SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Ozone Reagent, Low Range 0 - 0.25 mg/l O$_3$
**Catalog Number:** 2516025

Hach Company
P.O.Box 389
Loveland, CO USA 80539
(970) 669-3050

Emergency Telephone Numbers:
- (Medical and Transportation)
- Loveland, CO USA 80539 (303) 623-5716 24 Hour Service
- (970) 669-3050 (515) 232-2533 8am - 4pm CST

**MSDS Number:** M00511

**Chemical Name:** Not applicable
**CAS Number:** Not applicable
**Additional CAS No. (for hydrated forms):** Not applicable
**Chemical Formula:** Not applicable
**Chemical Family:** Not applicable
**Intended Use:** Laboratory Reagent Determination of ozone in water

2. HAZARDS IDENTIFICATION

**GHS Classification:**
- **Hazard categories:** Serious Eye Damage/Eye Irritation: Eye Irrit. 2 . . Specific Target Organ Toxicity - Single Exposure: STOT SE 3

**GHS Label Elements:**
WARNING

**Hazard statements:** . . . Causes serious eye irritation. May cause respiratory irritation.
**Precautionary statements:** Wear protective gloves / protective clothing / eye protection / face protection. If skin irritation occurs: Get medical advice/attention. Wash thoroughly after handling. Store in a well-ventilated place, locked up. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wear eye protection. IF INHALED: Remove victim/person to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Call a POISON CENTER or doctor/physician if you feel unwell. Dispose of contents/container according to state, local, federal or national regulations.

**HMIS:**
- **Health:** 1
- **Flammability:** 1
- **Reactivity:** 0

**Protective Equipment:** X - See protective equipment, Section 8.

**NFPA:**
- **Health:** 1
- **Flammability:** 1
- **Reactivity:** 0

**WHMIS Hazard Classification:** Class D, Division 2, Subdivision B - Toxic material (other toxic effects)
**WHMIS Symbols:** Other Toxic Effects
3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components according to GHS:

Malonic Acid

- **CAS Number:** 141-82-2
- **Chemical Formula:** C₃H₄O₄
- **GHS Classification:** Acute Tox. Orl 4, H302; Acute Tox. Inh. 4, H332; Skin Irrit. 3, H316; Eye Irrit. 2A, H319; STOT Single 3, H335
- **Percent Range:** 50.0 - 60.0
- **Percent Range Units:** weight / weight
- **PEL:** Not established
- **TLV:** Not established
- **WHMIS Symbols:** Other Toxic Effects

Potassium Acid Malonate

- **CAS Number:** 926-71-6
- **Chemical Formula:** C₃H₃O₄K
- **GHS Classification:** Non-Haz
- **Percent Range:** 35 - 50
- **Percent Range Units:** weight / weight
- **PEL:** Not established
- **TLV:** Not established
- **WHMIS Symbols:** Not applicable

POTASSIUM INDIGOTRISULFONATE

- **CAS Number:** Not applicable
- **Chemical Formula:** C₄₁H₇N₂O₁₁S₃K₃
- **GHS Classification:**
- **Percent Range:** < 0.5
- **Percent Range Units:** weight / weight
- **PEL:** Not Established
- **TLV:** Not Established
- **WHMIS Symbols:** Not applicable

4. FIRST AID MEASURES

General Information: In the event of exposure, show this Material Safety Data Sheet and label (where possible) to a doctor.

Advice to doctor: Treat symptomatically.

Eye Contact: Immediately flush eyes with water for 15 minutes. Call physician.

Skin Contact (First Aid): Remove contaminated clothing. Wash skin with plenty of water. Call physician if irritation develops.

Inhalation: Remove to fresh air. Give artificial respiration if necessary. Call physician.

Ingestion (First Aid): Give 1-2 glasses of water. Never give anything by mouth to an unconscious person. Call physician immediately.

5. FIRE FIGHTING MEASURES

Flammable Properties: Can burn in fire, releasing toxic vapors. Material is not classified as flammable according to GHS criteria.

Fire Fighting Instruction: As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

Extinguishing Media: Use media appropriate to surrounding fire conditions

Extinguishing Media NOT To Be Used: Not applicable

Fire / Explosion Hazards: None reported
**Hazardous Combustion Products:** Toxic fumes of: carbon monoxide, carbon dioxide, potassium oxides

6. ACCIDENTAL RELEASE MEASURES

**Spill Response Notice:**
Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.

**Containment Technique:** Not applicable

**Clean-up Technique:** If permitted by regulation, Flush the spilled material to the drain with a large excess of water. Otherwise, Pick up spill for disposal and place in a closed container Dispose of in accordance with local, state and federal regulations or laws.

**Evacuation Procedure:** Evacuate as needed to perform spill clean-up.

**DOT Emergency Response Guide Number:** Not applicable

7. HANDLING AND STORAGE

**Handling:** Avoid contact with eyes skin Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

**Storage:** Protect from: light heat moisture Keep away from: oxidizers

**Flammability Class:** Not applicable

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Maintain general industrial hygiene practices when using this product.

**Personal Protective Equipment:**
- **Eye Protection:** safety glasses with top and side shields
- **Skin Protection:** disposable latex gloves In the EU, the selected gloves must satisfy the specifications of EU Directive 89/686/EEC and standard EN 374 derived from it. lab coat
- **Inhalation Protection:** adequate ventilation

**Precautionary Measures:** Avoid contact with: eyes skin Do not breathe: dust Wash thoroughly after handling. Protect from: light heat moisture Keep away from: oxidizers

**TLV:** Not established

**PEL:** Not established

For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.

9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance:** White powder

**Physical State:** Solid

**Molecular Weight:** Not applicable

**Odor:** Acidic

**Odor Threshold:** Not available

**pH:** 5% solution = 2.5

**Metal Corrosivity:**
- **Corrosivity Classification:** Not classified as corrosive to metals according to GHS criteria.
- **Steel:** Not Applicable
- **Aluminum:** Not Applicable

**Specific Gravity/ Relative Density (water = 1; air =1):** 1.6

**Viscosity:** Not determined

**Solubility:**
- **Water:** Soluble
- **Acid:** Soluble
- **Other:** Not determined

**Partition Coefficient (n-octanol / water):** Not applicable

**Coefficient of Water / Oil:** Not applicable

**Melting Point:** 99°C; 210°F

**Decomposition Temperature:** Not determined

**Boiling Point:** Not applicable
**Vapor Pressure:** Not applicable  
**Vapor Density (air = 1):** Not applicable  
**Evaporation Rate (water = 1):** Not applicable  
**Volatile Organic Compounds Content:** Not applicable  
**Flammable Properties:** Can burn in fire, releasing toxic vapors. Material is not classified as flammable according to GHS criteria.  
**Flash Point:** Not applicable  
**Method:** Not applicable  
**Flammability Limits:**  
  - **Lower Explosion Limits:** Not applicable  
  - **Upper Explosion Limits:** Not applicable  
**Autoignition Temperature:** Not available  
**Explosive Properties:**  
Not classified according to GHS criteria.  
**Oxidizing Properties:**  
Not classified according to GHS criteria.  
**Reactivity Properties:**  
Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.  
**Gas under Pressure:**  
Not classified according to GHS criteria.

10. **STABILITY AND REACTIVITY**

**Chemical Stability:** Stable when stored under proper conditions.  
**Mechanical Impact:** None reported  
**Static Discharge:** None reported.  
**Reactivity / Incompatibility:** Incompatible with: oxidizers  
**Hazardous Decomposition:** Heating to decomposition releases toxic fumes of carbon monoxide and carbon dioxide.  
**Conditions to Avoid:** Heat  Excess moisture  Exposure to light.

11. **TOXICOLOGICAL INFORMATION**

**Toxicokinetics, Metabolism and Distribution:** No information available for mixture.  
**Toxicologically Synergistic Products:** None reported  
**Acute Toxicity:**  
  - **Acute Toxicity Estimate (ATE)- Calculated from Ingredient Toxicity Data Route Data Given Below**  
  - **ATE Oral Rat LD50 = 2302 mg/kg**  
  - **ATE Inhalation rat LC50 = 3910 mg/m3/4hr**  
**Specific Target Organ Toxicity - Single Exposure (STOT-SE):** Based on classification principles, the classification criteria are not met.  
**Specific Target Organ Toxicity - Repeat Exposure (STOT-RE):** Based on classification principles, the classification criteria are not met.  
**Skin Corrosion/Irritation:** Mildly irritating to skin.  
**Eye Damage:** Irritating to eyes.  
**Sensitization:** Based on classification principles, the classification criteria are not met.  
**CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction):** No germ cell mutagenicity, carcinogenicity or reproductive toxicity data found.  
This product does NOT contain any IARC listed chemicals.  
This product does NOT contain any NTP listed chemicals.  
This product does NOT contain any OSHA listed carcinogens.  
**Symptoms/Effects:**  
  - **Ingestion:** May cause: gastrointestinal tract irritation convulsions cyanosis (a reduction of the blood's ability to carry oxygen, giving a bluish discoloration) difficult breathing  
  - **Inhalation:** May cause: respiratory tract irritation difficult breathing  
  - **Skin Absorption:** None reported  
  - **Chronic Effects:** None reported  
  - **Medical Conditions Aggravated:** Pre-existing: Eye conditions Respiratory conditions

12. **ECOLOGICAL INFORMATION**

**Product Ecological Information:** --
No ecological data available for this product. Mobility in soil: No data available. Based on classification principles, not classified as hazardous to the environment.
CEPA Categorization: Not Persistent or Bioaccumulative. Not inherently toxic to aquatic organisms.
Ingredient Ecological Information: --
No ecological data available for the ingredients of this product.

13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number: Not applicable
Special Instructions (Disposal): Dilute material with excess water making a weaker than 5% solution. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system.
Empty Containers: Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.
NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

14. TRANSPORT INFORMATION

D.O.T.:  
D.O.T. Proper Shipping Name: Not Currently Regulated  
--  
Hazard Class: NA  
Subsidiary Risk: NA  
ID Number: NA  
Packing Group: NA  
T.D.G.:  
Proper Shipping Name: Not Currently Regulated  
--  
Hazard Class: NA  
Subsidiary Risk: NA  
UN Number/PIN: NA  
Packing Group: NA  
I.C.A.O.:  
I.C.A.O. Proper Shipping Name: Not Currently Regulated  
--  
Hazard Class: NA  
Subsidiary Risk: NA  
ID Number: NA  
Packing Group: NA  
I.M.O.:  
Proper Shipping Name: Not Currently Regulated  
--  
Hazard Class: NA  
Subsidiary Risk: NA  
ID Number: NA  
Packing Group: NA  
Additional Information: There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

U.S. Federal Regulations:  
O.S.H.A.: This product is an "Article" as defined in the Hazard Communication Standard (29 CFR. 1910.1200)  
E.P.A.:  
S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): Immediate (Acute) Health Hazard  
S.A.R.A. Title III Section 313 (40 CFR 372): This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.
State Regulations:
California Prop. 65: No Prop. 65 listed chemicals are present in this product.
Identification of Prop. 65 Ingredient(s): None
California Perchlorate Rule CCR Title 22 Chap 33: No
Trade Secret Registry: Not applicable

National Inventories:
U.S. Inventory Status: All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).
CAS Number: Not applicable
Canadian Inventory Status: All ingredients of this product are DSL Listed.
EEC Inventory Status: All ingredients used to make this product are listed on EINECS / ELINCS or are placed on the market in quantities less than 10 kg per year.
Australian Inventory (AICS) Status: Some ingredients are not listed.
New Zealand Inventory (NZIoC) Status: Some ingredients are not listed or exempt.
Korean Inventory (KECI) Status: Some ingredients are not listed or exempt.
Japan (ENCS) Inventory Status: All ingredients used to make this product are listed on EINECS / ELINCS or are placed on the market in quantities less than 10 kg per year.

16. OTHER INFORMATION


Complete Text of H phrases referred to in Section 3: H302 Harmful if swallowed. H319 Causes serious eye irritation.
Revision Summary: Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SG/AC.10/36/Add.3).

Date of MSDS Preparation:
Day: 12
Month: May
Year: 2014

MSDS Prepared: MSDS prepared by Product Compliance Department extension 3350

CCOHS Evaluation Note: It is offered under exemption from WHMIS labeling as specified in the Controlled Products Regulation (CPR) Section 17. It is offered under the interim policy that was established by Health Canada permitting use of GHS-formatted safety data sheets in Canada prior to revision of CPR to GHS. This product has been classified and labeled in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3). This SDS has been prepared in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3).

Legend:
NA - Not Applicable w/w - weight/weight
ND - Not Determined w/v - weight/volume
NV - Not Available v/v - volume/volume

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: Ozone Reagent, Mid Range 0 - 0.75 mg/l O₃
Catalog Number: 2517025

Hach Company
P.O.Box 389
Loveland, CO USA 80539
(970) 669-3050

Emergency Telephone Numbers:
(P.O.Box 389 (Medical and Transportation)
Loveland, CO USA 80539 (303) 623-5716 24 Hour Service
(970) 669-3050 (515) 232-2533 8am - 4pm CST

MSDS Number: M00511
Chemical Name: Not applicable
CAS Number: Not applicable
Additional CAS No. (for hydrated forms): Not applicable
Chemical Formula: Not applicable
Chemical Family: Not applicable
Intended Use: Laboratory Reagent Determination of ozone in water

2. HAZARDS IDENTIFICATION

GHS Classification:
Hazard categories: Serious Eye Damage/Eye Irritation:Eye Irrit. 2 . . Specific Target Organ Toxicity - Single Exposure: STOT SE 3

GHS Label Elements:
WARNING

Hazard statements: . . . Causes serious eye irritation. May cause respiratory irritation.
Precautionary statements: Wear protective gloves / protective clothing / eye protection / face protection. If skin irritation occurs: Get medical advice/attention. Wash thoroughly after handling. Store in a well-ventilated place, locked up. Avoid breathing dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Wear eye protection. IF INHALED: Remove victim/person to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Call a POISON CENTER or doctor/physician if you feel unwell. Dispose of contents/container according to state, local, federal or national regulations.

HMIS:
Health: 1
Flammability: 1
Reactivity: 0
Protective Equipment: X - See protective equipment, Section 8.

NFPA:
Health: 1
Flammability: 1
Reactivity: 0
Symbol: Not applicable

WHMIS Hazard Classification: Class D, Division 2, Subdivision B - Toxic material (other toxic effects)
WHMIS Symbols: Other Toxic Effects
3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components according to GHS:

Malonic Acid

- **CAS Number:** 141-82-2
- **Chemical Formula:** C₃H₄O₄
- **GHS Classification:** Acute Tox. Orl 4, H302; Acute Tox. Inh. 4, H332; Skin Irrit. 3, H316; Eye Irrit. 2A, H319; STOT Single 3, H335
- **Percent Range:** 50.0 - 60.0
- **Percent Range Units:** weight / weight
- **PEL:** Not established
- **TLV:** Not established

**WHMIS Symbols:** Other Toxic Effects

Potassium Acid Malonate

- **CAS Number:** 926-71-6
- **Chemical Formula:** C₃H₃O₄K
- **GHS Classification:** Non-Haz
- **Percent Range:** 35 - 50
- **Percent Range Units:** weight / weight
- **PEL:** Not established
- **TLV:** Not established

**WHMIS Symbols:** Not applicable

POTASSIUM INDIGOTRISULFONATE

- **CAS Number:** Not applicable
- **Chemical Formula:** C₁₆H₇N₂O₁₁S₃K₃
- **GHS Classification:**
- **Percent Range:** < 0.5
- **Percent Range Units:** weight / weight
- **PEL:** Not established
- **TLV:** Not established

**WHMIS Symbols:** Not applicable

4. FIRST AID MEASURES

**General Information:** In the event of exposure, show this Material Safety Data Sheet and label (where possible) to a doctor.

**Advice to doctor:** Treat symptomatically.

**Eye Contact:** Immediately flush eyes with water for 15 minutes. Call physician.

**Skin Contact (First Aid):** Remove contaminated clothing. Wash skin with plenty of water. Call physician if irritation develops.

**Inhalation:** Remove to fresh air. Give artificial respiration if necessary. Call physician.

**Ingestion (First Aid):** Give 1-2 glasses of water. Never give anything by mouth to an unconscious person. Call physician immediately.

5. FIRE FIGHTING MEASURES

**Flammable Properties:** Can burn in fire, releasing toxic vapors. Material is not classified as flammable according to GHS criteria.

**Fire Fighting Instruction:** As in any fire, wear self-contained breathing apparatus pressure-demand and full protective gear.

**Extinguishing Media:** Use media appropriate to surrounding fire conditions

**Extinguishing Media NOT To Be Used:** Not applicable

**Fire / Explosion Hazards:** None reported
Hazardous Combustion Products: Toxic fumes of: carbon monoxide, carbon dioxide. potassium oxides

6. ACCIDENTAL RELEASE MEASURES

Spill Response Notice:
Only persons properly qualified to respond to an emergency involving hazardous substances may respond to a spill according to federal regulations (OSHA 29 CFR 1910.120(a)(v)) and per your company's emergency response plan and guidelines/procedures. See Section 13, Special Instructions for disposal assistance. Outside of the US, only persons properly qualified according to state or local regulations should respond to a spill involving chemicals.

Containment Technique: Not applicable

Clean-up Technique: If permitted by regulation, Flush the spilled material to the drain with a large excess of water. Otherwise, Pick up spill for disposal and place in a closed container Dispose of in accordance with local, state and federal regulations or laws.

Evacuation Procedure: Evacuate as needed to perform spill clean-up.

DOT Emergency Response Guide Number: Not applicable

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes skin Wash thoroughly after handling. Maintain general industrial hygiene practices when using this product.

Storage: Protect from: light heat moisture Keep away from: oxidizers

Flammability Class: Not applicable

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Maintain general industrial hygiene practices when using this product.

Personal Protective Equipment:

Eye Protection: safety glasses with top and side shields

Skin Protection: disposable latex gloves In the EU, the selected gloves must satisfy the specifications of EU Directive 89/686/EEC and standard EN 374 derived from it. lab coat

Inhalation Protection: adequate ventilation

Precautionary Measures: Avoid contact with: eyes skin Do not breathe: dust Wash thoroughly after handling. Protect from: light heat moisture Keep away from: oxidizers

TLV: Not established

PEL: Not established

For Occupational Exposure Limits (OEL) for ingredients, see section 3 - Composition/Information on Ingredients.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White powder

Physical State: Solid

Molecular Weight: Not applicable

Odor: Acidic

Odor Threshold: Not available

pH: 5% solution = 2.5

Metal Corrosivity:

Corrosivity Classification: Not classified as corrosive to metals according to GHS criteria.

Steel: Not Applicable

Aluminum: Not Applicable

Specific Gravity/ Relative Density (water = 1; air =1): 1.6

Viscosity: Not determined

Solubility:

Water: Soluble

Acid: Soluble

Other: Not determined

Partition Coefficient (n-octanol / water): Not applicable

Coefficient of Water / Oil: Not applicable

Melting Point: 99°C; 210°F

Decomposition Temperature: Not determined

Boiling Point: Not applicable
Vapor Pressure: Not applicable
Vapor Density (air = 1): Not applicable
Evaporation Rate (water = 1): Not applicable
Volatile Organic Compounds Content: Not applicable
Flammable Properties: Can burn in fire, releasing toxic vapors. Material is not classified as flammable according to GHS criteria.
Flash Point: Not applicable
Method: Not applicable
Flammability Limits:
  Lower Explosion Limits: Not applicable
  Upper Explosion Limits: Not applicable
Autoignition Temperature: Not available
Explosive Properties: Not classified according to GHS criteria.
Oxidizing Properties: Not classified according to GHS criteria.
Reactivity Properties: Not classified as self-reactive, pyrophoric, self-heating or emitting flammable gases in contact with water according to GHS criteria.
Gas under Pressure: Not classified according to GHS criteria.

10. STABILITY AND REACTIVITY

  Chemical Stability: Stable when stored under proper conditions.
  Mechanical Impact: None reported
  Static Discharge: None reported.
  Reactivity / Incompatibility: Incompatible with: oxidizers
  Hazardous Decomposition: Heating to decomposition releases toxic fumes of carbon monoxide and carbon dioxide.
  Conditions to Avoid: Heat  Excess moisture  Exposure to light.

11. TOXICOLOGICAL INFORMATION

  Toxicokinetics, Metabolism and Distribution: No information available for mixture.
  Toxically Synergistic Products: None reported
  Acute Toxicity: Acute Toxicity Estimate (ATE) - Calculated from Ingredient Toxicity Data  Route Data Given Below
  ATE Oral Rat LD50 = 2302 mg/kg
  ATE Inhalation rat LC50 = 3910 mg/m3/4hr
  Specific Target Organ Toxicity - Single Exposure (STOT-SE): Based on classification principles, the classification criteria are not met.
  Specific Target Organ Toxicity - Repeat Exposure (STOT-RE): Based on classification principles, the classification criteria are not met.
  Skin Corrosion/Irritation: Mildly irritating to skin.
  Eye Damage: Irritating to eyes.
  Sensitization: Based on classification principles, the classification criteria are not met.
  CMR Effects/Properties (carcinogenic, mutagenic or toxic to reproduction): No germ cell mutagenicity, carcinogenicity or reproductive toxicity data found.
  This product does NOT contain any IARC listed chemicals.
  This product does NOT contain any NTP listed chemicals.
  This product does NOT contain any OSHA listed carcinogens.
  Symptoms/Effects:
    Ingestion: May cause: gastrointestinal tract irritation  convulsions  cyanosis (a reduction of the blood's ability to carry oxygen, giving a bluish discoloration)  difficult breathing
    Inhalation: May cause: respiratory tract irritation  difficult breathing
    Skin Absorption: None Reported
    Chronic Effects: None reported
  Medical Conditions Aggravated: Pre-existing: Eye conditions  Respiratory conditions

12. ECOLOGICAL INFORMATION

  Product Ecological Information: --
No ecological data available for this product. Mobility in soil: No data available. Based on classification principles, not classified as hazardous to the environment.

CEPA Categorization: Not Persistent or Bioaccumulative. Not inherently toxic to aquatic organisms.

Ingredient Ecological Information: --
No ecological data available for the ingredients of this product.

13. DISPOSAL CONSIDERATIONS

EPA Waste ID Number: Not applicable

Special Instructions (Disposal): Dilute material with excess water making a weaker than 5% solution. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Open cold water tap completely, slowly pour the reacted material to the drain. Allow cold water to run for 5 minutes to completely flush the system.

Empty Containers: Rinse three times with an appropriate solvent. Dispose of empty container as normal trash.

NOTICE (Disposal): These disposal guidelines are based on federal regulations and may be superseded by more stringent state or local requirements. Please consult your local environmental regulators for more information. In Europe: Chemical and analysis solutions must be disposed of in compliance with the respective national regulations. Product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system.

14. TRANSPORT INFORMATION

D.O.T.: Not Currently Regulated

Hazard Class: NA
Subsidiary Risk: NA
ID Number: NA
Packing Group: NA

T.D.G.: Not Currently Regulated

Hazard Class: NA
Subsidiary Risk: NA
UN Number/PIN: NA
Packing Group: NA

I.C.A.O.: Not Currently Regulated

Hazard Class: NA
Subsidiary Risk: NA
ID Number: NA
Packing Group: NA

I.M.O.: Not Currently Regulated

Hazard Class: NA
Subsidiary Risk: NA
ID Number: NA
Packing Group: NA

Additional Information: There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods. If the item is NOT in a set or kit, the classification given above applies. If the item IS part of a set or kit, the classification would change to the following: UN3316 Chemical Kit, Class 9, PG II or III. If the item is not regulated, the Chemical Kit classification does not apply.

15. REGULATORY INFORMATION

U.S. Federal Regulations:

O.S.H.A.: This product is an "Article" as defined in the Hazard Communication Standard (29 CFR 1910.1200)

E.P.A.: S.A.R.A. Title III Section 311/312 Categorization (40 CFR 370): Immediate (Acute) Health Hazard S.A.R.A. Title III Section 313 (40 CFR 372): This product does NOT contain any chemical subject to the reporting requirements of Section 313 of Title III of SARA.
302 (EHS) TPQ (40 CFR 355): Not applicable
304 CERCLA RQ (40 CFR 302.4): Not applicable
304 EHS RQ (40 CFR 355): Not applicable
Clean Water Act (40 CFR 116.4): Not applicable
RCRA: Contains no RCRA regulated substances.

State Regulations:
California Prop. 65: No Prop. 65 listed chemicals are present in this product.
Identification of Prop. 65 Ingredient(s): None
California Perchlorate Rule CCR Title 22 Chap 33: No
Trade Secret Registry: Not applicable

National Inventories:
U.S. Inventory Status: All ingredients in this product are listed on the TSCA 8(b) Inventory (40 CFR 710).
CAS Number: Not applicable
Canadian Inventory Status: All ingredients of this product are DSL Listed.
EEC Inventory Status: All ingredients used to make this product are listed on EINECS / ELINCS or are placed on the market in quantities less than 10 kg per year.
Australian Inventory (AICS) Status: Some ingredients are not listed.
New Zealand Inventory (NZIoC) Status: Some ingredients are not listed or exempt.
Korean Inventory (KECI) Status: Some ingredients are not listed or exempt.
Japan (ENCS) Inventory Status: All ingredients used to make this product are listed on EINECS / ELINCS or are placed on the market in quantities less than 10 kg per year.
China (PRC) Inventory (MEP) Status: Some ingredients are not listed or exempt.

16. OTHER INFORMATION


Revision Summary: Substantial revision to comply with EU Reg 1272/2008, Reg 1907/2006 and UN GHS (ST/SG/AC.10/36/Add.3).

Date of MSDS Preparation:
Day: 12
Month: May
Year: 2014

MSDS Prepared: MSDS prepared by Product Compliance Department extension 3350

CCOHS Evaluation Note: It is offered under exemption from WHMIS labeling as specified in the Controlled Products Regulation (CPR) Section 17. It is offered under the interim policy that was established by Health Canada permitting use of GHS-formatted safety data sheets in Canada prior to revision of CPR to GHS. This product has been classified and labeled in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3). This SDS has been prepared in accordance with the requirements of GHS (ST/SG/AC.10/36/Add.3).

Legend:
NA - Not Applicable
ND - Not Determined
NV - Not Available
w/w - weight/weight
w/v - weight/volume
v/v - volume/volume

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED TO BE ACCURATE. HOWEVER, NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF.

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