PART NO: CS-600 (Sub-component of CS-460) CS-620 (Sub-component of CS-462) MATERIAL SAFETY DATA SHEET Page 1 of 6

Effective Date: 8/25/09

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Intended Use or Product Type: Heat resistant laminating resin.

Tradename:

RP 4014 RESIN

Chemical Family: Epoxy

NFPA RATING

FLAMMABILITY REACTIVITY PROTECTIVE

HEALTH

EQUIPMENT

SHIPPER

Clock Spring Company L.P. 14107 Interdrive West Houston, TX 77032

EMERGENCY INFORMATION

HMIS RATING

Emergency telephone number (CHEMTREC): (800) 424-9300 Other Calls: (800) 471-0060

2. COMPOSITION / INFORMATION INGREDIENTS

| OSHA | CAS# | CHEMICAL IDENTITY | | | EXPOSURE LIMITS | | | | | CARCINOGEN STATUS | | |
|------|--|--|----|------------------|-----------------|------------------|---------------------|-----|------|-------------------|------|--|
| * | 2425-79-8 | Oxirane, 2,2'-[1,4-Butanediyibis (Oxymethylene)bis- | TV | AGC VA | STEL | OSH. PEL | A STEL | MFR | IARC | NTP | OSHA | |
| | Common Name: Butanediol diglycidyl ether | | NI | E NE | NE | NE | NE | NR | NR | NR | | |
| * | 25068-38-6 | Phenol,4,4'-, (1-methylethylidene)bis-, polymer | | AGGIH TWA STE | | OSHA PEL STEL | | MFR | IARC | NTP | OSHA | |
| | | with (chloromethyl)oxirane | NI | Ē | NE | NE | NE | NE | NR | NR | NR | |
| | Common Name: Bisphenal A. diglycidyl ether polymer | | | | | | | | | | | |
| | 28064-14-4 | Phenol, polymer with formaldehyde, glycidyl ether | TW | | GGIH | OSHA PEL ST | THE PERSON NAMED IN | MFR | IARC | NTP | OSHA | |
| | Common Na | mon Name: Epoxy Phenol Novolac | | E | NE | | NE | NE | NR | NR | NR | |
| • | 3101-60-8 | Oxirane, [[4-(1,1- | | AGC | ∋iH STEL | OSH | | MFR | IARC | NTP | OSHA | |
| | | dimethylethyl)phenoxy]methyl]- Butylphenyl glycidyl ether | NI | | NE | NE | NE | NE | NR | NR | NR | |
| | Common Name: Butylphenyl glycidyl ether | | | | | | | | | | | |

*OSHA Hazardous Ingredient

NE: Not Established

NR: Not Reviewed

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3. HAZARDS IDENTIFICATION

Emergency Overview: Can cause skin irritation, eye irritation, and allergic skin reaction. May be harmful if absorbed through the skin or if swallowed.

Primary Route(s) of Entry: Dermal; heated product may produce inhalable vapors.

4. FIRST AID MEASURES

First aid for ingestion:

Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Seek immediate medical attention.

First Aid for Skin:

Immediately wash with soap and water. Remove contaminated clothing and launder before re-use. Destroy contaminated shoes. Seek immediate medical attention.

First Ald for Inhalation:

Remove to fresh air. Give oxygen and/or artificial respiration, if needed. Call a physician.

First aid for eyes:

Immediately flush eyes with water for at least 15 minutes. Call a physician. Seek immediate medical attention.

Overexposure effects:

Can cause skin irritation, eye irritation, and allergic skin reaction. May be harmful if absorbed through the skin or if swallowed.

Medical conditions aggravated by exposure:

Skin and eye conditions.

Additional information:

Referral to a physician is recommended if there is any question about the seriousness of any injury.

5. FIRE FIGHTING MEASURES

Flash Point:

300° F (149° C)

Flash Point Method used:

PMCC

Flammable Limits in Air (lower - % by volume):

Not Established

Flammable Limits in Air (upper - % by volume):

Not Established

Fire Fighting Extinguishing Media: Carbon dioxide, dry chemical, foam, water

Fire Fighting Equipment: Use self-contained breathing apparatus

Fire and Explosion Hazards: Decomposition and combustion products may be toxic.

6. ACCIDENTAL RELEASE MEASURES

Spill control:

Remove spillage by absorbing in absorbent material.

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7. HANDLING AND STORAGE

Handling Precautions:

Warning! Can cause skin irritation, eye irritation and allergic skin reaction. May be harmful if absorbed through skin or if swallowed. Avoid contact with eyes, skin, or clothing. Avoid tasting or swallowing. Wash thoroughly after handling.

Other handling information:

Nuisance dust may be generated when sanding or sawing cured material.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Skin Protection:

Wear impermeable gloves.

Respiratory Protection:

Use NIOSH approved organic vapor cartridge respirator when vapor/mist exposure is likely.

Eye Protection:

Wear splash-proof chemical goggles..

Engineering Controls:

General mechanical and local exhaust in accordance with ACGIH recommendations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Physical State:

Grey

Solubility in Water:

Filled Liquid

Vones Deservate

Negligible

Vapor Pressure: Specific Gravity: 0.0073 mm Hg at 80°C (176°F) 1.3 - 1.36 (water=1)

Boiling Point:

Not determined

Evaporation rate:

Not determined

Vapor Density:

Not determined

VOC:

0q/I

pH:

Not determined

10. STABILITY AND REACTIVITY

Conditions to avoid:

Excessive heat for prolonged periods of time.

Stability:

Stable.

incompatibility:

Strong oxidizers, acids, bases.

Hazardous Decomposition Products:

Combustion may form toxic materials, such as carbon dioxide, carbon monoxide.

Hazardous Polymerization:

Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral Effects (LD50):

Component(s) are slightly toxic, 500 - 5000 mg/kg (rat). Butanediol diglycidyl ether= 1130 mg/kg (rabbit)

Acute Dermal Toxicity (LD50):

Component(s) are slightly toxic, 1000 - 2000 mg/kg (rabbit). Butanediol diglycidyl ether= 1134mg/kg (rat)

Sensitization:

Possible in susceptible individuals.

Carcinogenicity:

Based on several dermal studies in mice, IARC had concluded in 1999 that diglycldyl ether of bisphenol A is not classifiable as a human carcinogen (Group 3) and has limited evidence of carcinogenicity in animals.

Skin Irritation:

Irritant.

Eye Irritation:

Irritant.

Teratogenicity:

For diglycidyl ether of bisphenoi A-There were no adverse effects on embryonic or fetal development was observed in rabbits after dermal exposure.

Mutagenicity:

For diglycldyl ether of bisphenol A- in vitro tests showed mutagenic effects which were not observed in vivo tests.

Sub-Chronic:

Diglycidyl ether of bisphenol A, applied to the skin of rats five times per week for approximately 13 weeks, caused no apparent systemic toxicity with the exception of decreased body weight and body weight gain.

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

Waste disposal method:

Consult qualified local or corporate personnel for method that will comply with local, state, and federal health and environmental regulations.

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14. TRANSPORT INFORMATION:

DOT: Non-Bulk

Proper Shipping Name: Resin Compounds, N.O.I.

IATA: Non-Bulk IMDG: Non-Bulk Proper Shipping Name: Not regulated Proper Shipping Name: Not regulated

TDG: Non-Bulk

Proper Shipping Name: Not regulated

Department of transportation: Not regulated as a hazardous material by the U.S. Department of Transportation (DOT) 49 CFR 172.101 hazardous materials table.

15. REGULATORY INFORMATION:

International Regulations:

Canadian Inventory Status: This product contains components which are included on the Domestic Substances List (DSL) and the Non-Domestic Substance List (NDSL).

Canadian WHMIS: This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Regulations, D2B

U.S. Federal Regulations:

OSHA Status: This product is considered to be a hazardous chemical under the OSHA Hazard Communication Standard (29 CFR 1910, 1200).

Resource Conservation and Recovery Act (RCRA): Not a hazardous waste under RCRA (40 CFR 261).

SARA Title III: Section 313 - Toxic Chemical List: This product does not contain any chemicals for routine annual Toxic Chemical Release Reporting under Sec. 313 (40 CFR 372).

TSCA Section 8(b) - Inventory Status: All chemical components of this product are in compliance with TSCA inventory requirements.

TSCA Section 12(b) - Export Notification: This product does not contain any chemical(s) that are subject to a Section 12(b) Export Notification.

U.S. State Regulations:

California Proposition 65: The following is required composition information. This contains the following chemicals currently listed on the California list of Known Carcinogens and Reproductive Toxins.

Chemical Name: Quartz (SiO2) Common Name: Crystalline Silica

CAS Number: 14808-60-7

Percent in Composition: 0.02% by wt

Comment: Warning! This chemical is known in the State of California to cause cancer.

Chemical Name: Oxirane, (Phenoxxymethyl)-Common Name: Phenyl glycidyl ether

CAS Number: 122-60-1

Percent in Composition: 0.0002% by wt

Comment: Warning! This chemical is known in the State of California to cause cancer.

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Pennsylvania Right-to-Know: The following is required composition information:

Chemical Name: Phenol,4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane

Common Name: Bisphenal A diglycldyl ether polymer

CAS Number: 25068-38-6

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Limestone

Common Name: Calcium Carbonate

CAS Number: 1317-65-3

Comment: Hazardous Substance

Chemical Name: Phenol, polymer with formaldehyde, glycidyl ether

Common Name: Epoxy Phenol Novolac

CAS Number: 28064-14-4

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Oxirane, 2,2'-[1,4-Butanediylbis(Oxymethylene)bis-

Common Name: Butanediol diglycidyl ether

CAS Number: 2425-79-8

Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Talc Common Name: Talc CAS Number: 1407-96-6

Comment: Hazardous Substance

16. OTHER INFORMATION:

MSDS No.:

6082

Approved by:

Brandon Kreitz

Title:

Quality Control Manager

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