CLR Calcium / Lime Remover / SDS

Issue Date: 14-FEB-2017

1. IDENTIFICATION

Product Name: CLR
Other means of identification: Calcium Lime Remover
Recommended use: Removes hardness mineral deposits / residues
Prepared by: Safety Department
Source: US Formula Technology / 1000 McFarland 400 Blvd / Alpharetta, GA 30004 USA
Company Phone Number: 770-813-0008 or 800-728-7972 / Fax: 770-813-0470
Emergency Telephone Number (24 Hours): 1-800-535-5053 INFOTRAC (USA) / International: 001-352-323-3500

2. HAZARDS IDENTIFICATION

Signal word: Warning
Causes eye irritation
Causes mild skin irritation

ACUTE EYE IRRITATION (Category 2A)
ACUTE DERMAL IRRATION (Category 4)

Appearance: Clear liquid
Odor: Characteristic

Precautionary Statements: **PREVENTION**
Recommend safety glasses whenever splashing is possible.
Recommend waterproof gloves.

Precautionary Statements: **RESPONSE**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Go to Emergency Room doctor/physician.

IF ON SKIN (or hair): Considered to have a low order of toxicity. Remove/Take off immediately all contaminated clothing and wash before reuse. Rinse skin with water/shower.

IF INHALED: Unlikely. Remove victim to fresh air and keep at rest. Go to Emergency Room doctor/physician if you feel unwell.

IF SWALLOWED: Considered to have a low order of toxicity. Rinse mouth. Do NOT induce vomiting (aspiration hazard). Go to Emergency Room doctor/physician if you feel unwell.

IN CASE OF FIRE: Use CO_2, dry chemical, or foam for extinction

Precautionary Statements: **STORAGE**
Keep container tightly closed. Keep out of reach of children.

Precautionary Statements: **DISPOSAL**
Send to sanitary drain line with copious amounts of water. Do not allow to escape into natural waterways.

Hazards not otherwise classified (HNOC): Not Applicable

Other Information: Considered to have a low order of toxicity

3. COMPOSITION / INFORMATION on INGREDIENTS

Chemical Name	CAS No	Weight-%
Water		
2-hydroxypropanoic acid	79-33-4	10-30

4. FIRST AID MEASURES

INHALATION: Unlikely. Remove to fresh air.

EYE CONTACT: Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. If adverse health effects develop seek medical attention.

INGESTION: Low toxicity food acid. Rinse mouth. DO NOT induce vomiting (aspiration risk). Drink plenty of water. If adverse health effects develop seek medical attention.

SKIN CONTACT: Low toxicity. Wash off with plenty of water.
Take off contaminated clothing and wash before reuse.
If adverse health effects develop seek medical attention.

Note to physicians: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:
Water spray (fog). Alcohol resistant foam. Dry chemical.
Unsuitable Extinguishing Media: Not determined.
Specific hazards arising from the chemical: Keep containers cool.
Protective equipment and precautions for firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Use recommended personal protective equipment.
Spills may be slippery. Prevent foot traffic.
Environmental precautions: Do not discharge outside. Do not permit to escape directly into creeks or other natural waterways.
Methods for containment. Prevent further leakage or spillage if safe to do so.
Methods for cleaning up spills: Prevent traffc. Reclaim liquid with wet vacuum, autoscrubber or mop and bucket. Rinse area with water and dry before permitting traffic.

7. HANDLING AND STORAGE

Precautions for safe handling:
Wash after handling. Do not eat, drink or smoke when using this product.
Use personal protection recommended in Section 8.
Protect product quality by keeping containers tightly closed when not in use, avoid pouring unused material back into original container.
Never use food or beverage containers to measure or transport this product.
Empty containers contain residues and should not be used for food or beverage.

Storage Conditions: Keep containers tightly closed in a dry, cool and well-ventilated place.
Keep locked up and out of reach of children and pets. Protect from direct sunlight.
Store at 40-95°F.
Packaging materials: Keep in original container. Proper secondary labelling is available.
Incompatible materials: Bleach. strong acids, materials which react with water.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate Engineering Controls: Not determined
Appropriate Personal Protective Equipment:
Eye/face protection: Safety glasses recommended if splashing possible
Skin and body protection: Any waterproof gloves, such as latex, nitrile, etc.
Respiratory protection: Under normal conditions, respirator is not required.
General Hygiene: Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

pH	2 - 2.5
Melting point/freezing point	Not determined
Boiling point/boiling range	100 °C / 212 °F
Flash point	Not determined
Evaporation rate	1.0
Flammability (solid, gas)	n/a-liquid
Flammability limits in air:	
Upper flammability limit	Not determined
Lower flammability limit	Not determined
Vapor pressure	Not determined
Vapor density	Not determined

Specific gravity	> 1
Water solubility	soluble
Solubility in other solvents	Not determined
Partition coefficient	Not determined
Autoignition temperature	Not determined
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Dynamic viscosity	Not determined
Explosive properties	Not determined
Oxidizing properties	Not determined

10. STABILITY AND REACTIVITY

Reactivity: Not reactive under normal conditions
Chemical stability: Stable under recommended storage conditions.
Possibility of Hazardous Reactions: None under normal processing.
Hazardous polymerization: Hazardous polymerization does not occur.
Conditions to avoid: Incompatible materials. Heat which might compromise packaging.
Incompatible materials: acids, alkalines, caustics, halogens, etc. which react with water
Hazardous Decomposition Products: Carbon oxide gases

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Inhalation: Irritant
Eye contact: Strong Irritant
Skin Contact: Irritant
Ingestion: Irritating to mouth, esophagus, mucous membranes, causing nausea, vomiting

2-hydroxypropanoic acid	ORAL LD50:	Dermal LD50:
CAS# 79-33-4	= 3730 mg/kg (Rat)	> 2,000 mg/kg (Rabbit)

Information on physical, chemical and toxicological effects: please see Section 4.
Contains no known carcinogens, hormone disruptors, bioaccumulatives, formaldehyde, phosphates, NTA, EDTA, APEOs.

Delayed and immediate effect as well as chronic effects from short and long term exposure:

Sensitization	No information available
Germ cell mutagenicity	No information available
Carcinogenicity	No information available
STOT - single exposure	No information available
STOT - repeated exposure	No information available
Aspiration hazard	No information available

Numerical measures of toxicity - Product information:
Unknown Acute Toxicity - 0% of the mixture consists of ingredients of unknown toxicity

Continued / page 2 of 2

12. ENVIRONMENTAL INFORMATION

Contains readily biodegradable ingredients. Do not discharge into natural waterways since most detergents, even biodegradable ones, damage fish gills. Contains no known carcinogens, hormone disruptors, bioaccumulatives or formaldehyde. No NTA, EDTA, APEOs or phosphates. Virtually free of VOCs (Volatile Organic Compounds).

Data for ingredient 2-hydroxypropanoic acid

Toxicity to Algae (for ingredient 2-hydroxypropanoic acid)
EC50/Algae >2.8 g/L 72h Pseudokirchnerella subcapitata.
EC50/Algae 3.5 g/L 70h Pseudokirchnerella subcapitata.

Toxicity to Fish (for ingredient 2-hydroxypropanoic acid)
LC50: 130 mg/L 96h Pncorhynchus mykiss
LC50: 320 mg/L 96h Danio rerio

Toxicity to Micro-organisms (for ingredient 2-hydroxypropanoic acid)
LC50: >100 mg/L 3h

Toxicity to daphnia and other aquatic vertebrates
(for ingredient 2-hydroxypropanoic acid)
EC50 130 mg/L 48h Daphnia magna
EC50 250 mg/L 48h Daphnia magna

Persistence / degradability (for ingredient 2-hydroxypropanoic acid)
for ingredient 2-hydroxypropanoic acid:
Readily biodegradable.

Bioaccumulative Potential (for ingredient 2-hydroxypropanoic acid)
Does not bioaccumulate.

Partition coefficient (for ingredient 2-hydroxypropanoic acid): - 0.62

Mobility in soil / for ingredient 2-hydroxypropanoic acid:
No information available

PBT and vPvB assessment / for ingredient 2-hydroxypropanoic acid:
This substance is not considered to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

Other Adverse Effects:
No information available

13. DISPOSAL CONSIDERATIONS

Discharge to "sanitary" drain leading to a sewerage treatment plant.
Contains readily biodegradable ingredients.
Do not discharge to "storm" drains leading to natural waterways since all detergents, even biodegradable ones, damage fish gills. Dispose of wastes in accordance with applicable regional, national and local laws and regulations. Packaging may be recycled.

14. TRANSPORT INFORMATION Not regulated.

15. REGULATORY INFORMATION Not regulated.

16. OTHER INFORMATION

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification.
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End of Safety Data Sheet