

MATERIAL SAFETY DATA SHEET

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION



EMERGENCY PHONE NUMBER
Chemtrec, U.S.A. 1-800-424-9300

PRODUCT NAME
ENTHONE 50-770R Black

PRODUCT DESCRIPTION
Resin and filler mixture.

GENERAL USE
Two component CAT-L-INK.

Enthone
16782 Von Karman Ave.
Irvine, CA 92606
Phone: (949) 757-0111

Distributed by:
NAZDAR
8501 Hedge Lane Terrace
Shawnee, KS 66227
Phone: 800-677-4657
www.nazdar.com

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

Polymer of Epoxy Resin & Bisphenol A	20.0- 35.0	025036-25-3
Diethylene Glycol Ethyl Ether Acetate	7.0- 13.0	112-15-2
Dipropylene Glycol Mono Methyl Ether	5.0- 10.0	34590-94-8
Propylene Glycol Mono Methyl Ether Acetate	5.0- 10.0	108-65-6
Black Pigment	30.0- 60.0	68186-91-4
Amorphous Silica Gel	5.0- 10.0	112926-00-8

DISCLOSURE:

This product is hazardous under the criteria of the USA OSHA Hazard Communication Standard 29 CFR 1910.1200. Any ingredient claimed as a trade secret will be disclosed in accordance with 29 CFR 1910.1200 (i). See Section 8 of this MSDS for any noted exposure limits for these compounds.

SECTION 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Caution!
Combustible liquid and vapor
May cause eye irritation.
Black liquid. Mild odor.

EYE CONTACT

Moderately irritating with redness, pain or tearing. Prolonged contact may cause burns.

SKIN CONTACT

Slightly irritating. Frequent or prolonged contact may irritate and cause a rash (dermatitis). Repeated exposure may cause allergic skin reactions. Once an allergy develops, even an exposure to a very small amount can trigger an allergic reaction.

INHALATION

Slightly irritating to the eyes, nose, throat and lungs.

INGESTION

Slightly irritating to the mouth, stomach and digestive tract. May cause vomiting.

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SECTION 3. HAZARDS IDENTIFICATION (CONTINUED)

PRIMARY ROUTE OF EXPOSURE

Skin contact, skin absorption, eye, inhalation, ingestion.

CARCINOGENICITY

IARC - 3 (amorphous silica)

OSHA - Not Listed

NTP - Not Listed

TARGET ORGANS

Ingredients may be toxic to the following organs:

Skin, eyes, lungs, and mucous membranes.

SECTION 4. FIRST AID MEASURES

EYE CONTACT

Flush eyes with flowing water for 10 to 15 minutes. Blink eyes frequently. Repeat flushing if burning or pain persists. Get immediate medical attention.

SKIN CONTACT

Rinse skin immediately with plenty of water. Then wash skin immediately with soap and water. Remove contaminated clothing.

Do not apply lotions or creams without the advice of a physician or poison center. If problems persist get prompt medical attention.

INHALATION

Remove victim to fresh air. If breathing is difficult get immediate medical attention. If not breathing give artificial respiration and call for emergency medical assistance.

INGESTION

Do NOT induce vomiting. Rinse mouth with water and allow patient to drink as much water as desired. Contact a poison center or get prompt medical attention if symptoms of irritation persist.

SECTION 5. FIRE FIGHTING MEASURES

FLASH POINT

145.00 F 62.77 C

FLASH METHOD

Setaflash Closed Cup

EXTINGUISHING METHOD

Use carbon dioxide, foam or dry chemical.

FIRE FIGHTING PROCEDURES

Wear self-contained breathing apparatus (pressure-demand MSA/NIOSH or equivalent) and full fire fighting protective gear.

FIRE AND EXPLOSION HAZARDS

Heat in excess of flashpoint, open flame, or storage with incompatible materials as listed in Stability And Reactivity.

HAZARDOUS PRODUCTS/COMBUSTION

Carbon monoxide, carbon dioxide.

SECTION 6. ACCIDENTAL RELEASE MEASURES

CLEAN-UP

Remove ignition sources. Provide adequate ventilation and/or personal protective equipment (see Section 8). Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Prevent runoff to storm sewers, ditches and other pathways to soil and waterways.

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SECTION 7. HANDLING AND STORAGE

HANDLING

Avoid breathing fumes. Do not splash or spill.

STORAGE

Do not store with incompatible materials. Store containers upright. Keep away from heat and flame.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Use local exhaust ventilation.

EYE PROTECTION

Wear safety glasses with side shields or a face shield.

SKIN PROTECTION

Wear chemical resistant rubber gloves and apron.

RESPIRATORY PROTECTION

No respirator is required if ingredient exposure limits are not exceeded. An OSHA approved (29 CFR 1910.134 USA Dept. of Labor), air purifying, half-face respirator with the appropriate cartridge should be used if exposure limits are exceeded.

OTHER PROTECTION

A safety shower and eye wash station should be within reasonable distance of the work area.

EXPOSURE LIMITS/REGULATORY INFORMATION

SUBSTANCE DESCRIPTION	REG. AGCY	PELTL	STEL	CEIL
Polymer of Epoxy Resin & Bisphenol A	OSHA	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D
Diethylene Glycol Ethyl Ether Acetate	OSHA	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D
Dipropylene Glycol Mono Methyl Ether	OSHA	100.0	150.0	N/D
	ACGIH	100.0	150.0	N/D
Propylene Glycol Mono Methyl Ether Acetate	OSHA	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D
Black Pigment	OSHA	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D
Amorphous Silica	OSHA	20mppcf	N/D	N/D
	ACGIH	10 MG/M3	N/D	N/D

LEGEND:

EXPOSURE LIMIT DESCRIPTIONS

CEIL Ceiling Exposure Limit

STEL Short Term Exposure Limit

UNIT OF MEASURE

PELTL PEL/TLV

N/D = Not Determined

PPM Parts Per Million (Liquid)

MG/M3 Milligrams Per Cubic Meter (Solid)

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR
Black liquid. Mild odor.

SPECIFIC GRAVITY
1.73

BOILING POINT
N/D F N/D C 320 - 370 deg. F

VOLATILE ORGANIC COMPOUNDS
VOC - % 28.2
VOC - g/L 488
VOC - lbs/Gal 4.07

SECTION 10. STABILITY AND REACTIVITY

INCOMPATIBILITIES
Oxidizing agents.

DECOMPOSITION
None

POLYMERIZATION
None.

CONDITIONS TO AVOID
Extreme temperatures.

STABILITY
Stable.

SECTION 11. TOXICOLOGICAL INFORMATION

EYE EFFECTS
Conjunctival irritation and redness. May cause corneal damage.

DERMAL EFFECTS
Slightly irritating. Absorption of toxic amounts through the skin is unlikely under ordinary conditions of industrial use.

INHALATION EFFECTS
Minor irritation of the mucous membranes and the upper respiratory tract. Systemic toxicity is very unlikely under ordinary conditions of industrial use.

The glycol ether in this product does not cause adverse effects on the male or female reproductive system.

INGESTION EFFECTS
Systemic effects are unlikely unless taken in massive amounts.

ACUTE TOXICITY DATA
Enthone is not aware of any toxicity data on the specific mixture of chemical components contained in this product. Data on the individual chemical components of this mixture is available in the literature or can be obtained by contacting Enthone's Health, Safety, and Environmental Department at the address and telephone number listed in Section 1.

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SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Enthone has not conducted specific studies on the ecotoxicity or environmental fate of this product. Commonly available data on certain ingredients indicate that acute or chronic effects could result from uncontrolled releases to soil, ground water, storm waters or air. Appropriate measures should be taken to prevent uncontrolled releases. Prompt containment and clean-up should be performed if releases do occur (see Section 6).

SECTION 13 DISPOSAL CONSIDERATIONS

WASTE DISPOSAL Legal disposition of wastes is the responsibility of the owner/generator of the waste. Applicable Federal, state and/or local regulations must be followed during treatment, storage, or disposal of waste containing this product

It is recommended that the following priority hierarchy be used when selecting a disposal method: (1) Reuse or reintroduction into the process. (2) Reclamation, regeneration or recycling (3) Burning for energy recovery, or incineration. (4) Treatment

SECTION 14. TRANSPORT INFORMATION

DOT/IATA PROPER SHIPPING NAME

Ink Materials

DOT/IATA HAZARD CLASS

Not Regulated

DOT/IATA UN OR NA NUMBER

Not Regulated

DOT/IATA PACKING GROUP

Not Regulated

DOT/IATA LABEL

Not Regulated

DOT/IATA PLACARD

Not Regulated

SECTION 15 REGULATORY INFORMATION

Component Epoxy Resin is subject to the following Environmental List
311/312 SARA Phy/Hea Haz (40CFR370.40)

Component Bisphenol A is subject to the following Environmental List
311/312 SARA Phy/Hea Haz (40CFR370.40)
313 SARA toxic chem (40CFR372.65)

Component Diethylene Glycol Ethyl Ether Acetate is subject to the following Environmental List
311/312 SARA Phy/Hea Haz (40CFR370.40)
313 SARA toxic chem (40CFR372.65)

Component Dipropylene Glycol Mono Methyl Ether is subject to the following Environmental List
311/312 SARA Phy/Hea Haz (40CFR370.40)

Component Propylene Glycol Mono Methyl Ether Acetate is subject to the following Environmental List
311/312 SARA Phy/Hea Haz (40CFR370.40)
313 SARA toxic chem (40CFR372.65)

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SECTION 15 REGULATORY INFORMATION (CONTINUED)

Component Black Pigment is subject to the following Environmental List
311/312 SARA Phy/Hea Haz (40CFR370.40)

Component Trade Secret 2061 is subject to the following Environmental List

CALIFORNIA PROPOSITION 65

This product contains a chemical(s) known to the State of California to cause cancer.

SECTION 16. OTHER INFORMATION

HAZARDOUS MATERIALS ID. SYSTEM

HMIS

Health 2

Fire 2

1

Reactivity 1

3

WHMIS HAZARD CLASS

B3, D2B

HAZARD RATING

Least 0 Slight

Moderate 2 High

Extreme 4

REVISION NO.

001

REVISION DATE

09/07/00

REVISION SECTION / REASON

SECTION 2: Composition

Created by:

HSE - Irvine, CA

Approved by:

HSE - Irvine, CA

Limitations and Disclaimer:

This MSDS relates only to the specific material identified in Section 2. In compiling this MSDS, Enthone has relied in good faith on information provided to Enthone by suppliers of the components of this material, and, in some cases, provided by independent data resources. Enthone has not independently verified such information and in addition users should be aware that all materials may present unknown hazards. Use of this material in combination with other materials and/or in specific processes may render information set forth in this MSDS inaccurate or otherwise invalid

NO WARRANTY, EXPRESS OR IMPLIED, IS MADE REGARDING THE INFORMATION FURNISHED ON THIS MSDS

KEY TO ABBREVIATIONS:

EQ=Equal

GT=Greater Than

ND=No Data Available

<=Less Than

LT=Less Than

N/D=Not Determined

>=Greater Than

AP=Approximately

TR=Trace

HSE=Health, Safety and Environmental