

Safety Data Sheet

24 Hour Emergency Phone Numbers Medical/Poison Control:

In U.S.: Call 1-800-222-1222

Outside U.S.: Call your local poison control center

Transportation/National Response Center:

1-800-535-5053 1-352-323-3500

NOTE: The National ResponseCenter emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

IMPORTANT: Provide this information to employees, customers, and users of this product. Read this SDS before handling or disposing of this product. This product is covered by the OSHA Hazard Communication Standard and this document has been prepared in accordance with requirements of this standard. All abbreviated terms used in this MSDS are further described in Section 16.

1. Identification

This Safety Data Sheet is available in American Spanish upon request. Los Datos de Serguridad pueden obtenerse en Espanol si lo riquiere.

Product Name: Plaster of Paris Revision Date: 6/19/2015

Product Use/Class: Plaster of Paris SDS No: 00071008001

Manufacturer: DAP Products Inc.

2400 Boston Street Suite 200 Baltimore, MD 21224-4723

888-327-8477 (non - emergency matters)

Preparer: Regulatory Department

2. Hazards Identification

EMERGENCY OVERVIEW: WARNING!May cause eye, skin, nose, throat and respiratory tract irritation. Product dust may be irritating to eyes, skin and respiratory system. Removal of this product after use or by dry sanding will generate dust and exposure to this dust may be irritating to the eyes, ears, nose and mouth. May cause burns. When mixed with water, this material hardens and then slowly becomes hot. DO NOT attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions may cause severe burns that may require surgical removal of affected tissues. DO NOT attempt to make a cast enclosing any part of the body using this material. Failure to follow these instructions may cause severe burns that may require surgical removal of affected tissues.

GHS Classification

Acute Tox. 4 Inhalation, Carc. 1A, Eye Irrit. 2, Skin Irrit. 2

Symbol(s) of Product



Signal Word

Danger

GHS HAZARD STATEMENTS

Skin Irritation, category 2 H315 Causes skin irritation.

Eye Irritation, category 2 H319 Causes serious eye irritation.

Acute Toxicity, Inhalation, category 4 H332 Harmful if inhaled.

Carcinogenicity, category 1A H350 May cause cancer. Classified as carcinogenic Category 1 on the basis of

epidemiological and/or animal data. Mixtures are classified as carcinogenic when at least 1 ingredient has been classified as carcinogenic and is present at 0.1% or above Routes of exposure are dependant on ingredient form.

GHS LABEL PRECAUTIONARY STATEMENTS

P271 Use only outdoors or in a well-ventilated area.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

3. Composition/Information on Ingredients

| <u>Chemical Name</u> | CAS-No. | Wt. % | GHS Symbols | GHS Statements |
|----------------------|------------|---------|-------------|-----------------------|
| Plaster of paris | 26499-65-0 | 75-100 | GHS03 | H270 |
| Limestone | 1317-65-3 | 10-25 | GHS03 | H270 |
| Quartz | 14808-60-7 | 1.0-2.5 | GHS03-GHS07 | H270-302 |

The text for GHS Hazard Statements shown above (if any) is given in the "Other information" Section.

4. First-aid Measures

FIRST AID - INHALATION: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical attention immediately.

FIRST AID - SKIN CONTACT: Wash skin with soap and water for 15 minutes. Get medical aid if symptoms persist.

FIRST AID - EYE CONTACT: In case of contact, immediately flush eyes with large quantities of water for at least 15 minutes until irritation subsides. Get medical attention immediately.

FIRST AID - INGESTION: If swallowed, DO NOT INDUCE VOMITING. Get medical attention immediately.

5. Fire-fighting Measures

UNUSUAL FIRE AND EXPLOSION HAZARDS: 465 <undefined>

SPECIAL FIREFIGHTING PROCEDURES: Wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear. Use water spray to cool exposed surfaces.

EXTINGUISHING MEDIA: Carbon Dioxide, Dry Chemical, Foam

6. Accidental Release Measures

ENVIRONMENTAL MEASURES: No Information

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: In case of spillage, absorb with inert material and dispose of in accordance with applicable regulations. Sweep up excess powder. Place remaining powder into containers.

7. Handling and Storage

HANDLING: KEEP OUT OF REACH OF CHILDREN!DO NOT TAKE INTERNALLY. Use only with adequate ventilation. Ensure fresh air entry during application and drying. Do not breathe dust. Removal of this product after use will result in the generation of Dust. If dry-sanded, exposure to dust may result in the build-up of material in eyes, ears, nose, and mouth which may cause irritation. While dry sanding, use of a NIOSH-approved dust mask is recommended. Wash thoroughly after handling.

STORAGE: Store away from caustics and oxidizers. Keep containers dry and tightly closed to avoid moisture absorption and contamination.

8. Exposure Controls/Personal Protection

Ingredients with Occupational Exposure Limits

| <u>Chemical Name</u> | ACGIH TLV-TWA | ACGIH-TLV STEL | OSHA PEL-TWA | OSHA PEL-CEILING |
|----------------------|-------------------------------------|----------------|---|------------------|
| Plaster of paris | N.E. | N.E. | 15 mg/m3 TWA total dust, 5 mg/m3 TWA respirable fraction | N.E. |
| Limestone | N.E. | N.E. | 15 mg/m3 TWA total dust, 5 mg/m3 TWA respirable fraction | N.E. |
| Quartz | 0.025 mg/m3 TWA respirable fraction | N.E. | N.E. | N.E. |

Further Advice: MEL = Maximum Exposure Limit OES = Occupational Exposure Standard SUP = Supplier's Recommendation Sk = Skin Sensitizer N.E. = Not Established

Personal Protection



RESPIRATORY PROTECTION: Dust safety masks recommended where working powder concentration is more than 10 mg/m3. When concentrations exceed the exposure limits specified, use of a NIOSH-approved dust, mist and fume respirator is recommended. Where the protection factor of the respirator may be exceeded, use of a full facepiece, supplied air, or Self Contained Breathing Apparatus (SCBA) may be necessary. If concentrations exceed the exposure limits specified, use of a NIOSH-approved supplied air respirator is recommended. Where the protection factor is exceeded, use of a Self Contained Breathing Apparatus (SCBA) may be necessary. National Institute for Occupational Safety and Health (NIOSH) has recommended that the permissible exposure limit be changed to 50 micrograms respirable free silica per cubic meter of air (0.05 mg/m3) as determined by a full shift sample up to 10-hour work shift. A respiratory protection program that meets the OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.



SKIN PROTECTION: Wear protective gloves.



EYE PROTECTION: Goggles or safety glasses with side shields.



OTHER PROTECTIVE EQUIPMENT: Provide eyewash. Provide coveralls if body contact may occur.



HYGIENIC PRACTICES: Remove and wash contaminated clothing before re-use.

9. Physical and Chemical Properties

Appearance: White to Off-White Physical State: Powder Odor: Little or No Odor Threshold: Not Established Density, g/cm3: 2.89 - 2.91pH: Not Applicable Freeze Point, °C: Not Established Viscosity (mPa.s): Not Established Solubility in Water: Not Established Partition Coeff., n-octanol/water: Not Established Decomposition Temperature, °C: Not Established Explosive Limits, %: N.I. - N.I. Not Established Boiling Range, °C: N.I. - N.I. Auto-Ignition Temperature, °C Minimum Flash Point, °C: No Information Vapor Pressure, mmHg: No Information **Evaporation Rate:** Flash Method: Not Applicable Not Applicable Vapor Density: Not Applicable Flammability: No Information

Combustibility: Does not support combustion

(See "Other information" Section for abbreviation legend)

(If product is an aerosol, the flash point stated above is that of the propellant.)

10. Stability and Reactivity

STABILITY: Stable under recommended storage conditions.

CONDITIONS TO AVOID: Do not breathe dust. Avoid dust formation in confined areas. Excessive heat and freezing.

INCOMPATIBILITY: Incompatible with strong bases and oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: Above 1450 degree C: SO2 and CaO.

11. Toxicological Information

EFFECT OF OVEREXPOSURE - INHALATION: Inhalation may cause irritation to the respiratory tract (nose, mouth, mucous membranes). Prolonged, repeated, or high exposures may cause irritation to the respiratory tract (nose, mouth, mucous membranes).

EFFECT OF OVEREXPOSURE - SKIN CONTACT: May cause dry skin. May cause skin irritation. May cause skin irritation in susceptible persons. May develop enough heat to cause burns if a large mass such as a cast of hand or arm, is kept in contact with skin while hardening.

EFFECT OF OVEREXPOSURE - EYE CONTACT: May cause eye irritation. Signs and symptoms may include: pain, tears, swelling, redness and blurred vision. May cause eye irritation.

EFFECT OF OVEREXPOSURE - INGESTION: Under normal use conditions, this product is not expected to cause adverse health effects. Single dose oral toxicity is very low. Amounts ingested incidental to industrial handling are not likely to cause injury; however, ingestion of large amounts may cause injury. Ingestion may cause irritation to mucous membranes. Ingestion may result in obstruction when material hardens.

CARCINOGENICITY: No Information

EFFECT OF OVEREXPOSURE - CHRONIC HAZARDS: Contains Crystalline Silica which has been determined to be carcinogenic to humans (1) by IARC when in respirable form. Risk of cancer depends upon duration and level of inhalation exposure to dust from sanding the dried paint or spray mist. The International Agency for Research on Cancer (IARC) has determined that crystalline silica in the form of quartz or cristobalite that is inhaled from occupational sources is carcinogenic to humans (Group 1- carcinogenic to humans). Refer to IARC Monograph 68, Silica, Some Silicates and Organic Fibres (published in June 1997) in conjunction with the use of these materials. The National Toxicology Program (NTP) classifies respirable crystalline silica as "known to be a human carcinogen". Refer to the 9th Report on Carcinogens (2000). The American Conference of Governmental Industrial Hygienists (ACGIH) classifies crystalline silica, quartz, as a suspected human carcinogen (Group A2). Breathing dust containing respirable crystalline silica may not cause noticeable injury or illness even though permanent lung damage may be occurring. Inhalation of dust may have the following serious chronic health effects: Excessive inhalation of respirable dust can cause pneumoconiosis, a respiratory disease, which can result in delayed, progressive, disabling and sometimes fatal lung injury. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function. Smoking exacerbates this disease. Individuals with pneumoconiosis are predisposed to develop tuberculosis. There is some evidence that breathing respirable crystalline silica or the disease silicosis is associated with an increased incidence of significant disease endpoints such as

scleroderma (an immune system disorder manifested by fibrosis of the lungs, skin and other internal organs) and kidney disease. Prolonged or repeated inhalation of dust may cause lung damage.

PRIMARY ROUTE(S) OF ENTRY: Eye Contact, Ingestion, Inhalation, Skin Contact

Acute Toxicity Values

The acute effects of this product have not been tested. Data on individual components are tabulated below

| CAS-No. | Chemical Name | Oral LD50 | Dermal LD50 | Vapor LC50 |
|------------|------------------|-----------------|-------------|------------|
| 26499-65-0 | Plaster of paris | >2000 mg/kg Rat | N.I. | >20 mg/L |
| 1317-65-3 | Limestone | 6450 mg/kg Rat | >2000 mg/kg | >20 mg/L |
| 14808-60-7 | Quartz | 500 mg/kg Rat | >2000 mg/kg | >20 mg/L |

N.I. = No Information

12. Ecological Information

ECOLOGICAL INFORMATION: Ecological injuries are not known or expected under normal use.

13. Disposal Information

DISPOSAL INFORMATION: This product does not meet the definition of a hazardous waste according to U.S. EPA Hazardous Waste Management Regulation, 40 CFR Section 261. Dispose as hazardous waste according to all local, state, federal and provincial regulations. State and Local regulations/restrictions are complex and may differ from Federal regulations. Responsibility for proper waste disposal is with the owner of the waste.

14. Transport Information

SPECIAL TRANSPORT PRECAUTIONS: No Information

DOT UN/NA Number: N.A.

DOT Proper Shipping Name: Not Regulated.

DOT Technical Name: N.A.

DOT Hazard Class: N.A.

Hazard SubClass: N.A.

Packing Group: N.A.

15. Regulatory Information

U.S. Federal Regulations:

CERCLA - SARA Hazard Category

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Acute Health Hazard, Chronic Health Hazard

SARA SECTION 313:

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372:

No Sara 313 components exist in this product.

TOXIC SUBSTANCES CONTROL ACT:

All ingredients in this product are either on TSCA inventory list, or otherwise exempt.

This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:

No TSCA 12(b) components exist in this product.

CALIFORNIA PROPOSITION 65 CARCINOGENS AND REPORODUCTIVE TOXINS

CALIFORNIA PROPOSITION 65: No Information

International Regulations: As follows -

CANADIAN WHMIS:

This SDS has been prepared in compliance with Controlled Product Regulations except for the use of the 16 headings.

WHMIS Class Consumer Commodity

16. Other Information

Revision Date: 6/19/2015 Supersedes Date: New MSDS

Reason for revision: HazCom2012/GHS Conversion

Datasheet produced by: Regulatory Department

HMIS Ratings:

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

VOC Less Water Less Exempt Solvent, g/L_{0.0}

VOC Material, g/L:0

VOC as Defined by California Consumer Product Regulation, Wt/Wt%:0.0

Text for GHS Hazard Statements shown in Section 3 describing each ingredient:

H270 May cause or intensify fire; oxidiser.

H302 Harmful if swallowed.

Icons for GHS Pictograms shown in Section 3 describing each ingredient:

GHS03



GHS07

Legend: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

DAP believes the data and statements contained herein are accurate as of the date hereof. They are offered in good faith as typical values and not as a product specification. NO WARRANTY OF MERCHANTABILITY, WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE WITH REGARD TO THE INFORMATION HEREIN PROVIDED OR THE PRODUCT TO WHICH THE INFORMATION REFERS. Since this document is intended only as a guide to the appropriate use and precautionary handling of the referenced product by a properly trained person, it is therefore the responsibility of the user to (i) review the recommendations with due consideration for the specific context of the intended use and (ii) determine if they are appropriate.

SAFETY DATA SHEET

FORMALIN FIXED GRASSFROGS AND BULLFROGS IN PRESERVED HOLDING SOLUTION



SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name:

Formalin Fixed Grassfrogs and Bullfrogs In Preserved Holding Solution

Recommended Use:

Science education applications

Synonyms:

None

Manufacturer/Supplier:

Ranaco Corporation, 4345 E Irvington Road, Tucson, AZ 85714

General Information:

800-528-7023

Transportation Emergency Number:

800-424-9300 Chemtrec - 24 hours assistance

SECTION 2: HAZARD IDENTIFICATION

DANGER



Targeted organs:

Eyes, Skin, Central Nervous System, Respiratory Tract

GHS Classification:

Acute Toxicity, oral (Category 4)
Acute Toxicity, dermal (Category 4)
Skin Irritation (Category 2)
Eye irritation (Category 2A)
Skin sensitization (Category 1)
Acute toxicity, inhalation (Category 4)
Carcinogenicity (Category 2)

Hazard Statements:

Maybe harmful if swallowed.
Causes skin irritation.
Causes eye irritation.
May cause an allergic skin reaction.
May cause respiratory irritation.
May cause cancer.

Precautionary Statements:

Obtain special instructions before use.

Wear protective gloves and eye protection.

Do not eat, drink or smoke when using this product.

Wash hands thoroughly after bandling.

Wash hands thoroughly after handling.

IF ON SKIN: Wash with plenty of soap and water.

IF IN EYES: Rinse cautiously for several minutes. Remove contact lenses, if

present and easy to do so. Continue rinsing.

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at

rest in a position comfortable for breathing.

IF SWALLOWED: Immediately call a POISON CENTER or physician

IF exposed or concerned: Get medical advice/attention.

Store in a well- ventilated place. Keep container tightly closed.

Dispose of contents/container in accordance with local/regional/national

regulations.

★ WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

| Component | CAS# | % |
|----------------------------------|-----------|---------------------------------|
| Formaldehyde | 50-00-0 | All concentrations are withheld |
| Methanol | 67-56-1 | due to Trade Secret |
| Propylene Glycol | 57-55-6 | |
| Ethylene Glycol Monophenyl Ether | 122-99-6 | |
| Acetone | 67-64-1 | |
| Glutaraldehyde | 111-30-8 | |
| BHT Butylated Hydroxytoluene | 128-37-0 | |
| Polysorbate 80 | 9005-65-6 | |
| Water | 7732-18-5 | Balance |

SECTION 4: FIRST AID MEASURES

SKIN CONTACT: Wash affected area with soap and water. Seek medical attention if symptoms develop.

EYE CONTACT: Rinse cautiously for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Seek medical attention if irritation persists.

INHALATION: Remove to fresh air. Get medical treatment if symptoms persist.

INGESTION: Immediately call a POISON CENTER or physician. Only induce vomiting at the instruction of medical personnel. Never give anything by mouth to an unconscious person.

SIGNS AND SYMPTOMS OF EXPOSURE: Irritation of skin, eyes, respiratory tract. Repeated exposure may cause dermatitis or other allergic reactions.

SECTION 5: FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Use dry chemical, CO₂, water spray (fog) or alcohol foam.

FIRE FIGHTING METHODS AND PROTECTION: Firefighters should wear self-contained breathing apparatus and wear full protective equipment.

FIRE AND/OR EXPLOSION HAZARDS: During a fire, smoke generated can be irritating or toxic.

HAZARDOUS COMBUSTION PRODUCTS: Products of combustion include but are not limited to carbon monoxide and carbon dioxide.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Avoid breathing vapors. Use gloves and eye protection to clean up spills.

EMERGENCY PROCEDURES: Ventilate area of spill. Eliminate all sources of ignition. Remove non-essential personnel.

ENVIRONMENTAL PRECAUTIONS: No special hazards. Follow applicable federal, state, provincial and local regulations regarding releases.

METHODS FOR CONTAINMENT AND CLEAN-UP: Absorb with liquid binding material and place in a sealed container. Dispose of waste in accordance with federal, state, provincial and local regulations.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING: Do not eat, drink or smoke when using this product. Avoid breathing vapors. Avoid direct skin or eye contact with liquids. Do not ingest. Wash hands with soap and water after use or handling of product.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Store at room temperature in a dry well ventilated area.

Keep specimen container tightly closed when not in use.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits:

| Chemical Name | ACGIH (TLV) | OSHA (PEL) | NIOSH (REL) |
|----------------------------------|--------------------------------------|------------------------------|-------------------------------------|
| Formaldehyde | C 0.3 ppm / C 0.37 mg/m ³ | TWA: 0.75 ppm / STEL: 2ppm | TWA: 0.016 ppm / STEL: 0.1 ppm |
| Methanol | TWA: 200 ppm / STEL: 250 ppm | TWA: 200 ppm / STEL: 260 ppm | TWA: 200 ppm / STEL: 250 ppm |
| Ethylene Glycol Monophenyl Ether | Not available | Not available | Not available |
| Glutaraldehyde | C 0.05 ppm / C 0.2 mg/m ³ | Not available | C 0.2 ppm / C 0.8 mg/m ³ |
| Acetone | TWA: 250 ppm / STEL: 500 ppm | TWA: 1000 ppm | TWA: 250 ppm |
| BHT Butylated Hydroxytoluene | 2 mg/m³ Vapor | 5 mg/m³ Nuisance Dust | TWA 10 mg/m ³ |
| Polysorbate 80 | None | None | None |
| | WEEL | | |
| Propylene Glycol | TWA 10 mg/m³ Aerosol | Not available | Not available |

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility, a safety shower and fire extinguishing material. Personnel should wear safety glasses, goggles or face shield, apron and appropriate protective gloves. Use adequate ventilation to keep airborne concentrations low.

Respiratory Protection: None should be needed in normal handling and room temperatures. If use conditions generate fumes above the OSHA regulations, use of a NIOSH/MSHA approved respirator is required.

ACGIH: American Conference of Industrialist Hygienists, OSHA: U.S. Occupational Safety and Health Administration, NIOSH: U.S. National Institute for Occupational Safety and Health, PEL: Permissible Exposure Limit, TWA: Time Weighted Average, STEL: Short Term Exposure Limit, REL: Recommended Exposure Limit, WEEL: Workplace Environmental Exposure Limit

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

Appearance: Specimen with/without clear colorless liquid

Odor: Mild pungent or sweet odor Odor Threshold: Data not available

pH: Data not available

Melting/Freezing Point: Data not available

Boiling Point: Data not available Flash Point: Data not available Evaporation Rate (Water = 1): >1

Flammability (solid/gas): Data not available Explosion Limits: Lower/Upper: Data not available Vapor Pressure (mmHg): Data not available

Vapor Density: Data not available
Relative Density (Specific Gravity): >1
Solubility(ies): Complete in water
Partition Coefficient: Data not available

Auto-ignition Temperature: Data not available

Decomposition Temperature: Data not available

Viscosity: Data not available Molecular Formula: Mixture Molecular Weight: Mixture

SECTION 10: STABILITY & REACTIVITY

Reactivity: None under normal conditions.

Chemical Stability: Stable

Conditions to Avoid: Excessive temperatures which cause evaporation.

Incompatible Materials: Strong acids, phenol, strong oxidizers, strong bases, hydrochloric acid, ammonia, iodine, alkalies, tannin, iron

products, gelatin, bisulfate Hazardous Polymerization: None under normal conditions.

Hazardous Decomposition Products: May include, but are not limited to Carbon oxides, gaseous formaldehyde, aldehydes, ketones,

alcohols, ethers and organic acids

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Toxicity: Formalin Fixed Grassfrogs and Bullfrogs in Preserved Holding Solution have not been tested as a mixture. Information about individual components is supplied.

Formaldehyde - Oral-rat LD50: 100 mg/kg; Inhalation-rat LC50: 250 ppm/4 hours; Dermal-rat: 270 mg/kg

Methanol - Oral-rat LD50: 5,600 mg/kg; Inhalation-rat LC50: 6,400 ppm/4 hours, 145,000 ppm/1 hour; Dermal-rat: 15,800 mg/kg

Propylene Glycol - Ingestion-rat LD50: > 20,000 mg/kg, Skin absorption-rabbit LD50: > 20,000 mg/kg

Ethylene Glycol Monophenyl Ether- Oral-rat LD50: 1,840 mg/kg; Dermal-rabbit: >2,214 mg/kg

Glutaraldehyde - Oral-rat LD50:200mg/kg; Dermal-rabbit LD50: 1,749 mg/kg

Acetone - Oral-rat LD50: 5,800 mg/kg; Inhalation-rat LC50: 50,100 mg/m³; Irritation eye-rabbit: standard draize, 20 mg

BHT Butylated Hydroxytoluene - Oral-rat LD50: >2,930 mg/kg; Dermal-rat: >2,000 mg/kg

Chronic Effects: Data not available.

Skin Corrosion/Irritation:

Causes skin irritation. May cause an allergic skin reaction.

Serious Eye Damage/Irritation:

Causes eye irritation or damage.

Respiratory or Skin Sensitization:

May cause sensitization by skin contact

Germ Cell Mutagenicity: Data not available.

Carcinogenicity: Data not available. Information about individual components is supplied.

Formaldehyde - Classified as a carcinogen by the International Agency for Research on Cancer (IARC) and the National Toxicology

Program (NTP) and OSHA. CA Prop 65: Formaldehyde is known to the State of California to cause cancer.

Reproductive Toxicity: Data not available. Information about individual components is supplied.

Methanol - CA Prop 65: This chemical is known to the State of California to cause birth defects or other reproductive harm.

Specific Target Organ Toxicity - Single exposure: Data not available.

Specific Target Organ Toxicity—Repeated exposure: Data not available.

Aspiration Hazard: Data not available.

Potential Health Effects:

Inhalation: May cause respiratory irritation.
Ingestion: May be harmful if swallowed.

Skin: May cause skin irritation. May cause an allergic skin reaction.

Eyes: May cause eye irritation or damage.

Signs and Symptoms of Exposure:

The chemical, physical and toxicological properties have not been thoroughly investigated for this product/mixture. Specific data is

not available. Exercise appropriate procedures to minimize hazards.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity to fish: No data available.

Toxicity to daphnia and other aquatic invertebrates: No data available.

Toxicity to algae: No data available.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

PBT and vPvB assessment: No data available.

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with local/regional/national regulations.

SECTION 14: TRANSPORTATION INFORMATION (US DOT / CANADA TDG)

UN/NA Number: Not applicable

Shipping Name: Not regulated

Hazard Class: Not applicable

Packing Group: Not applicable

Reportable Quantity: No

Marine Pollutant: No

Exceptions: Not applicable

2012 ERG Guide#: Not applicable

SECTION 15: REGULATORY INFORMATION

Toxic Substances Control Act (TSCA): All components of this product are included on the TSCA inventory.

| Component | TSCA | CERLCA (RQ) | RCRA CODE | DSL | NDSL | WHMIS CLASSIFICATION |
|----------------------------------|--------|---------------------|-----------|--------|------------|----------------------|
| Formaldehyde | Listed | 100 lbs (45.4 kg) | U122 | Listed | Not Listed | D1A; D2A; D2B |
| Methanol | Listed | 5,000 lbs (2,270 kg | U154 | Listed | Not Listed | B2; D1B; D2A; D2B |
| Propylene Glycol | Listed | None | None | Listed | Not Listed | None |
| Ethylene Glycol Monophenyl Ether | Listed | None | None | Listed | Not Listed | В3 |
| Acetone | Listed | 5,000 lbs | U002 | Listed | Not Listed | B2, D2B |
| Glutaraldehyde | Listed | None | None | Listed | Not Listed | D1A, D2B, E |
| BHT Butylated Hydroxytoluene | Listed | None | None | Listed | Not Listed | None |
| Polysorbate 80 | Listed | None | None | Listed | Not Listed | None |

California Proposition 65 Information:

△WARNING: This product can expose you to chemicals including formaldehyde, which is known to the State of California to cause cancer, and methanol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: OTHER INFORMATION

Date Prepared: July 23, 2018

Supersedes:

April 24, 2018

RANACO disclaims all expressed or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein. All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, RANACO makes no representations as to its accuracy or sufficiency. Conditions of use are beyond RANACO's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling and disposal of the product or from the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process.