological safety standards. Wear shoes with conductive soles.

SPECIAL FIREFIGHTING PROCEDURES: In the event of fire, wear self-contained breathing apparatus. Cool containers / tanks with water spray. Flammable.

Accidental Release Measures

PERSONAL SAFETY MEASURES/ENVIRONMENTAL MEASURES/METHOD OF CLEANING/CONTAINMENT: Do not allow material to contaminate ground water system. Prevent product from entering drains. Remove all sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Evacuate personnel to safe areas. Wear personal protective equipment. For personal protection see section 8. Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

7. Handling and Storage

INSTRUCTIONS FOR SAFE HANDLING: Avoid breathing vapors or spray mist. Do not get in eyes, on skin, or on clothing. Keep containers dry and tightly closed to avoid moisture absorption and contamination. Use only with adequate ventilation/personal protection. Wash thoroughly after handling. Ensure all equipment is electrically grounded before beginning transfer operations. Do not use sparking tools. Prepare the working solution as given on the label(s) and/or the user instructions. Do not breathe vapours or spray mist.

STORAGE CONDITIONS: Keep container closed when not in use. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight.

8. Exposure Controls/Personal Protection

ENGINEERING CONTROLS: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas.

RESPIRATORY PROTECTION: In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator. Use only with ventilation to keep levels below exposure guidelines reported in this document. User should test and monitor exposure levels to ensure all personnel are below guidelines. If not sure, or not able to monitor, use State or federally approved supplied air respirator. For silica containing coatings in a liquid state, and/or if no exposure limits are established above, air-supplied respirators are generally not required.

Date Printed: 6/11/2013 Page 3 / 5

SKIN PROTECTION: Lightweight protective clothing. Impervious gloves. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Request information on glove permeation properties from the glove supplier.

EYE PROTECTION: Safety glasses with side-shields

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.

PROTECTION AND HYGIENE MEASURES: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

9. Physical and Chemical Properties

Boiling Range: 281 F (138 C) - 343 F (173 C) Vapor Density: Heavier than Air

Odor: Solvent Odor Threshold: N/D

Appearance: Red Liquid Evaporation Rate: Slower Than Ether

Solubility in Water: Insoluble Specific Gravity: 1.87

Freeze Point: N/D pH: N/D

Physical State: Liquid Vapor Pressure: No Information

(See section 16 for abbreviation legend)

10. Stability and Reactivity

CONDITIONS TO AVOID: Heat, flames and sparks.

MATERIALS TO AVOID: Strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

HAZARDOUS POLYMERIZATION: Hazardous polymerisation does not occur.

STABILITY: Stable under normal conditions.

11. Toxicological Information

Chemical Name	CAS-No.	LD50	LC50
CUPROUS OXIDE (Cu2O)	1317-39-1	470 MG/KG, ORAL, RAT	NOT AVAILABLE
TERT-BUTYL ACETATE	540-88-5	3160 mg/kg, oral, rat	4000 ppm/6 hours, rat inhalation
META-XYLENE	108-38-3	Not Available	Not Available
ZINC OXIDE	1314-13-2	Not Available	Not Available
PARA-XYLENE	106-42-3	Not Available	Not Available
ETHYL BENZENE	100-41-4	3500 mg/kg rat, oral	17.2 mg/L lnh, Rat, 4Hr
ORTHO-XYLENE	95-47-6	Not Available	Not Available

12. Ecological Information

ECOLOGICAL INFORMATION: No information available.

13. Disposal Information

DISPOSAL INFORMATION: Dispose of in accordance with local regulations.

Date Printed: 6/11/2013 Page 4 / 5

14. Transport Information

DOT Proper Shipping Name: Paint Packing Group: III

DOT Technical Name: N/A Hazard Subclass: N/A

DOT Hazard Class: 3 Resp. Guide Page: 128

DOT UN/NA Number: UN 1263
Additional Notes: No Information

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Sara Section 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

 Chemical Name
 CAS-No.

 META-XYLENE
 108-38-3

 ZINC OXIDE
 1314-13-2

 PARA-XYLENE
 106-42-3

 ETHYL BENZENE
 100-41-4

 ORTHO-XYLENE
 95-47-6

Toxic Substances Control Act:

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

U.S. State Regulations:

New Jersey Right-to-Know:

The following materials are non-hazardous, but are among the top five components in this product.

<u>Chemical Name</u> <u>CAS-No.</u>

VINYL RESIN TRADE SECRET

Pennsylvania Right-To-Know:

The following non-hazardous ingredients are present in the product at greater than 3%.

<u>Chemical Name</u> <u>CAS-No.</u>

VINYL RESIN TRADE SECRET

CALIFORNIA PROPOSITION 65:

Warning: The following ingredients present in the product are known to the state of California to cause Cancer:

 Chemical Name
 CAS-No.

 ETHYL BENZENE
 100-41-4

 BENZENE
 71-43-2

Date Printed: 6/11/2013 Page 5 / 5

Warning: The following ingredients present in the product are known to the state of California to cause birth defects, or other reproductive hazards.

 Chemical Name
 CAS-No.

 TOLUENE
 108-88-3

 BENZENE
 71-43-2

International Regulations:

CANADIAN WHMIS:

This MSDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

Canadian WHMIS Class: B2, D1B, D2B

16. Other Information

HMIS Ratings:

Health: 3 Flammability: 2 Reactivity: 0 Personal Protection: X

VOLATILE ORGANIC COMPOUNDS, GR/LTR MIXED (UNTHINNED): 390

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

The information contained herein is, to the best of our knowledge and belief accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state, and local laws and regulations.