

Enthone
 Enthone Inc.
 P.O. Box 1900
 New Haven, CT 06508
 (203) 934-8611
 (203) 799-8179 Fax

Page: 1/5
 Printed 3/23/2001.
 Product Name 50-202BR

50-SERIES INK (YELLOW)

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

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

FOR PRODUCT INFORMATION:
 Phone (949) 757-0111
 Fax (949) 757-0248

EMERGENCY PHONENUMBER:
 Chemtrec, U.S.A.
 1-800-424-9300

PRODUCT DESCRIPTION Resin and filler mixture.

GENERAL USE
 Two component 50-Series Cat-I-Ink

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE DESCRIPTION	PERCENT	CAS#
Polymer of Epoxy Resin & Bisphenol A	30.000- 45.000	025036-25-3
Diethylene Glycol Ethyl Ether Acetate	7.000- 13.000	112-15-2
Dipropylene Glycol Mono Methyl Ether	7.000- 13.000	34590-94-8
Propylene Glycol Mono Methyl Ether Acetate	5.000- 10.000	108-65 -6
Lead	18.430	7439-92 1
Hexavalent Chromium	4.300	7440-47-3
Barium Sulfate	1.000- 5.000	7727-43-7

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 (d). 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.
 Yellow 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.

PRIMARY ROUTE OF EXPOSURE
 Skin contact, skin absorption, eye, inhalation, ingestion.

CARCINOGENICITY
 IARC - 1 Chromium, 2B Lead
 OSHA - Not Listed
 NTP - 1 Chromium

TARGET ORGANS
 Ingredients may be toxic to the following organs:
 Skin, eyes, lungs, 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.

Enthone
 Enthone Inc.
 P.O. Box 1900
 New Haven, CT 06508
 (203) 934-8611
 (203) 799-8179 Fax

Page: 2 / 5

Printed 3/23/2001

Product Name 50-202BR

50-SERIES INK (YELLOW)

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

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.

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. AGENCY	PELLEL	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	100.0000	150.0000N/D	
	ACGIH	100.0000	150.0000N/D	
Propylene Glycol Mono Methyl Ether Acetate	OSHA	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D
Lead	OSHA	0.0500	N/D	N/D
	ACGIH	0.0500	N/D	N/D
Hexavalent Chromium	OSHA	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D
Barium Sulfate	OSHA	N/D	N/D	N/D
	ACGIH	10.0000	N/D	N/D

LEGEND:

Enthone
Enthone Inc.
P.O. Box 1900
New Haven, CT 06508
(203) 934-8611
(203) 799-8179 Fax

Page: 3 / 5

Printed 3/23/2001

Product Name **50-202BR**

50-SERIES INK (YELLOW)

EXPOSURE LIMIT DESCRIPTIONS

CEIL Ceiling Exposure Limit
PEL/TLV PEL/TLV
STEL Short Term Exposure Limit
N/D Not Determined

UNIT OF MEASURE

PPM Parts Per Million (Liquid)
MG/M3 Milligrams Per Cubic Meter (Solid)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR

Yellow liquid, mild odor.

SPECIFIC GRAVITY

1.47

pH FACTOR

N/D

BOILING POINT

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

VOLATILE ORGANIC COMPOUNDS

VOC - % 27.8
VOC - g/L 400
VOC - lbs/gal 3.34

SECTION 10. STABILITY AND REACTIVITY

INCOMPATIBILITIES

Oxidizing agents.

DECOMPOSITION

Not established.

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.

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 5).

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.

Enthone
Enthone Inc.
P.O. Box 1900
New Haven, CT 06508
(203) 934-8611
(203) 799-8179 Fax

Page: 4 / 5
Printed 3/23/2001
Product Name 50-202BR

50-SERIES INK (YELLOW)

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 Polymer of Epoxy Resin and 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)

Component Lead is subject to the following:

Environmental List

CA California Prop 65

CERCLA Hazardous Substance

311/312 SARA Phy/Hea Haz (40CFR370.40)

313 SARA toxic chem (40CFR372.65)

Component Hexavalent Chromium is subject to the following:

Environmental List

CA California Prop 65

CERCLA Hazardous Substance

311/312 SARA Phy/Hea Haz (40CFR370.40)

313 SARA toxic chem (40CFR372.65)

Component Barium Sulfate is subject to the following:

Environmental List

311/312 SARA Phy/Hea Haz (40CFR370.40) 313 SARA toxic chem (40CFR372.65)

CALIFORNIA PROPOSITION 65

This product contains a chemical(s) known to the State of California to cause cancer and birth defects, or other reproductive harm.

SECTION 16. OTHER INFORMATION

HAZARDOUS MATERIALS ID. SYSTEM

HMIS

Health 2

Fire 2

Reactivity 1

HAZARD RATING

Least 0 Slight 1

Moderate 2 High 3

Extreme 4

WHMIS HAZARD CLASS

B3, D2B

REVISION NO.

005

REVISION DATE

08/10/00

Enthone
 Enthone Inc.
 P.O. Box 1900
 New Haven, CT 06508
 (203) 934-8611
 (203) 799-8179 Fax

Page: 5 / 5

Printed 3/23/2001.

Product Name 50-202BR

50-SERIES INK (YELLOW)

REVISION SECTION / REASON

Section 2: Replaced Epoxy Resin and Bisphenol A with Polymer.

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-OMI, Inc 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	LT = Less Than
AP = Approximately	GT = Greater Than
N/D = Not Determined	TR = Trace
ND = No Data Available	> = Greater Than
HSE = Health, Safety and Environmental	< = Less Than

