

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

Page: 1 / 5

Printed 2/19/2001.

Product Name 50-202AR 50-SERIES INK (MED. YELLOW)

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

COMPANY IDENTIFICATION

ALPHA PC FAB/ENTHONE
P.O. BOX 1900
NEW HAVEN, CT 06508
USA
Phone: 1-203-934-8611
Fax: 1-203-799-8179
PRODUCT CODE
XX0353

EMERGENCY TELEPHONE NUMBERS
Transportation:
Chemtrec, USA, 1-800-424-9300
International: 1-703-527-3887
After Hours Non Transportation
Emergency: 1-800-399-6503

PRODUCT DESCRIPTION

Epoxy resin mixture.

GENERAL USE

P.W.B. Permanent Marking Ink

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE DESCRIPTION	PERCENT	CAS#
Epoxy Resin	15.000- 40.000	25068-38-6
Bisphenol A	7.000- 13.000	80-05-7
Diethylene Glyc Eth Ether Acet	7.000- 13.000	112-15-2
Dipropyl Glyc Mono Meth Ether	5.000- 10.000	34590-94-8
Prop Gly Mono Methyl Ether Ace	5.000- 10.000	108-65-6
Cadmium Sulfide	10.430	1306-23-6
Barium Sulfate	10.000- 30.000	7727-43-7
Zinc Sulfide	1.000- 5.000	1314-98-3
Solvent Naphtha, Petroleum	1.000- 5.000	64742-94-5

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

Warning!
Combustible liquid and vapor.
May cause eye irritation.
Harmful if swallowed.
Medium yellow, high viscosity 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

May cause severe vomiting and diarrhea.

PRIMARY ROUTE OF EXPOSURE

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

CARCINOGENICITY

IARC - 2A Cadmium Sulfide
OSHA - Not Listed
NTP - 2 Cadmium Sulfide

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.

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

Page: 2 / 5

Printed 2/19/2001.

Product Name 50-202AR

50-SERIES INK (MED. YELLOW)

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

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. Give small amounts of water. Never give anything by mouth to an unconscious person. Contact a poison center or get immediate medical attention.

SECTION 5. FIRE FIGHTING MEASURES

FLASH POINT

145.00 F 62.77 C

FLASH METHOD

S.C.C.

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

No unusual fire or explosion hazards.

HAZARDOUS PRODUCTS/COMBUSTION

Not established.

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.

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

Work should be done in an adequately ventilated area (i.e., ventilation sufficient to maintain concentrations below one half of the PEL and other relevant standards). Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination.

EYE PROTECTION

Wear appropriate goggles, face shields or other personal protective equipment (PPE) which will be effective under the circumstances if the possibility of contact exists. A program meeting 29CFR1910.133 requirements must be followed when PPE is necessary.

SKIN PROTECTION

Impermeable gloves and protective clothing as necessary to prevent skin contact.

RESPIRATORY PROTECTION

Appropriate respirators must be used, and a program that follows 29 CFR1910.134 must be followed, when workplace hazards warrant the use of a respirator. NIOSH-approved respirators must be used when respiratory protection is necessary.

OTHER PROTECTION

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

SUBSTANCE DESCRIPTION	EXPOSURE LIMITS/REGULATORY INFORMATION			
	REG. AGENCY	PEL/TL	STEL	CHIL
Epoxy Resin	OSHA	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D
Bisphenol A	OSHA	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D
Diethylene Glyc Eth Ether Acet	OSHA	N/D	N/D	N/D
	OSHA	N/D	N/D	N/D

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

Page: 3 / 5

Printed 2/19/2001.

Product Name 50-202AR

50-SERIES INK (MED. YELLOW)

	ACGIH	N/D	N/D	N/D
Dipropyl Glyc Mono Meth Ether	OSHA	100.0000	150.0000	N/D
	ACGIH	100.0000	150.0000	N/D
Prop Gly Mono Methyl Ether Ace	OSHA	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D
Cadmium Sulfide	OSHA	0.6000	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
Zinc Sulfide	OSHA	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D
Solvent Naphtha, Petroleum	OSHA	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D

LEGEND:

EXPOSURE LIMIT DESCRIPTIONS

CELL Ceiling Exposure Limit
 PELTL 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

Medium yellow, high viscosity liquid. Mild odor.

SPECIFIC GRAVITY

1.42

pH FACTOR

N/D

BOILING POINT

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

VOLATILE ORGANIC COMPOUNDS

VOC - % 18.1
 VOC - g/L 308.4
 VOC - lbs/Gal 2.98

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. Emetic effects possible due to the cadmium content. Cadmium is very poorly absorbed from the gastrointestinal tract.

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. Accidental ingestion of more than one ounce should be referred for medical evaluation.

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

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

Page: 4 / 5

Printed 2/19/2001.

Product Name 50-202AR 50-SERIES INK (MED. YELLOW)

literature or can be obtained by contacting Dexter'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 eco toxicity 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 Glyc Eth is subject to the following

Environmental List

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

Component Dipropyl Glyc Mono M is subject to the following

Environmental List

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

Component Prop Gly Mono Methyl is subject to the following

Environmental List

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

Component Cadmium Sulfide is subject to the following

Environmental List

CA California Prop 65
 CERCLA CERCLA Hazardous Substance
 311/312 SARA Phy/Hea Haz (40CFR370.40)
 313 SARA toxic chem (40CFR372.65)

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

Page: 5 / 5

Printed 2/19/2001.

Product Name **50-202AR** **50-SERIES INK (MED. YELLOW)**

 Component Barium Sulfate is subject to the following

Environmental List

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

 Component Zinc Sulfide is subject to the following

Environmental List

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

 Component Solvent Naphtha, Pet 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.

SECTION 16. OTHER INFORMATION

HAZARDOUS MATERIALS ID. SYSTEM

HMIS		HAZARD RATING			
Health	3	Least	0	Slight	1
Fire	2	Moderate	2	High	3
Reactivity	1	Extreme	4		

WHMIS HAZARD CLASS

B3, D2A

REVISION NO.

002

REVISION DATE

1/27/1999

REVISION SECTION / REASON

Section 8 / ENGINEERING CONTROLS, EYE, SKIN, RESPIRATORY
 PROTECTION changes.

CREATED BY

HSE & R&D INDUSTRY, CALIF.

APPROVED BY

HSE - California

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	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