MANUFACTURER: EMECOLE, INC. P.O. BOX 7486, ROMEOVILLE, IL 60446 **EMERGENCY TELEPHONE 800-535-5053**

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: EMECOLE 101, PART A SYNONYM: THERMOSETTING RESIN **CHEMICAL FAMILY: EPOXIDE DATE:** APRIL 15, 2014

SECTION II - HAZARDOUS INGREDIENTS AND OTHER COMPONENTS % BY WEIGHT

65-95%

5-35%

0-10%

INGREDIENT

VP: N.A.

VD: N.A.

Diglycidyl ether resin mixture Proprietary diluent N-Butyl glycidylether

Evaporation rate: N.A.

SECTION III - PHYSICAL DATA

Boiling Point: >200°F Solubility in water: SLIGHT

SP GR: 1.1 - 1.2 % Volatile by volume: <3%

EXPOSURE LIMITS

N.E.

50 PPM-PEL

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: 490°F CL. Flammable Limits: UK Extinguishing Media: Carbon dioxide, foam, water spray

Special fire fighting procedures: Use self-contained breathing apparatus. Unusual fire and explosion hazards: Decomposition and combustion products may be toxic.

SECTION V - HEALTH HAZARD DATA

Primary Route(s) of Entry: Inhalation, skin contact. Toxicological Data: LD SOs provided are the lowest values for typed of bisphenol A, diglycidal ether resins used. Oral: LD,0 (rabbit) > 4000 MG/KG Skin irritation: (rabbit) moderate irritation Eye irritation: (rabbits) mild irritation Sensitization: Sensitizer Effects of Overexposure: Irritation, sensitization and dertitis. Medical conditions generally aggravated by exposure: allergy eczema, skin conditions

CAS#

25068-38-6

98-00-0

2426-08-6

PART A (CONT'D)

Carcinogenicity: None of the components of this material are listed as carcinogens by NTP, LARC, or OSHA.

In order to comply with California Proposition 65, we feel obligated to advise that some of our products may conceivably contain trace contaminants of some of the listed chemicals. While not necessarily added to our products as ingredients, some listed chemicals may be present in the raw materials from suppliers and over which we have no control. Therefore, even though some of the listed substances may not be present, a significant risk as defined by the regulations in order to comply with California law, we feel obligated to make the following statement:

<u>WARNING</u>: Our products may contain trace amounts of some chemicals considered by the State of California to be carcinogens or reproductive toxicants.

Emergency and first aid procedures:

Eyes: Flush with water for at least 15 minutes. If any ill effects develop, seek medical attention. <u>Skin</u>: Wash with soap and water. Wash contaminated clothing before reuse. <u>Inhalation</u>: Remove to fresh air and give oxygen if breathing is difficult. <u>Ingestion</u>: Give large quantities of water and induce vomiting. Get medical attention.

SECTION VI - REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Elevated temperatures

Incompatibility Materials to Avoid: Strong oxidizers, strong acids or bases in bulk.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, aldehydes and other organics.

SECTION VII - SPILL OR LEAK PROCEDURES

<u>Steps to be taken in case material is released or spilled</u>: Avoid all personal contact. Wipe with rag for small spills. For larger spills, use absorbent material. Collect waste in designated container. Flush contaminated areas with water. Waste Disposal Method: Dispose in accordance with federal, state and local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

<u>Respiratory Protection</u>: Avoid breathing vapors. Use adequate ventilation.

Ventilation: Good mechanical ventilation and local exhaust.

Eye Protection: Safety glasses.

Protective Gloves: Rubber or polyethylene.

<u>Protective Equipment</u>: Disposable containers and paper on work area. Use of barrier cream recommended. Use appropriate equipment to prevent eye or skin contact.

SECTION IX - SPECIAL PRECAUTIONS

<u>Precautions to be taken in handling and storage</u>: Causes irritation. May cause allergic skin reaction. Avoid contact with eyes, skin or clothing. Store in cool, dry area in closed cartridges.

Other precautions: Avoid breathing vapors, use with good ventilation. Wash hands thoroughly with soap and water after every use.

| Health | Flammability | Reactivity | Personal Protection |
|--------|--------------|------------|----------------------------|
| 2 | 1 | 0 | В |

All statements, technical information and recommendations contained herein are based upon available scientific test or data which we believe to be reliable since we cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used. Emecole makes no warranties, express or implied, and assumes no responsibility in connection with any use of this information.

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SECTION I - PRODUCT IDENTIFICATION

PRODUCT NAME: EMECOLE 101 PART B **SYNONYM:** EPOXY HARDENER **CHEMICAL FAMILY**: MODIFIED POLYAMINE/POLYAMIDE COMPOSITION **DATE**: APRIL 15, 2014

SECTION II - HAZARDOUS INGREDIENTS AND OTHER COMPONENTS

| INGREDIENT | % BY WEIGHT | EXPOSURE LIMITS | CAS # |
|------------------------|-------------|------------------|----------|
| Proprietary Polyamine/ | <70 | N.E. | UK |
| Polyamide Blend | | | |
| Proprietary Diluent | 10-15 | 10 PPM-ACGIH-TWA | 98-00-0 |
| Diethylene Triamine | <5 | 1 PPM-SKIN-ACGIH | 111-40-0 |
| Nonyl Phenol | <15 | N.E. | 104-40-5 |

SECTION III - PHYSICAL DATA

Boiling Point: NOT DETERMINED (>200° F) **VD:** N.A. **Solubility in water:** SLIGHT **Evaporation Rate:** N.A. **SP. GR**: .98 - .99 % Volatile by Weight: <3%

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: 185 f PMCC
Flammable Limits: Unknown
Extinguishing Media: Foam, dry chemicals, C02
Unusual Fire and Explosion Hazards: None
Special Fire Fighting Procedures: Avoid breathing smoke. Self-contained breathing apparatus.

SECTION V - HEALTH HAZARD DATA

 Primary Route(s) of Entry: Inhalation, skin contact

 <u>Toxicological Data</u>: Polyamine resin, oral rat LD 50 <5 CC/KG</td>

 <u>Irritation Data</u>: Polyamine resin eye – rabbit conjunctival irritant. Skin rabbit – mild irritant

 <u>Effects of Overexposure</u>:

 <u>Acute</u>: Will cause burns to skin and eyes. High concentrations of vapor can cause irritation of respiratory tract, nausea and vomiting.

 Chronic prolonged or repeated exposure may cause asthma and skin sensitization or other allergic response.

 <u>Medical conditions generally aggravated by exposure</u>: Allergy, eczema, skin conditions.

PART B (CONT'D)

Carcinogenicity: None of the components of this material are listed as carcinogens by NTP, LARC, or OSHA.

In order to comply with California Proposition 65, we feel obligated to advise that some of our products may conceivably contain trace contaminants of some of the listed chemicals. While not necessarily added to our products as ingredients, some listed chemicals may be present in the raw materials from suppliers and over which we have no control. Therefore, even though some of the listed substances may not be present, a significant risk as defined by the regulations in order to comply with California law, we feel obligated to make the following statement:

<u>WARNING</u>: Our products may contain trace amounts of some chemicals considered by the State of California to be carcinogens or reproductive toxicants.

Emergency and first aid procedures:

Eyes: Flush with water for at least 15 minutes. If any ill effects develop, seek medical attention. <u>Skin</u>: Immediately deluge skin with plenty of water. Remove contaminated clothing and shoes. <u>Inhalation</u>: Remove to fresh air if affected. Administer oxygen if necessary. Seek medical attention. <u>Ingestion</u>: If swallowed and conscious, give plenty of water and induce vomiting. Seek medical attention.

SECTION VI - REACTIVITY DATA

Stability: Stable

Incompatibility (materials to avoid): Strong oxidizing agents, acids.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, nitrogen oxides.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Mixing with oxidizers or epoxy resins in quantities over 1#.

SECTION VII - SPILL OR LEAK PROCEDURES

<u>Steps to be taken in case material is released or spilled</u>: Soak up with inert material or scrape up. Collect waste in designated waste containers. Avoid personal contact. Flush contaminated area with water.

<u>Waste Disposal Method</u>: Dispose in accordance with federal, state and local regulations.

SECTION VIII - SPECIAL PROTECTION INFORMATION

<u>Respiratory Protection</u>: Use adequate ventilation. Avoid breathing vapors. <u>Ventilation</u>: Normal ventilation should be adequate. Local if vapors are vented. <u>Eye Protection</u>: Safety glasses.

Protective Gloves: Rubber or impervious gloves recommended.

SECTION IX - SPECIAL PRECAUTIONS

<u>Precautions to be taken in handling and storage</u>: Store away from heat and open flame. <u>Other Precautions</u>: Avoid breathing vapors of heated material. Wash hands with soap and water after every usage. Use adequate ventilation. Keep containers tightly closed when not in use.

| Health | Flammability | Reactivity | Personal Protection |
|--------|--------------|------------|----------------------------|
| 2 | 2 | 0 | В |

All statements, technical information and recommendations contained herein are based upon available scientific test or data which we believe to be reliable since we cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used. Emecole makes no warranties, express or implied, and assumes no responsibility in connection with any use of this information.