Regular Cal™

1. Identification

Product Name: Regular Cal™

Item #: 6056, 6060, 6070, 6071, 6071s, 6072 S47

Web SDS:

Synonyms: N/A

Recommended Use: Decalcification, Laboratory Reagent

Restrictions on Use: Any use other than recommended

Manufacturer:
BBC Biochemical
409 Eleanor Lane,
Mount Vernon, WA 98273
1-800-635-4477

In Case of Emergency:
Chemtrec US 1-800-424-9300
Chemtrec International 703-527-3887

2. Hazards Identification

OSHA Hazard Classification(s):
Acute Toxicity - Inhalation - Category 4
Acute Toxicity - Oral - Category 4
Skin Corrosion - Category 1A
Eye Damage - Category 1

Signal Word: Danger

Hazard Statement(s): Harmful if inhaled. Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage.

Pictogram(s):

Precautionary Statement(s): Prevention: Avoid breathing dust, vapors. Use only outdoors or in a well-ventilated area. Wash body thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dusts or mists. Wear protective gloves, protective clothing, eye protection and face protection. Wear eye protection, face protection.

Response: If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell. If swallowed: Call a doctor if you feel unwell. Rinse mouth. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Take off all contaminated clothing and wash it before reuse. Immediately call a doctor. Specific treatment (see first aid section on this label). If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue Rinsing

Storage: Store locked up.

Disposal: Dispose of contents/container in accordance with local regulations.

Descriptions of Hazards not otherwise classified: N/A

Percent of mixture with unknown acute toxicity: N/A

3. Composition and Information on Ingredients

Chemical Name	Common Name	CAS #	Concentration %
Water		7732-18-5	Trade Secret
Formic Acid		64-18-6	Trade Secret
Hydrochloric Acid		7647-01-0	Trade Secret
Selected buffers		Trade Secret	Trade Secret
Selected ethers		Trade Secret	Trade Secret

4. First Aid Measures

Eye Contact: 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.

Skin Contact: If on skin (or hair): Take off immediately all contaminated clothing and wash before reuse. Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.

Inhalation: Remove to fresh air; give artificial respiration if breathing has stopped. Get medical advice/attention if you feel unwell.

Ingestion: Do not induce vomiting. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention.

Symptoms: Irritation of eyes, skin, nose, throat; skin burns, blisters, dermatitis; lacrimation; rhinorrhea; cough, dyspnea; nausea; eye redness, pain, burns, blurred vision; pulmonary edema; metabolic acidosis; unconsciousness, hemolysis, hematuria (blood in the urine); central nervous system depression, headache; vomiting bronchitis [potential occupational carcinogen] ; INGES. ACUTE: Burning sensation, sore throat, abdominal pain, cramps, vomiting, diarrhea

Recommendations for immediate medical care/special treatment: Get medical advice/attention if you feel unwell. Seek medical attention immediately for acute exposure.

5. Fire- Fighting Measures

Extinguishing Media: Dry chemical, carbon dioxide, alcohol foam, water.

Fire Hazards (Chemical): Not flammable.

Special Protective Equipment: Fire fighters should use self-contained breathing apparatus and protective clothing.

Precautions for Firefighters: Carbon monoxide and unidentified organic compounds may be formed during combustion.

6. Accidental Release Measures

Emergency Procedures: Evacuate the area of all unnecessary personnel. Wear suitable protective equipment. Eliminate all sources of ignition and provide ventilation.

Protective Equipment: See section 8

Environmental Precautions: Prevent release to the environment by using barriers.

Containment and Clean-Up Procedures: Use barriers to prevent spreading. Collect spill in container. Call waste authorities.

7. Handling and Storage

Handling: Do not breathe vapors. Do not eat, drink or smoke when using this product.

Storage: Store locked up. Store in a well-ventilated place. Keep container tightly closed. Do not store in metal containers.

8. Exposure Controls/Personal Protection

OSHA Permissible Exposure Limits (PELs):

Reagent	CAS #	OSHA PEL TWA
Formic Acid	64-18-6	5ppm
Hydrochloric Acid	7647-01-1	5ppm
Select buffer	Trade Secret	0.2 mg/m3
Select ether	Trade Secret	50 ppm (240 mg/m3) TWA Skin

ACGIH Threshold Limit Values (TLVs):

Reagent	CAS #	ACGIH PEL TLV	ACGIH STEL
Formic Acid	64-18-6	5 ppm, 9.4 mg/m3	10 ppm, 19 mg/m3
Hydrochloric Acid	7647-01-1	2 ppm (3 mg/m3) Ceiling3	
Select buffer	Trade Secret	0.2 mg/m3	
Select ether	Trade Secret	20 ppm (97 mg/m3)	

Engineering Controls: Use in a well ventilated area to prevent exposure. Maintain eyewash fountain and quick-drench facilities in work areas.

Personal Protective Measures: Wear gloves, lab coat, eye protection and impervious footwear. Contact lenses should not be worn when working with this material.

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Special PPE Requirements: If ventilation hood not available wear respirator.

9. Physical and Chemical Properties Section

Appearance: Yellow, Liquid
Molecular Weight: N/A
Molecular Formula: N/A
pH: 1.03
Boiling Point and Boiling Range: N/A
Melting Point/Freezing Point: N/A
Flash Point: N/A
Specific Gravity/Relative Density: N/A
Odor: Pungent
Odor Threshold: N/A
Color: Yellow
Flammability (solid/gas): N/A
Vapor Density: N/A
Upper/Lower flammability or explosive limits: N/A
Vapor Pressure: N/A
Evaporation Rate: N/A
Partition Coefficient: n-octanol/water: N/A
Viscosity: N/A
Auto-ignition temperature: N/A
Solubility: N/A
Decomposition Temperature: N/A

10. Stability and Reactivity

Reactivity: Not Reactive
Chemical Stability: Stable
Conditions of Stability/Instability: Stable under normal conditions of temperature and pressure
Stabilizers needed: None
Safety issue indicated by appearance change: N/A
Other: N/A
Hazardous Reactions: N/A
Hazardous Polymerization: Does not occur
Conditions to avoid: Exposure to heat, sources of ignition.
Classes of Incompatible Materials: Oxidizers, Strong Acids, Strong Bases
Hazardous Decomposition Products: Thermal-oxidation degradation can produce oxides of carbon. Toxic gases and vapors (I.e. Carbon monoxide) may be released in a fire.

11. Toxicological Information

Likely Routes of Exposure

Eyes: Corrosive to eyes, may cause permanent corneal damage, redness and pain.
Skin: Corrosive to skin, may cause permanent damage, redness, pain and severe medical conditions.
Inhalation: Toxic by inhalation. May cause bronchitis, respiratory distress.
Ingestion: Poison to drink. May cause irreversible effects. Very corrosive. May cause burns to mouth, throat, stomach and gastrointestinal tract.

Signs or Symptoms of Exposure: Irritation of eyes, skin, nose, throat; skin burns, blisters, dermatitis; lacrimation; rhinorrhea; cough, dyspnea; nausea; eye redness, pain, burns, blurred vision; pulmonary edema; metabolic acidosis; unconsciousness, hemolysis,

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hematuria (blood in the urine); central nervous system depression, headache; vomiting bronchitis [potential occupational carcinogen] ; INGES. ACUTE: Burning sensation, sore throat, abdominal pain, cramps, vomiting, diarrhea

Effects from short term exposure (delayed, immediate, chronic): Irritation to the eyes, nose, throat; headache, dizziness, nausea. Target Organs Eyes, skin, respiratory system, central nervous system, hematopoietic system, blood, kidneys, liver, lymphoid system

Acute Toxicity (Numerical Measures): Hydrochloric Acid: LD50(oral, rat)=900 mg/kg; LC50(inhalation, mouse)=1108 ppm/1H; LC50(inhalation, mouse)=3940 mg/m3/30M
Formic Acid: LD50(oral,mouse)=700 mg/kg; LC50(inhalation,mouse)=6200 mg/m3/15MLC50(inhalation,rat)=7400 mg/m3/4H

Carcinogenicity (NTP, IARC, OSHA): N/A

12. Ecological Information

Ecotoxicity: Hydrochloric Acid: Ecotoxicity: CAS 7647-01-0 Hydrochloric Acid Fish: LC50 (96 Hr) Mosquito Fish: 282 mg/L LC100(24Hr) Trout: 10 mg/L Invertebrates: LC50(48Hr) Starfish: 100-330 mg/L LC50 (48Hr) Shrimp: 100-330 mg/L
Formic Acid: Toxicity to fish: LC50-Leuciscus idus(Golden orfe)-46-100mg/l-96h Toxicity to daphnia and other aquatic invertebrates:EC50-Daphnia magna(Water flea)-34.2mg/l-48h Toxicity to bacteria-Pseudomonas putida-46.7mg/l-17h

Persistence and degradability: Formic Acid: iodegradability:Result:>90%-Readily biodegradable. Bioaccumulation is unlikely Biochemical Oxygen Demand (BOD)=86mg/g Chemical Oxygen Demand (COD) 348mg;

Bioaccumulation Potential (octanol-water partition coefficient, BCF): N/A

Mobility in the soil: N/A

Adverse Environmental Effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

13. Disposal Considerations

Recommended Disposal Containers: Check with your local waste authorities*

Recommended Disposal Methods: Do not dispose of in drains, check with your local waste authorities.*

Physical/Chemical Properties affecting Disposal: See section 2 and section 9 applicable information.*

Special Precautions for Landfill and Incineration Activities: Check with your local waste authorities.*

Waste Stream: Consult your local or regional authorities.*

14. Transport Information

UN Number: UN3264

UN Proper Shipping Name: Corrosive Liquid, Acidic, Inorganic, n.o.s. (Formic Acid)

Transport Hazard Class(es): 8

Packing Group Number: III

Environmental Hazards (IMDG code):

Marine Pollutant: No

Transport in Bulk (IBC Code): N/A

Special Transport Precautions: N/A

15. Regulatory Information

OSHA: N/A

DOT: N/A

EPA: N/A

CPSC: N/A

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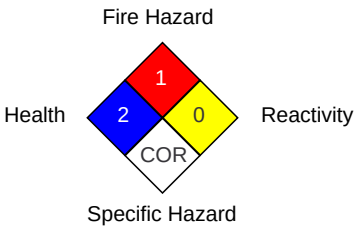
16. Other Information

Revision Date: 04/22/2015

NFPA

Health	2
Fire Hazard	1
Reactivity	0
Specific Hazard	COR

National Fire Protection Association (USA) NFPA



HMIS

Health	2
Flammability	1
Physical Hazard	0
Personal Protection	

Hazardous Material Information System HMIS

Health	2
Flammability	1
Physical Hazard	0
Personal Protection	

Notice to Reader:

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

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