

1. IDENTIFICATION OF THE SUBSTANCE OR PREPARATION AND OF THE COMPANY

Identification of Preparation: Acid Replacement Technology.

Date of Safety Data Sheet: September 6, 2020

Use of Preparation: Scale remover/acid replacement cleaner.

Company Identification: Acretech LLC

411 Conway Meadows Drive Chesterfield, MO 63017

Company Emergency Telephone

Number

Emergency Phone: 636-391-3000

2. HAZARD IDENTIFICATION

Emergency Overview:
OSHA/ WHMIS 2015 Hazards:
Classification of substances or mixture
GHS-US/ Canadian classification:
Eye Damage/ Irritation Category 2A H319
Label Elements

GHS-US Labeling Hazard Pictograms (GHS):



Signal Word (GHS): Warning **Hazard Statements (GHS)**:

H319: Causes serious eye irritation **Precautionary Statements (GHS)**:

P264: Wash hands thoroughly after handling. P280: Wear face protection or eye protection.

Response Statements (GHS):

P301+P310+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Description: Chemical Blend

Ingredient	CAS#	% by Wt	Classification
Organic Acid Salt	Proprietary	5-10	Serious Eye Damage / Eye Irritation Category 2A- H319

4. FIRST AID MEASURES

General Advice: Remove to fresh air. If symptoms persist, consult a doctor.

Eye Contact: Remove contacts. Flush with water for at least 20 minutes, occasionally lifting the

upper and lower eyelids. Get medical attention immediately.

Skin Contact: Thoroughly wash exposed skin with soap and water. Remove any contaminated

clothing and wash before reuse.

Ingestion: Wash out mouth with water. Drink plenty of water. Do not induce vomiting unless

directed by medical personal. Never give anything to an unconscious person.

Immediately call a POISON CENTRE or doctor/physician.

Inhalation: Remove to fresh air.

Notes to Physician: Treatment based on judgment of attending physician.

Most Important symptoms andCauses serious eye damage. Symptoms may include stinging, tearing, redness,

effects, both acute and delayed: swelling and blurred vision.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Any standard extinguishing media (alcohol foam, water spray or

fog, CO2 dry chemical, etc.).

Unsuitable extinguishing media: High volume/jet water.

Special exposure hazards: Thermal decomposition releases irritating gases.

Special safety equipment: Self-contained positive pressure breathing apparatus and protective clothing.

Fire and explosion Not flammable. Not an explosion hazard.

Further information Keep containers and surrounding cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Do not get in eyes. Avoid prolonged contact with skin and clothing. Do not breathe vapour or

mist.

For Non-Emergency Personnel:

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel:

Protective Equipment: Equip cleanup crew with proper protection.

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Emergency Procedures: Stop leak if safe to do so. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up:

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely.

Reference to Other Sections:

See Heading 8. Exposure controls and personal protection.

7. HANDLING AND STORAGE

Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Avoid splashes or spray in enclosed areas.

Prevent formation of aerosols.

Information about fire and explosion protection:

Keep respiratory protective device available.

No special measures required.

Conditions for safe storage, including any incompatibilities:

Storage: Alkaline, Oxidizers, reducing agents.

Requirements to be met by storerooms and receptacles:

Store in a cool location.

Unsuitable material for receptacle: aluminium.

Avoid storage near extreme heat, ignition sources or open flame.

Information about storage in one common storage facility:

Do not store together with alkaline products.

Store away from oxidizing agents.

Store away from foodstuffs.

Further information about storage conditions:

Store in cool, dry conditions in well sealed receptacles.

Store receptacle in a well-ventilated area.

Keep container tightly sealed.

Specific end use(s) No further relevant information available.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate Engineering Controls:

Engineering Measures Showers. Eyewash Stations. Ventilation Systems.

Respiratory protection: Use local exhaust or dilution ventilation.

Hand protection: Chemical resistant gloves if risk assessment indicates this is necessary.

Eye protection: Safety goggles or full face shield.

Skin protection: Use body-covering impervious clothing if risk assessment indicates this is

necessary.

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Typical

No data available.

Working hygiene: Take usual precautions when handling. Workers should wash hands before

eating, drinking, or smoking.

Exposure guidelines: None.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Physical State Appearance Colour Property	Liquid Clear Water white <u>Values</u>	Odour Odour Threshold Remarks/Method
рН	2.0-3.0	None known
Melting/Freezing Point	No data available	None known
Boiling Point/Range	No data available	None known
Flash Point	Not applicable.	None known
Evaporation Rate	Similar	None known
Flammability (solid, gas)	Not flammable	None known
Flammability Limit in Air:		
Upper Limit	No data available	None known
Lower Limit	No data available	None known
Vapour Pressure	No data available	None known
Vapour density	No data available	None known
Specific Gravity	1.05 g/cm3	
Water Solubility	Soluble in water.	None known
Solubility Other Solvents	No data available	None known
Partition Coefficient:		
n-octanol/water	No data available	None known
Autoignition temperature	No data available	None known
Decomposition	No data available	None known
Temperature		
Kinematic Viscosity	No data available	None known
Dynamic Viscosity	No data available	None known
Explosive Properties	No data available	None known
Oxidizing Properties	No date available	None known

Other Properties:

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Softening Point
VOC Content %

Particle Size

Particle Size Distribution

No data available
No data available
No data available
No data available



10. STABILITY AND REACTIVITY

Reactivity Stable at normal ambient temperature and pressure.

Chemical stability Stable up to 230°F /110 °C

Heating above 230°F/110 °C results in an exothermic decomposition with rapid

Thermal decomposition/conditions release of CO2 gas

to avoid: Reacts with alkali, aluminum, amines, and oxidizing agents.

Corrodes aluminium.

Possibility of hazardous reactions

Warning! Do not use together with other products. May release dangerous gases

(chlorine). Avoid contact with oxidizers.

Conditions to avoid Store away from oxidizing agents.

Warning! Do not use together with other products. May release dangerous gases

Avoid contact with oxidizers. This material may be extremely hazardous in

Hazardous decomposition products contact with chlorates or nitrates. This material is acidic. Contact with

hypochlorites (e.g. chlorine bleach, sulfides, or cyanides will liberate toxic gases. Contact with alkaline materials (e.g. agua ammonia) will generate heat and toxic

gases.

Materials to avoid Oxidizing agents, acids, chlorates, and nitrates.

Hazardous polymerization Will not occur

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity: Not classified.

LD/LC50 values relevant for classification

Organic Acid Salt

LD50 (Oral) Rat: 1,357 mg/Kg LD 50 (Dermal) Rat 3,698 mg/Kg

Primary irritant effect:

On the skin: Prolonged or repeated contact can cause mild skin irritation Non-Corrosive to Skin and not classified as a skin irritant under GHS. On the eye: Causes eye irritation. Pain, watering, and redness.

Ingestion: Unclassified. **Inhalation:** Unclassified.

Additional toxicological information: The product shows the following dangers according to the calculation method: Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and

stomach.

Respiratory or Skin Sensitization: No ingredients classified as sensitizer.

Additional toxicological information:

Carcinogenicity: Chemical Name None

Reproductive Toxicity: Not classified as hazardous.

Specific Target Organ Toxicity

Single Exposure: Not classified as hazardous.

Specific Target Organ Toxicity

Single Exposure: Not classified as hazardous. **Aspiration Hazard**: Not an aspiration hazard.

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12. ECOLOGICAL INFORMATION

Toxicity: Not available.

Persistence and Degradability: Not available
Bioaccumulative Potential: Not available
Mobility in Soil: Not available.

Other Adverse Effects Not available.

Other Information: Avoid release to the environment.

13. DISPOSAL

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

Ecology - Waste Materials: Avoid release to the environment.

14. TRANSPORTATION INFORMATION

U.S. Department of Transportation (DOT): Not Regulated Material

Canadian T.D.G.: Not Regulated Material

Water Transportation (IMO): Not Regulated Material Air Transportation (IATA): Not Regulated Material

15. REGULATION

Occupational Health & Safety Regulations:

WHMIS 1988 Classification: Class D - Division 2B.



OSHA & WHMIS: MSDS prepared pursuant to the Hazard Communication Standard (CFR29 1910.1200) and Canadian WHMIS regulations (Controlled Products Regulations under the Hazardous Products Act).

International Inventories

TSCA Complies
DSL/NDSL Compiles
EINECS/ELINCS Complies
ENCS Complies
IECSC Complies

KECL -

PICCS Complies AICS Complies

<u>Legend:</u>

TSCA - All components of this product are listed or are exempt or excluded from listing on the United States Toxic Substances

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Control Act Section 8(b) Inventory.

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Listed on the United States TSCA (Toxic Substances Control Act) inventory

U.S. State Regulations

California Prop. 65

This product does not contain any Proposition 65 chemicals.

HMIS III Rating

Health: 1 Hazard

Flammability: 0 Minimal Hazard Physical: 0 Minimal Hazard Personal Protection: C

SDS US (GHS HazCom 2012 and WHMIS 2015)

16. OTHER INFORMATION

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Issuing Date: September 6, 2020

Disclaimer:

The manufacturer warrants that this product conforms to its standard specification when used according to direction. To the best of our knowledge the information contained herein is accurate. However, we do not assume accuracy or completeness of the information contained herein.

Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

End of Safety Data Sheet

Date: September 6, 2020 SDS: Acretech LLC Acid Replacement Technology.