Kelly FROM: GOTT SAMUEL L DATE: Thu Feb 18 1999 15:00 EST

MATERIAL SAFETY DATA SHEET

000001403/F/USA Approval Date: 1995-12-02 Print Date: 11/16/1998

TO:

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: "EASTOTAC" RESIN H-142R

Product Identification Number(s): PM 02833-00

Manufacturer/Supplier: Eastman Chemical Company, Kingsport, Tennessee 37662

MSDS Prepared by: Eastman Health, Safety, and Environmental Services, Eastman

Chemical Company, Kingsport, TN 37662

For Emergency Health, Safety & Environmental Information, call 800-EASTMAN

For Emergency Transportation Information call CHEMTREC at 800-424-9300 or call 800-EASTMAN

For Other Information, call your Eastman representative or the Eastman operator at 423-229-2000 (USA)

Chemical Name: not applicable

Synonym(s) not applicable

Molecular Formula not applicable

Molecular Weight not applicable

Product Use: adhesive, ink

2. COMPOSITION/INFORMATION ON INGREDIENTS

Weight % - Component - (CAS Registry No

>99 mixed alkylated cycloaliphatic hydrocarbons (069430-35-9)

<1 stabilizer (not applicable)

3. HAZARDS IDENTIFICATION

CAUTION

POWDERED MATERIAL MAY FORM EXPLOSIVE DUST-AIR MIXTURES MOLTEN MATERIAL WILL PRODUCE THERMAL BURNS

HMIS Hazard Ratings Health - 1, Flammability - 1, Chemical Reactivity - 0

NFPA Hazard Ratings Health - 1, Flammability - 1, Chemical Reactivity - 0

NOTE: HMIS and NFPA ratings involve data and interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

megaFAX Facsimile Services RFF # 8025276A001 DAGE 2 OF TO Kelly FROM: GOTT SAMUEL L DATE: Thu Feb 18 1999 15:00

4. FIRST-AID MEASURES

Inhalation: If symptomatic move to fresh air. Get medical attention if symptoms persist.

Eyes: Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention if symptoms persist

Skin: Wash with soap and water. Get medical attention if symptoms occur. If burned by contact with molten material, cool as quickly as possible. Do not peel material from skin.

Note to Physicians: Burns should be treated as thermal burns. The material will come off as healing occurs; therefore, immediate removal from the skin is not necessary.

Ingestion: Material is not expected to be absorbed from the gastrointestinal tract so that induction of vomiting should not be necessary.

5. FIRE FIGHTING MEASURES

Extinguishing Media: water spray, dry chemical

Special Fire-Fighting Procedures: Wear self-contained breathing apparatus protective clothing.

Hazardous Combustion Products: carbon dioxide, carbon monoxide

Unusual Fire and Explosion Hazards: Powdered material may form explosive dust-air mixtures.

6. ACCIDENTAL RELEASE MEASURES

Sweep or scoop up and remove

7. HANDLING AND STORAGE

... ***

Personal Precautionary Measures: No special precautionary measures should be _needed_under—anticipated conditions of use.

Prevention of Fire and Explosion: Keep from contact with oxidizing materials Minimize dust generation and accumulation. Refer to NFPA Pamphlet No. 654, "Prevention of Fire and Dust Explosions in the Chemical, Dye, Pharmaceutical and Plastics-Industries."

Storage: Keep container closed

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits

ACGIH Threshold Limit Value (TLV): not established

OSHA (USA) Permissible Exposure Limit (PEL, 1989 Table Z-1-A values or section-specific standards): not established

megaFAX Facsimile Services REF # 8025276A001

PAGE 3 OF 7

Ventilation: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances such as poorly ventilated spaces, mechanical generation of dusts, heating, drying, etc.

Respiratory Protection: If engineering controls do not maintain airborne concentrations to an acceptable level, an approved respirator must be worn. Respirator type: dust. If respirators are used, a program should be instituted to assure compliance with OSHA Standard 29 CFR 1910.134.

Eye Protection: It is a good industrial hygiene practice to minimize eye contact.

Skin Protection: It is a good industrial hygiene practice to minimize skin contact. When material is heated, wear gloves to protect against thermal burns.

Recommended Decontamination Facilities eye bath, washing facilities

9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical Form: solid (flake)
- Color: white, yellow
- Odor: odorless
- Odor Threshold: not applicable
- Specific Gravity (water = 1): 1.04
- Vapor Pressure: negligible
- Vapor Density (Air = 1): not applicable
- Evaporation Rate: not applicable
- Boiling Point: not available
- Softening Point: 142°C (288°F)
- Viscosity at 190°C (374°F): 3000 mPa.s or cP
- Solubility in Water: negligible
- pH: not applicable
- Octanol/Water Partition Coefficient: not applicable
- Flash Point (Cleveland open cup): 321°C (610°F)
- Lower Explosive Limit: not available
- Upper Explosive Limit: not available
- Autoignition Temperature (ASTM E-659): 383-399°C (721-751°F
- Sensitivity to Mechanical Impact: not available
- Sensitivity to Static Discharge: not available

10. STABILITY AND REACTIVITY

Stability stable

Incompatibility Material can react with strong oxidizing agents

Hazardous Polymerization will not occur

11. TOXICOLOGICAL INFORMATION

Effects of Exposure

Inhalation: Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

FROM: GOTT SAMUEL L DATE TO: Kelly Thu Feb 18 1999 15:00 EST

Eyes: Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

Skin: Molten material will produce thermal burns

Ingestion: Expected to be a low ingestion hazard

Acute Toxicity Data

Oral LD-50 (rat): >5 g/kg (highest dose tested) Inhalation LC-50: not available Dermal LD-50 (rat): >2 g/kg (highest dose tested) Skin irritation (guinea pig): none Skin sensitization (guinea pig): none Eye irritation (rabbit, unwashed eyes): slight to moderate Eye irritation (rabbit, washed eyes): very slight

12. ECOLOGICAL INFORMATION

Introduction: This environmental effects summary is written to assist in addressing emergencies created by an accidental spill which might occur during the shipment of this material, and, in general, it is not meant to address discharges to sanitary sewers or publically owned treatment works.

This material has not been tested for environmental effects. It is a high molecular weight polymer with a very low water solubility. As such, it is expected to have a low biochemical oxygen demand and to cause essentially no oxygen depletion in aquatic systems. It is expected to have a low potential to affect aquatic organisms, secondary waste treatment microorganisms, and the germination and early growth of plants. It is expected to be nonbiodegradable and unlikely to bioconcentrate. In a spill situation this material may be visually unpleasant; however, it is not expected to cause any adverse environmental effects.

13. DISPOSAL CONSIDERATIONS

Discharge, treatment, or disposal may be subject to national, state or local laws. Incinerate.

14. TRANSPORT INFORMATION

- DOT (USA Status not regulated

TDG Canada Status not regulated

- Air International Civil Aviation Organization ICAO)
- ICAO Status: not regulated
- Sea International Maritime Dangerous Goods IMDG)
- IMDG Status: not regulated

15. REGULATORY INFORMATION

This document has been prepared in accordance with the MSDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200. OSHA hazardous chemical(s): none

GOTT SAMUEL L TO DATE Thu Feb 18 1999 15:00 EST Kelly FROM:

- California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): material(s) known to the State to cause cancer: none
- California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986): material(s) known to the State to cause adverse reproductive effects:
- Massachusetts Substance List: none New Jersey Workplace Hazardous Substance List: none
- Pennsylvania Hazardous Substance List: none

WHMIS (Canada) Status: noncontrolled

This document has been prepared in accordance with the MSDS requirements of the WHMIS Controlled Products Regulation. WHMIS (Canada) Ingredient Disclosure List: none

- American Conference of Governmental Industrial Hygienists (ACGIH): not

Carcinogenicity Classification (components present at 0.1% or more):

- International Agency for Research on Cancer (IARC): not listed
- listed - National Toxicology Program (NTP): not listed
- Occupational Safety and Health Administration (OSHA): not listed
- Chemical(s) subject to the reporting requirements of Section 313 or Title

40 CFR Part 372: none SARA (U.S.A.) Sections 311 and 312 hazard classification(s): not applicable

III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and

US Toxic Substances Control Act (TSCA): All components of this product are listed on the TSCA inventory or otherwise comply with TSCA premanufacture notification requirements.

- Canadian Environmental Protection Act (CEPA) and Domestic Substances List

(DSL): All components of this product are listed on the DSL or otherwise comply with CEPA new substance notification requirements. European Inventory of Existing Commercial Chemical Substances (EINECS): Any

polymer intentionally present in this product has regulatory clearance under Directives of the European Union.

- Australian Inventory of Chemical Substances (AICS) and National Industrial

Chemicals Notification and Assessment Scheme (NICNAS): All components of this product are listed on AICS or otherwise comply with NICNAS.

Japanese Handbook of Existing and New Chemical Substances: All components of this product are listed in the Handbook or have been approved in Japan by new substance notification.

16. OTHER INFORMATION

Label Statements:

CAUTION POWDERED MATERIAL MAY FORM EXPLOSIVE DUST-AIR MIXTURES MOLTEN MATERIAL WILL PRODUCE THERMAL BURNS

Minimize dust generation and accumulation

FIRST AID: Get medical attention if symptoms occur. If burned by contact with molten material, cool as quickly as possible. Do not peel from skin Note to Physicians: Burns should be treated as thermal burns. The material will come off as healing occurs; therefore, immediate removal from the skin is not necessary.

CAUTION: FOR MANUFACTURING, PROCESSING OR REPACKING BY TRAINED PERSONNEL

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and

customers and the protection of the environment

MARKETED BY