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International Emergency Phone: (409) 727-0831
Asia Pacific Emergency Phone: (65) 6336-6011

Effective Date: 1/28/10

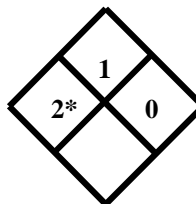
Material Safety Data Sheet

MSDS No: 35321

1. PRODUCT IDENTIFICATION

Trade Name: RenPaste 4618-1 US

Chemical Family: Epoxy



NFPA RATING

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

HMIS RATING

Synonyms:

Huntsman Advanced Materials Americas Inc.
LMD 2564 Resin US
XD 4618-1 Resin US

Intended Use or Product Type: Seamless model paste resin

2. COMPOSITION / INFORMATION ON INGREDIENTS

| O S H A | CAS No. | CHEMICAL IDENTITY | EXPOSURE LIMITS | | | | MFR. | CARCINOGEN STATUS | | |
|------------------|------------|---|-----------------|------|-----------|------|------|-------------------|-----|------|
| | | | ACGIH | | OSHA | | | IARC | NTP | OSHA |
| | | | TWA | STEL | PEL | STEL | | | | |
| * | 103-23-1 | Hexanedioic acid, bis(2-ethylhexyl) ester Common Name: Dioctyl adipate Concentration: 1.00 - 5.00 % by wt | NE | NE | NE | NE | NE | NR | NR | NR |
| * | 1317-65-3 | Limestone Common Name: Calcium carbonate Concentration: 10.00 - 30.00 % by wt | 10 mg/m3 | NE | 5 mg/m3 | NE | NE | NR | NR | NR |
| * | 1344-09-8 | Silicic Acid, Sodium Salt Common Name: Sodium silicate Concentration: 10.00 - 30.00 % by wt | NE | NE | NE | NE | NE | NR | NR | NR |
| * | 14808-60-7 | Quartz (SiO2) Common Name: Crystalline silica Concentration: 0.10 - 0.15 % by wt | 0.05 mg/m3 | NE | 0.1 mg/m3 | NE | NE | Yes | Yes | NR |
| * | 21645-51-2 | Aluminum hydroxide Common Name: Hydrated Alumina Concentration: 10.00 - 30.00 % by wt | NE | NE | NE | NE | NE | NR | NR | NR |
| * | 2425-79-8 | Oxirane, 2,2'-[1,4- | NE | NE | NE | NE | NE | NR | NR | NR |

Effective Date: 1/28/10

| | | | | | | | | | | |
|---|--|--|----|----|----|----|----|----|----|----|
| | Common Name: Concentration | Butanediylbis(Oxymethylene)]bis- Butanediol diglycidyl ether 1.00 - 5.00 % by wt | | | | | | | | |
| * | 25068-38-6 Common Name: Concentration | Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane Bisphenol A diglycidyl ether polymer 30.00 - 60.00 % by wt | NE | NE | NE | NE | NE | NR | NR | NR |
| * | 28064-14-4 Common Name: Concentration | Phenol, polymer with formaldehyde, glycidyl ether Epoxy Phenol Novolac 5.00 - 10.00 % by wt | NE | NE | NE | NE | NE | NR | NR | NR |
| | Confidential Concentration | borate 1.00 - 5.00 % by wt | NE | NE | NE | NE | NE | NR | NR | NR |
| | Held confidential by our supplier Concentration | Alkyl Quaternary Ammonium Clay 1.00 - 5.00 % by wt | NE | NE | NE | NE | NE | NR | NR | NR |

NE = Not Established NR = Not Reviewed * = OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

Emergency Overview: Causes severe skin irritation. Causes eye irritation. May cause skin burns and allergic skin reaction.

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

Carcinogenicity (NTP, IARC, OSHA): This product contains crystalline silica. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis) and cancer.

4. FIRST AID MEASURES

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.

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Destroy contaminated shoes. Seek immediate medical attention.

Inhalation: Remove to fresh air. Seek immediate medical attention.

Eyes: Immediately flush eyes with water for at least 15 minutes. Seek immediate medical attention.

Overexposure Effects: Can cause skin irritation, eye irritation, and allergic skin reaction. Can be harmful 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.

Effective Date: 1/28/10

5. FIRE FIGHTING MEASURES

| | |
|--|-------------------|
| Flash Point: | > 200°F (> 93 °C) |
| Flash Point Method Used: | Estimated |
| 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

Accidental Release Measures: Remove spillage by absorbing in absorbent material.

7. HANDLING AND STORAGE

Signal Word: Warning! Danger!

Precautions: Causes severe skin irritation and may cause skin burns. Can cause eye irritation and allergic skin reaction. Do not get on skin or on clothing. Avoid contact with eyes. 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

| | |
|----------------------|-----------------------|
| Color: | Light Gray |
| Odor: | Slight |
| Physical State: | Paste |
| Solubility in Water: | Practically Insoluble |
| Vapor Pressure: | Not Determined |
| Specific Gravity: | 0.9 (water = 1) |
| Boiling Point: | Not Determined |
| Evaporation Rate: | Not Determined |
| Vapor Density: | Not Determined |
| VOC: | Negligible |
| pH: | Not Evaluated |

Effective Date: 1/28/10

Coefficient of water/oil: Not Evaluated

10. STABILITY AND REACTIVITY**Conditions to Avoid:** Excessive heat for prolonged periods of time.**Stability:** Stable.**Incompatibility:** Strong oxidizers, acids and bases.**Hazardous Decomposition Products:** Combustion may form toxic materials, such as carbon dioxide, carbon monoxide.**Hazardous Polymerization:** Will not occur.**11. TOXICOLOGICAL INFORMATION****Sensitization:** Possible in susceptible individuals.**Carcinogenicity:** This product contains crystalline silica. Repeated inhalation of respirable free crystalline silica dust may cause delayed lung injury (silicosis) and cancer.**Skin Irritation:** Severe skin irritant.**Eye Irritation:** Irritant.**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.**14. TRANSPORT INFORMATION****DOT: Non-Bulk**

| | |
|---|---|
| Proper Shipping Name: | Environmentally hazardous substance, liquid, n.o.s. |
| Technical Shipping Name (If n.o.s.): | Bisphenol A epoxy resin |
| Hazard Class: | 9 |
| ID Number: | UN 3082 |
| Packing Group: | PG III |
| Marine Pollutant: | Marine Pollutant |

IATA: Non-Bulk

| | |
|---|---|
| Proper Shipping Name: | Environmentally hazardous substance, liquid, n.o.s. |
| Technical Shipping Name (If n.o.s.): | Bisphenol A epoxy resin |
| Hazard Class: | 9 |
| ID Number: | UN 3082 |
| Packing Group: | PG III |
| Marine Pollutant: | Marine Pollutant |

IMDG: Non-Bulk

Effective Date: 1/28/10

| | |
|---|---|
| Proper Shipping Name: | Environmentally hazardous substance, liquid, n.o.s. |
| Technical Shipping Name (If n.o.s.): | Bisphenol A epoxy resin |
| Hazard Class: | 9 |
| ID Number: | UN 3082 |
| Packing Group: | PG III |
| Marine Pollutant: | Marine Pollutant |
| TDG: Non-Bulk | |
| Proper Shipping Name: | Environmentally hazardous substance, liquid, n.o.s. |
| Technical Shipping Name (If n.o.s.): | Bisphenol A epoxy resin |
| Hazard Class: | 9 |
| ID Number: | UN 3082 |
| Packing Group: | PG III |
| Marine Pollutant: | Marine Pollutant |

Department of Transportation: Under 49 CFR 171.4 (c) NONBULK shipments of marine pollutants are not regulated for transport by motor vehicles, rail cars or aircraft. NONBULK shipments of marine pollutants are regulated when transported by vessel (ship).

15. REGULATORY INFORMATION

US Federal Regulations:

Occupational Safety and Health Act (OSHA): This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.

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

SARA Title III: Section 313 Toxic Chemical List (TCL): This product does not contain any chemicals for routine annual toxic chemical release reporting under Section 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.

International Regulations:

Australian Inventory Status: This product contains only chemicals which are currently listed on the Australian Inventory of Chemical Substances.

Canadian Inventory Status: This product contains components which are included on the Domestic Substances List (DSL) and the Non-Domestic Substances 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 Products Regulations. D2A, D2B

European Inventory Status (EINECS): This product contains only chemicals that are currently listed on the European Inventory of Existing Commercial Chemical Substances (EINECS).

Effective Date: 1/28/10

Japanese Inventory Status: This product contains one or more chemicals currently not on the Japanese Ministry of International Trade and Industry List of Existing and New Chemical Substances.

State Regulations:

California Proposition 65: The following is required composition information. This product contains the following chemical(s) which are 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: 0.1 - 0.15 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer.

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

Chemical Name: Phenol, 4,4'-(1-methylethylidene)bis-, polymer with (chloromethyl)oxirane
Common Name: Bisphenol A diglycidyl 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: Silicic Acid, Sodium Salt
Common Name: Sodium silicate
CAS Number: 1344-09-8
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Aluminum hydroxide
Common Name: Hydrated Alumina
CAS Number: 21645-51-2
Comment: Not on Pennsylvania Hazardous Substance List

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: Hexanedioic acid, bis(2-ethylhexyl) ester
Common Name: Dioctyl adipate
CAS Number: 103-23-1
Comment: Environmental Hazardous Substance

16. OTHER INFORMATION

Effective Date: 1/28/10

MSDS No: 35321
Reason Issued: 1/10 update DOT
Approved By: Matt Austin
Title: EHS Chemist

Other Information: DLW/Si-/CA1 (D12120031) [DA9]

Disclaimer: The following supercedes Buyer's documents. SELLER MAKES NO REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, INCLUDING OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. No statements herein are to be construed as inducements to infringe any relevant patent. Under no circumstances shall Seller be liable for incidental, consequential or indirect damages for alleged negligence, breach of warranty, strict liability, tort or contract arising in connection with the product(s). Buyer's sole remedy and Seller's sole liability for any claims shall be Buyer's purchase price. Data and results are based on controlled or lab work and must be confirmed by Buyer by testing for its intended conditions of use. The product(s) has not been tested for, and is therefore not recommended for, uses for which prolonged contact with mucous membranes, abraded skin, or blood is intended; or for uses for which implantation within the human body is intended.

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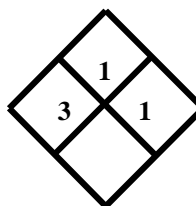
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24-Hour Emergency Phone: (800) 328-8501
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Asia Pacific Emergency Phone: (65) 6336-6011

Effective Date: 1/26/09**Material Safety Data Sheet**

MSDS No: 63048

1. PRODUCT IDENTIFICATION**Trade Name:** Ren 4619 US**MSDS Category:** Commercial Product**Made In:** U.S.A.**Chemical Family:** Modified Amine**Intended Use:** Hardener for epoxy resin**Synonyms:**

RD 4618-1 IT Hrd



NFPA RATING

2. COMPOSITION / INFORMATION ON INGREDIENTS

| O S H A | CAS No. | CHEMICAL IDENTITY | EXPOSURE LIMITS | | | | CARCINOGEN STATUS | | | |
|------------------|-------------|--|-----------------|------|---------|------|-------------------|------|-----|------|
| | | | ACGIH | | OSHA | | MFR. | IARC | NTP | OSHA |
| | | | TWA | STEL | PEL | STEL | | | | |
| * | 112945-52-5 | Silicon dioxide, amorphous Common Name: silica Concentration: 1.00 - 5.00 % by wt | NE | NE | NE | NE | TWA 2 mg/m3 | NR | NR | NR |
| | 1317-65-3 | LIMESTONE Common Name: limestone Concentration: 10.00 - 30.00 % by wt | 10 mg/m3 | NE | 5 mg/m3 | NE | NE | NR | NR | NR |
| | 14808-60-7 | Quartz (SiO2) Common Name: Crystalline Silica (Quartz) Concentration: 0.10 - 0.50 % by wt | 0.05 mg/m3 | NE | NE | NE | NE | Yes | Yes | Yes |
| * | 21645-51-2 | Aluminum hydroxide (Al(OH)3) Concentration: 10.00 - 30.00 % by wt | NE | NE | NE | NE | NE | NR | NR | NR |
| * | 38640-62-9 | Naphthalene, bis(1-methylethyl)-diisopropyl naphthalene Common Name: Concentration: 5.00 - 10.00 % by wt | NE | NE | NE | NE | NE | NR | NR | NR |

Effective Date: 1/26/09

| | | | | | | | | | |
|----------------------------|--|----|----|----|----|----|----|----|----|
| 6864-37-5 | Cyclohexanamine, 4,4'-methylenebis[2-methyl-cycloaliphatic diamine | NE | NE | NE | NE | NE | NR | NR | NR |
| Common Name: | | | | | | | | | |
| Concentration | 30.00 - 60.00 % by wt | | | | | | | | |
| Confidential Concentration | Synthetic rubber 1.00 - 5.00 % by wt | NE | NE | NE | NE | NE | NR | NR | NR |
| 1344-09-8 | Silicic acid, sodium salt Sodium Silicate | NE | NE | NE | NE | NE | NR | NR | NR |
| Common Name: | | | | | | | | | |
| Concentration | 10.00 - 30.00 % by wt | | | | | | | | |
| Confidential Concentration | polysilanamine 1.00 - 5.00 % by wt | NE | NE | NE | NE | NE | NR | NR | NR |
| 7775-19-1 | Boric acid (HBO ₂), sodium salt (1:1) sodium borate | NE | NE | NE | NE | NE | NR | NR | NR |
| Common Name: | | | | | | | | | |
| Concentration | 1.00 - 5.00 % by wt | | | | | | | | |
| Confidential Concentration | clay 1.00 - 5.00 % by wt | NE | NE | NE | NE | NE | NR | NR | NR |

NE = Not Established NR = Not Reviewed * = OSHA Hazardous Ingredient

3. HAZARDS IDENTIFICATION

Emergency Overview: WARNING!! Corrosive & Toxic. Causes severe eye irritation, skin irritation and possible allergic skin reaction. May be toxic by ingestion or inhalation.

Primary Route(s) of Entry: Dermal, inhalation.

Potential Health Effects: Vapor or mist can cause severe irritation to the nose and throat. Substance can be corrosive to eyes and causes permanent, irreversible eye injury. Substance can be corrosive to skin and cause chemical burns. Substance will cause burning and swelling of mouth, throat, and abdomen on ingestion.

Carcinogenicity (NTP, IARC, OSHA): This product contains Silica considered to be carcinogenic by NTP, IARC, or OSHA (fused and/or amorphous)

Chronic: Prolonged or repeated exposure may cause liver damage. Also, repeated overexposure can cause allergic reaction

4. FIRST AID MEASURES

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.

Skin: Immediately wash with soap and water. Remove contaminated clothing and launder before reuse. Destroy contaminated shoes. Seek immediate medical attention.

Inhalation: Remove to fresh air. Seek immediate medical attention.

Eyes: Immediately flush eyes with water for at least 15 minutes. Seek immediate medical attention.



Effective Date: 1/26/09

Note to Physician: Allergic dermatitis or respiratory response in susceptible individuals may be delayed. It may appear after weeks or even months of frequent and prolonged contact.

Medical Conditions Aggravated by Exposure: Eczema, skin, eye condition or respiratory disease

5. FIRE FIGHTING MEASURES

Flash Point: > 99°C (> 210 °F) (estimated)

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

Fire Fighting Equipment: Cool exposed containers with water spray. Use self contained breathing apparatus.

Fire and Explosion Hazards: Keep fire-exposed containers cool with water. Do NOT use a solid stream of water. A solid stream of water can spread fire.

Hazardous Combustion Products: Decomposition and combustion products may be toxic.

6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Evacuate the spill area. Wear full protective equipment. Dike and absorb spill with inert material (sand, earth, etc.). Transfer to containers suitable for disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Thoroughly launder clothing before reuse. Keep spills and runoffs out of municipal sewers and open bodies of water. If spilled on a porous surface, ground contamination must be considered.

7. HANDLING AND STORAGE

Signal Word: Warning! Corrosive and Toxic!!

Precautions: Do NOT get in eyes, on skin, or clothing. Wear chemical splash goggles and impervious gloves when handling. Wash skin and clothing thoroughly after handling. Avoid breathing vapor or mist. Use only with adequate ventilation. Keep containers closed when not in use. Do NOT take internally.

Other Handling Information: In accordance with good industrial practice, handle with care and avoid unnecessary personal contact. Avoid contact with eyes and prolonged or repeated skin contact. Do not inhale mists. Use with adequate ventilation. For industrial use only.

Storage Information: STORAGE TEMPERATURE: 35°C, maximum. Store indoors in a cool, dry area with adequate ventilation away from excessive heat, sources of ignition, and reactive materials. Do NOT store near food or feed. CORROSIVE to copper and brass on long-term storage.

Additional Information: PLEASE READ TECHNICAL DATA SHEET BEFORE HANDLING THE PRODUCT. KEEP OUT OF THE REACH OF CHILDREN. FOR INDUSTRIAL USE ONLY.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal Protective Equipment: Eye bath and safety shower should be available. Wear protective clothing.

Exposure Guidelines: Wash thoroughly after handling and before eating, drinking, or using tobacco products.

Effective Date: 1/26/09

Skin Protection: Wear impervious gloves.

Respiratory Protection: Wear respirator (MSHA/NIOSH or approved equivalent) suitable for concentrations and type of air contaminants encountered.

Eye Protection: Wear safety glasses or goggles.

Engineering Controls: Use good general mechanical ventilation and local exhaust.

Emergency Response Protection: Wear breathing apparatus (MSHA/NIOSH-approved, pressure demand, self-contained or equivalent) and full protective gear.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|----------------------------------|--------------------------------------|
| Appearance: | Paste |
| Color: | Off White |
| Odor: | Ammoniacal |
| Viscosity: | Paste |
| Vapor Pressure: | < 1 mm Hg at 20°C (68 °F) |
| Specific Gravity: | 0.8 - 0.9 (Water =1) |
| Evaporation Rate: | < 1 (Butyl Acetate = 1) |
| Vapor Density: | > 1 (Air = 1) |
| VOC: | 10 g/L (This is an estimated value.) |
| Coefficient of water/oil: | Not Evaluated |

10. STABILITY AND REACTIVITY

Conditions to Avoid: Elevated temperatures

Stability: Stable under normal conditions.

Incompatibility: Strong oxidizing agents, mineral acids, chlorocarbons, moisture

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

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral Effects (LD50): For 4,4'-methylenebis(2-methylcyclohexanamine): 320 - 460 mg/Kg (rat) [very toxic]

Acute Dermal Toxicity (LD50): For 4,4'-methylenebis(2-methylcyclohexanamine): 200 - 400 mg/Kg (rabbit) [Toxic]

Inhalation Toxicity (LC50): For 4,4'-methylenebis(2-methylcyclohexanamine): 0.42 mg/L4 hr. (rat) [very toxic]

Sensitization: Skin sensitizer.

Carcinogenicity: Crystalline silica dust in its neat form is on the IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans (Volume 42, 1987) concludes that there is sufficient evidence for the carcinogenicity of crystalline silica to experimental animals, and there is limited evidence of the carcinogenicity of crystalline silica to Humans. IARC Class 2A

Effective Date: 1/26/09

Skin Irritation: Corrosive. Causes burns.**Eye Irritation:** Corrosive. Causes burns.**Reproduction:** For Bisphenol A:

A recent study (October 2000) has shown that orally administered bisphenol A (BPA) in rats can cross the placental barrier. Peak concentrations were achieved in most tissues within approximately 20 minutes and were reduced by 95 to 98% within 6 hours. A second study, "Three Generation Reproductive Toxicity Evaluation" in rats yielded the following no observed adverse effect levels (NOAELs):

- adult systemic toxicity- 75 ppm or ~ 5mg/kg/day
- reproductive toxicity - 750 ppm or ~ 50 mg/kg/day
- postnatal toxicity - 750 ppm or ~ 50 mg/kg/day

These results suggest that Bisphenol A crosses the placental barrier and that high doses (> 50 mg/kg/day at or near the maximum tolerated dose) may be a mild reproductive and/or postnatal toxicant.

12. ECOLOGICAL INFORMATION**Biodegradability:** No information available.**Ecotoxicity:** No information available.**13. DISPOSAL CONSIDERATIONS**

Waste Disposal Method: Incinerate liquid; landfill or incinerate contaminated diking material in accordance with local, state, and federal regulations.

14. TRANSPORT INFORMATION**DOT: Non-Bulk**

| | |
|---|----------------------------------|
| Proper Shipping Name: | Corrosive liquids, toxic, n.o.s. |
| Technical Shipping Name (If n.o.s.): | cycloaliphatic diamine |
| Hazard Class: | 8 (6.1) |
| ID Number: | UN 2922 |
| Packing Group: | PG II |
| Label: | Toxic & Corrosive |

TDG: Non-Bulk

| | |
|---|----------------------------------|
| Proper Shipping Name: | Corrosive liquids, toxic, n.o.s. |
| Technical Shipping Name (If n.o.s.): | cycloaliphatic diamine |
| Hazard Class: | 8 (6.1) |
| ID Number: | UN 2922 |
| Packing Group: | PG II |
| Label: | Toxic & Corrosive |

IMDG: Non-Bulk

| | |
|---|----------------------------------|
| Proper Shipping Name: | Corrosive liquids, toxic, n.o.s. |
| Technical Shipping Name (If n.o.s.): | cycloaliphatic diamine |
| Hazard Class: | 8 (6.1) |
| ID Number: | UN 2922 |
| Packing Group: | PG II |
| Label: | Toxic & Corrosive |

IATA: Non-Bulk

Printed: 1/26/2009

Page 5 of 8



| | |
|---|----------------------------------|
| Proper Shipping Name: | Corrosive liquids, toxic, n.o.s. |
| Technical Shipping Name (If n.o.s.): | cycloaliphatic diamine |
| Hazard Class: | 8 (6.1) |
| ID Number: | UN 2922 |
| Packing Group: | PG II |
| Label: | Toxic & Corrosive |

15. REGULATORY INFORMATION

US Federal Regulations:

Occupational Safety and Health Act (OSHA): This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is considered to be a hazardous chemical under that standard.

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

SARA Title III: Section 304 - CERCLA: Not listed.

SARA Title III: Section 311/312 - Hazard Communication Standard (HCS): Immediate (acute) health hazard.
Delayed (chronic) health hazard.

SARA Title III: Section 313 Toxic Chemical List (TCL): This product does not contain any chemicals for routine annual toxic chemical release reporting under Section 313 (40 CFR 372).

TSCA Section 8(b) - Inventory Status: Chemical components listed on TSCA Inventory.

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

International Regulations:

Australian Inventory Status: This product contains only chemicals which are currently listed on the Australian Inventory of Chemical Substances.

Canadian Inventory Status: This product contains only chemicals that are currently listed on the Canadian Domestic Substance List.

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 Products Regulations. D1B, D2A, D2B, E.

European Inventory Status (EINECS): This product contains only chemicals that are currently listed on the European Inventory of Existing Commercial Chemical Substances (EINECS).

Japanese Inventory Status: This product contains one or more chemicals currently not on the Japanese Ministry of International Trade and Industry List of Existing and New Chemical Substances.

State Regulations:

California Proposition 65: The following is required composition information. This product contains the following chemical(s) which are currently listed on the California list of Known Carcinogens and Reproductive Toxins:

Effective Date: 1/26/09

Chemical Name: Quartz (SiO₂)
Common Name: Crystalline Silica (Quartz)
CAS Number: 14808-60-7
Percent in Composition: 0.1 - 0.5 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer.

Chemical Name: Benzenamine, 4,4'-methylenebis[2-methyl-
Common Name: 4,4'-METHYLENE BIS(2-METHYLANILINE)
CAS Number: 838-88-0
Percent in Composition: 0.001 - 0.005 % by wt
Comment: Warning! This chemical is known to the State of California to cause cancer.

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

Chemical Name: Cyclohexanamine, 4,4'-methylenebis[2-methyl-
Common Name: Dimethyldicykan
CAS Number: 6864-37-5
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: metal hydroxide
CAS Number: Confidential
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: alkali carbonate
CAS Number: Confidential
Comment: Hazardous Substance

Chemical Name: Inorganic Silicate
CAS Number: Confidential
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: alkly naphthalene
CAS Number: Confidential
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: Synthetic rubber
CAS Number: Confidential
Comment: Not on Pennsylvania Hazardous Substance List

Chemical Name: fumed silica
CAS Number: Confidential
Comment: Not on Pennsylvania Hazardous Substance List

16. OTHER INFORMATION

| | |
|-------------------------|---------------------------------|
| MSDS No: | 63048 |
| Reason Issued: | 1/09 rename - 11/08 new product |
| Approved By: | Matthew Austin |
| Title: | EHS Chemist |
| Approved Date: | 11/20/08 |
| Supersedes Date: | 11/20/08 |



Effective Date: 1/26/09

Other Information: L/M Codes: S/Si/L/CA1 (S12121831) [S09]

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