MATERIAL SAFETY DATA SHEET

John C Dolph (a VonRoll Company)

DOLPHON®

CR-1034-H A

Red Epoxy Buttering Resin

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Manufacturer Name: John C Dolph (a Von Roll Company)

Address: 320 New Road, Monmouth Junction, New Jersey 08852

Business Phone: 732-329-2333 Business Fax: 732-329-1143

CHEMTREC: For transportation emergencies 703-527-3887 (US call 800-424-9300)

24-Hour Emergency: 518-395-3310

Manufacturer MSDS Creation Date: 08/2004 Manufacturer MSDS Revision Date: 06/2013

SECTION 2: COMPOSITION, INFORMATION ON INGREDIENTS				
Chemical Name Bisphenol A Diglycidyl Ether Polymer	CAS# 25068-38-6	% Weight 40-48	OSHA PEL Not Established	ACGIH TLV Not Established
Chemical Name tert-Butylphenol glycidyl ether	CAS# 3101-60-8	% Weight	OSHA PEL Not Established	ACGIH TLV Not Established
Chemical Name Dibutyl phthalate	CAS# 84-74-2	% Weight 7-12	OSHA PEL 5 mg/m³ (TWA)	ACGIH TLV 5 mg/m³ (TWA)

SECTION 3: HAZARDS IDENTIFICATION

Emergency Overview:

Irritant. Sensitizer

Applies to All Ingredients:

Route of Exposure:

Eyes, Skin, Inhalation, and Ingestion.

Potential Health Effects:

Eye Contact:

May cause eye irritation. Symptoms include stinging, tearing, redness, and swelling of eyes.

Skin Contact:

May cause skin irritation. Symptoms may include burning of skin, allergic reaction, blistering and scaling.

Inhalation:

May cause respiratory irritation. Overexposure may cause nausea, drowsiness, headache and weakness.

Inaestion:

May cause gastrointestinal irritation.

Target Organs:

Respiratory System, liver, kidney, CNS, reproductive system, eyes, skin, and digestive tract

Aggravation of Pre-Existing Conditions:

May aggravate pre-existing respiratory disorders, allergy, eczema, or skin conditions.

SECTION 4: FIRST AID MEASURES

Eye Contact:

Immediately flush eyes with plenty of water for at least 20 minutes. Assure adequate flushing of the eyes by separating the eyelids with fingers. Get immediate medical attention if irritation persists, or symptoms of overexposure become apparent.

Skin Contact:

Immediately wash skin with plenty of water and soap for at least 20 minutes, while removing contaminated clothing and shoes. Get medical attention especially, if irritation develops, persists, or symptoms of overexposure become apparent.

Inhalation:

Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Keep warm. Get immediate medical attention.

Ingestion:

If swallowed, call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting unless instructed by medical personnel. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

Flash Point:

> 200°F (93°C)

Upper Flammable or Explosive Limit:

Not Established

Lower Flammable or Explosive Limit:

Not Established

Auto Ignition Temperature:

Not Established

Extinguishing Media:

In the event of a fire involving this material, alone or in combination with other materials, use dry chemicals, carbon dioxide, universal foam extinguishing media or water fog.

Hazardous Combustion Byproducts:

Oxides of carbon and various hydrocarbons.

Fire Fighting Instructions:

Evacuate area and fight fire from a safe distance. Containers can build up pressure if exposed to heat (fire). Use water spray to cool fire-exposed containers. Explosive vapor-air mixture could form after the initial fire is extinguished. Use water spray to disperse vapors if a spill or leak has not ignited. Water runoff can cause environmental damage. Dike and collect water used to fight fire. See Section 13 for disposal considerations.

Protective Equipment:

Wear self-contained breathing apparatus pressure-demand, NIOSH (approved or equivalent) and full protective gear.

NFPA

Health: 2 Flammability: 1 Instability: 0

Other: NONE

SECTION 6: ACCIDENTIAL RELEASE MEASURES

Spill Cleanup Measures:

Remove all sources of ignition. Absorb spill with dry inert material (e.g., dry sand or earth), then place in a chemical waste container. Clean up spills immediately observing precautions in the protective equipment section.

Environmental Precautions:

Contain liquid to prevent contamination of soil, surface water or ground water. Avoid runoff into storm sewers and ditches, which lead to waterways. Do not flush to sewer.

Spill/Release Reporting:

Immediately notify authorities of any reportable spill as may be required pursuant to regulations. See Section 15 for applicable CERCLA reportable quantities.

SECTION 7: HANDLING and STORAGE

Handling:

This product should be handled only by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals, who should take into account the fire, health and chemical hazard data. Use with adequate ventilation.

"Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources of ignition. Containers may explode and cause injury or death. Empty drums or containers should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

Storage:

Store in a cool, dry, well ventilated area away from sources of heat and incompatible substances. Consult manufacturer for shelf life.

Hygiene Practices:

Wash thoroughly after handling. Avoid contact with eyes and skin. Avoid inhaling vapor or mist.

SECTION 8: EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use appropriate engineering control such as process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended and or regulated exposure limits. Where such systems are not effective wear suitable personal protective equipment, which performs satisfactorily and meets OSHA or other recognized standards. Consult with local procedures for selection, training, inspection and maintenance of the personal protective equipment.

Skin Protection Description:

Wear suitable protective clothing to prevent contact with skin.

Hand Protection Description:

Wear appropriate protective gloves such as rubber. Consult glove manufacturers for glove permeability data.

Eye/Face Protection:

Wear appropriate protective glasses or splash goggles as described by 29 CFR 1910.133, OSHA eye and face protection regulation, or the European standard EN 166.

Protective Clothing/Body Protection:

If splashing is likely, wear impervious clothing and boots to prevent repeated or prolonged skin contact. Consult your supplier of personal protective equipment for additional instructions on proper usage.

Respiratory Protection:

A NIOSH approved air-purifying respirator with an appropriate cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited to airborne concentrations that are typically within 10 times the exposure limit. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirators use.

Other Protective:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State/Appearance:

Liquid

Color:

Red

Odor:

Slight.

pH:

No data.

Decomposition Temperature:

No data.

Vapor Pressure:

No data.

Vapor Density:

No data.

Boiling Point:

No data.

Freezing Point:

No data.

Solubility in Water:

Negligible

Specific Gravity:

1.15 - 1.25

Percent Volatile:

< 2%

Viscosity:

300,000 - 1,000,000 cps

Molecular Weight:

Mixture

Flashpoint:

> 200°F (93°C)

Auto Ignition Temp:

Not Established

Upper Flammable Explosive Limit:

Not Established

Lower Flammable Explosive Limit:

Not Established

SECTION 10: STABILITY AND REACTIVITY

Chemical Stability:

Stable at normal temperatures and storage conditions.

Conditions to Avoid:

Flames, heat, sparks and high temperatures and pressures. Oxidizing conditions.

Incompatibilities with Other Materials:

Acids, Aluminum, Lead, and strong oxidizers.

Hazardous Polymerization:

Hazardous polymerization will not occur.

Hazardous Decomposition Products:

When heated to decomposition it emits irritating vapors, which may include carbon dioxide, carbon monoxide and aldehydes.

SECTION 11: TOXICOLOGICAL INFORMATION

Carcinogenicity:

Not listed by the National Toxicology Program (NTP) Annual Report on Carcinogens or by the International Agency for Research on Cancer (IARC) Monographs, or by the Occupational Safety and Health Administration (OSHA).

tert-Butylphenol glycidyl ether:

Carcinogenicity:

Not listed by the National Toxicology Program (NTP) Annual Report on Carcinogens or by the International Agency for Research on Cancer (IARC) Monographs, or by the Occupational Safety and Health Administration (OSHA).

Mutagenicity:

Mutation data reported. (RTECS)

Dibutyl phthalate:

Skin Effects:

 LD_{50} - rabbit, >20 mL/kg

Ingestion Effects:

LD₅₀ - rat, 7499 mg/kg

Inhalation Effects:

 LC_{50} - rat, 4250 mg/m³

Carcinogenicity:

Not listed by the National Toxicology Program (NTP) Annual Report on Carcinogens or by the International Agency for Research on Cancer (IARC) Monographs, or by the Occupational Safety and Health Administration (OSHA).

Mutagenicity:

Mutation data reported

Reproductive Toxicity:

Reproductive effects reported

Other Toxicological Information:

LD₅₀, Intraperitoneal - rat, 3050 uL/kg

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

No data.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal:

Consult with the US EPA Guidelines listed in 40 CFR Part 261.3 for the classifications of hazardous waste prior to disposal. Furthermore, consult with your state and local waste requirements or guidelines, if applicable, to ensure compliance. Arrange disposal in accordance to the EPA and/or state and local guidelines, by a licensed disposal company.

SECTION 14: TRANSPORT INFORMATION

DOT Shipping Name:

RESIN COMPOUND, LIQUID, NOT REGULATED

DOT UN Number: NOT REGULATED

DOT Hazard Class: NOT REGULATED DOT Packing Group: NOT REGULATED

Marine Pollutant: NONE

SECTION 15: REGULATORY INFORMATION

All ingredients:

TSCA 8(b): Inventory Status

Listed or Exempt

Bisphenol A Diglycidyl Ether Polymer:

State:

Listed on the New Jersey and Pennsylvania Right-to-Know List.

MSDS Dolphon® CR-1034-H A Page 5 of 6

tert-Butylphenol glycidyl ether:

State:

Listed on the New Jersey and Pennsylvania Right-to-Know List.

Dibutyl phthalate:

State:

Listed on the New Jersey and Pennsylvania Right-to-Know List.

SECTION 16: ADDITIONAL INFORMATION

HMIS

Health: *2
Fire Hazard: 1
Physical Hazard: 0

Disclaimer:

While John C Dolph (a Von Roll Company) believes the data set forth herein are accurate as of the date hereof, it is furnished without warranty of any kind and specially disclaims all liability for reliance on the information provided. The data is furnished solely for your consideration, investigation and verification.