

1. PRODUCT AND COMPANY IDENTIFICATION

Manufacturer

Titan Laboratories
2935 Irving Blvd., #209
Dallas, TX 75247

Contact: Titan Laboratories

Phone: 800-475-3300 // 214-638-1200

Email: _info@titanlabs.net

Web: www.titanlabs.net

Product Name: Cement Off™ Concrete Dissolver

Revision Date: January 2, 2017

Version: 1.2

SDS Number: 620

Common Name: Mild Acid Cleaner

CAS Number: MIXTURE

Chemical Family: Mild Acid Cleaner

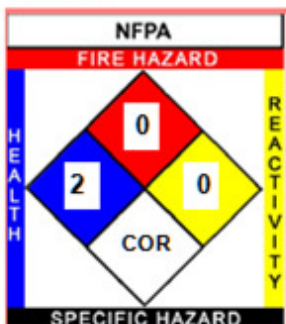
Chemical Formula: *** PROPRIETARY ***

Emergency Phone: +1-800-255-3924

2. HAZARDS IDENTIFICATION

NFPA:
HMIS III:

Health = 2, Fire = 0, Reactivity = 0
H2/F0/PH0



HMIS III	
HEALTH	2
FLAMMABILITY	0
PHYSICAL HAZARDS	0
PERSONAL PROTECTION C Safety Glasses, Gloves, Apron	

PERSONAL PROTECTION INDEX	
A	Goggles + Gloves + Apron
B	Goggles + Gloves
C	Goggles + Gloves + Apron
D	Goggles + Gloves + Apron + Respirator
E	Goggles + Gloves + Respirator
F	Goggles + Gloves + Apron + Respirator
G	Goggles + Gloves + Apron
H	Goggles + Gloves + Apron + Respirator
I	Goggles + Gloves + Apron
J	Goggles + Gloves + Apron + Respirator
K	Goggles + Gloves + Apron + Respirator
X	Consult your supervisor or S.D.S. for "SPECIAL" handling directions
A	Safety Glasses
n	Eye Protection
O	Face Shield & Goggles
P	Goggles
q	Boots
r	Respirator
S	Full Body Protection
t	Full Face Respirator
U	Eye Protection
W	Full Body Protection
y	Full Face Respirator
Z	Additional Information

GHS Signal Word:
DANGER

GHS Hazard Pictograms:



GHS Classifications:

Health, Acute toxicity, 4 Oral

Health, Skin corrosion/irritation, 1 C

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Health, Specific target organ toxicity - Single exposure, 3
Environmental, Hazards to the aquatic environment - Chronic, 2

GHS Phrases:

H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H335 - May cause respiratory irritation
H411 - Toxic to aquatic life with long lasting effects

GHS Precautionary Statements:

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 - Wash skin thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P301+310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+361+353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+351+338 - IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P321 - Specific treatment (see supplementary first aid instructions on this label).
P332+313 - If skin irritation occurs: Get medical advice/attention.
P337+313 - If eye irritation persists: Get medical advice/attention.
P363 - Wash contaminated clothing before reuse.
P391 - Collect spillage. Hazardous to the aquatic environment.
P403+233 - Store in a well ventilated place. Keep container tightly closed.
P405 - Store locked up.
P412 - Do not expose to temperatures exceeding 49 °C/120 °F
P501 - Dispose of contents/container to an approved waste disposal plant.

Environmental Hazards: Not to be expected if handled and used properly. Environmental hazard assignment applies only to large volume spills of product. When this product is used at the doses recommended by Titan Laboratories, it attributes minimal to no environmental hazards, acute or chronic, to the aquatic environment.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CAS #	Percentage	Chemical Name
N/A	>78%	Proprietary, non-hazardous, non-regulated
79-14-1	<20%	Acetic acid, hydroxy-
None	<2%	Trade Secret*

*The specific chemical identities of the ingredients of this mixture labeled as "Trade Secret" are considered to be proprietary and are withheld in accordance with the provisions of 29CFR1910.1200 Sect. (i) Trade Secrets.

4. FIRST AID MEASURES

Inhalation: Give oxygen or artificial respiration if needed. If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.

Skin Contact: Take off contaminated clothing and shoes immediately. Promptly flush skin with water for at least 15 minutes to ensure all chemical is removed. If reddening develops and/or persists, obtain medical attention.

Eye Contact: Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Remove contact lenses if present and easy to do so. Get immediate medical attention.

Ingestion: Rinse mouth with water. Do NOT induce vomiting unless instructed to do so. Give 3-4 glasses of water or milk to dilute stomach contents. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Most important symptoms and effects, both acute and delayed:

The most important known symptoms and effects are described in the labelling (see Section 2) and/or Section 11.

Indication of any immediate medical attention and special treatment needed: No data available.

5. FIRE FIGHTING MEASURES

Flammability	Not flammable
Flash Point	DNA
Flash Point Method	DNA
Burning Rate	No data available
Autoignition Temp	No data available
LEL	DNA
UEL	DNA

Extinguishing Media:

Water Spray
Carbon Dioxide
Alcohol-Resistant Foam
Dry Chemical

Special Hazards Arising From the Substance or Mixture:

Carbon Oxides
Sodium Oxides
Sulfur Oxides

Advice for Firefighters: Firefighters should wear full-face, positive-pressure respirators.

Further Information: If incinerated, may release toxic fumes. Use water spray to cool unopened containers. See Section 7 for more information on safe handling. See Section 8 for more information on personal protection equipment. See Section 13 for disposal information.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:

Use personal protective equipment. Keep from contacting skin or eyes. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental Precautions:

Prevent further release (leakage/spillage) if safe to do so. Do not allow product to enter drains. Do not allow to drain to environment.

Methods and Materials for Containments and Cleaning Up:

Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).
Neutralizing agent like Sodium Bicarbonate may also be used to absorb/neutralize any spilled material. Place contaminated material into suitable, closed containers for disposal.
Dispose of contaminated material according to Section 13.
After spillage has been collected, area may be flushed with water or wet-brushed. Ensure adequate ventilation.

Reference to Other Sections: See Section 7 for information on safe handling. See Section 8 for information on personal protection equipment. See Section 13 for information on proper disposal.

7. HANDLING AND STORAGE

Handling Precautions: Avoid breathing vapors or mist. Avoid contact with eyes, skin, or clothing. Use approved, original containers only. Keep containers closed when not in use. Do not expose containers to open flame, excessive heat, or direct sunlight. Do not puncture or drop containers. Handle with care and avoid spillage on the floor. Keep material out of reach of children. Keep material away from incompatible materials. Wash thoroughly after handling. Ensure adequate ventilation.

Storage Requirements: Keep container tightly closed. Avoid inhalation of vapors or mist upon opening container. Store in a well-ventilated place. Do not store at temperatures exceeding 49 °C/120 °F. Do not store in direct sunlight. Store away from strong bases, strong oxidizing agents, strong reducing agents, Alkali metals and Alkali salts.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

Personal Protective Equip:

Eye/face protection: When using material use safety goggles, gloves and apron according to HMIS PP, C. All safety equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection: Handle with gloves made from Neoprene, Nitrile or Burma rubber. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Dispose of contaminated gloves according to applicable laws and laboratory practices.

Body Protection: Chemically resistant gloves, apron and safety goggles are recommended. Type of protective equipment should be selected based on concentration amount and conditions of use of this material.

Respiratory protection: Full-face vapor respirator may be required as backup to engineering controls when proper engineering controls are not in place to keep TLV and PEL limits below defined thresholds.

Control of environmental exposure:

Prevent leakage or spillage if safe to do so. Do not let material enter drains.

Components with workplace control parameters: Contains no substances with occupational exposure limit values.

Biological occupational exposure limits: Contains no substances with biological occupational exposure limits values.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, colorless liquid

Physical State: Liquid

Odor Threshold: Not determined

Particle Size: Not determined

Spec Grav./Density: 1.087 g/ml (9.07 lbs/gal)

Viscosity: Not determined

Sat. Vap. Conc.: Not determined

Boiling Point: 100 °C (212 °F)

Flammability: (solid, gas): Not flammable

Partition Coefficient: Not determined

Vapor Pressure: (mm Hg @ 25 °C): 20

pH: @ 1%: 3.5

Evap. Rate: (N-Butyl Acetate = 1): > 1.0

Molecular weight: MIXTURE

Decomp Temp: Not determined

Odor: Slight, detergent-like
Molecular Formula: MIXTURE
Solubility: 100%
Softening Point: Not determined
Percent Volatile: DNA
Heat Value: Not determined
Freezing/Melting Pt.: Not determined
Flash Point: DNA
Octanol: Not determined
Vapor Density: (air = 1): Not determined
VOC: DNA
Bulk Density: Not determined
Auto-Ignition Temp: Not determined
UFL/LFL: Not determined

10. STABILITY AND REACTIVITY

Stability: Product is stable under normal conditions.

Conditions to Avoid: Incompatibilities, flames, ignition sources.

Materials to Avoid: Strong bases, strong oxidizing agents, strong reducing agents, Alkali metals and Alkali salts.

Hazardous Decomposition: Carbon Oxides, Sodium Oxides and Sulfur Oxides.

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Component(s): Acetic acid, hydroxy-; Trade Secret

CAS No(s): 79-14-1; None

Acute Toxicity:

LD50 Oral - Rat: 438 mg/kg

LC50 Inhalation - Rat: 3.6 mg/l (4 h)

Skin Corrosion/Irritation: Rabbit skin - Corrosive.

Serious Eye Damage/Eye Irritation: Rabbit eyes - Severe eye irritation.

Respiratory or Skin Sensitization: May cause respiratory irritation.

Germ Cell Mutagenicity: No data available.

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: Oral - Rat: Effects on Embryo or Fetus; Fetotoxicity (stunted fetus); Developmental Abnormalities (Musculoskeletal system).

Specific Target Organ Toxicity - Single Exposure: Respiratory system - May cause respiratory irritation.

Specific Target Organ Toxicity - Repeated Exposure: No data available.

Aspiration Hazard: No data available.

Additional Information:

Component: Acetic acid, hydroxy-; RTECS: MC5250000

12. ECOLOGICAL INFORMATION

Component(s): Acetic acid, hydroxy-; Trade Secret

CAS No(s): 79-14-1; None

Toxicity:

Toxicity to fish:

LC50 - Danio rerio (Zebra Fish): 5,000 mg/l (96 h)

LC50 - Oncorhynchus mykiss (Rainbow Trout): 3.2 - 5.6 mg/l (96 h) Mortality NOEC - Oncorhynchus kisutch (Coho Salmon): 3.1 mg/l (72 h) Mortality LOEC - Oncorhynchus kisutch (Coho Salmon): 5.6 mg/l (72 h)

Toxicity to daphnia and other aquatic invertebrates:

Mortality NOEC - Daphnia: 4.0 mg/l (7 d)

Persistence and Degradability:

No data available.

Bioaccumulative potential:

Bioaccumulation - Lepomis macrochirus: 64 µg/l (28 d) Bioconcentration factor (BCF): 220

Mobility in Soil:

No data available.

Results of PBT and vPvB assessment:

Not required/conducted.

Other Adverse 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

Product: Hazardous wastes shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT Class: Corrosive (8) #8

UN #: UN 3265, Class: 8, Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s. (Glycolic acid)

DOT (US)

UN Number: 3265

Class: 8

Packing Group: III ERG #: 153

Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s. (Glycolic acid) Marine Pollutant: No

Poison Inhalation Hazard(s): No

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IMDG

UN Number: 3265

Class: 8

Packing Group: III EMS-No: F-A, S-B

Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s. (Glycolic acid) Marine Pollutant: No

IATA

UN Number: 3265

Class: 8

Packing Group: III ERG #: 153

Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s. (Glycolic acid) Marine Pollutant: No



15. REGULATORY INFORMATION

COMPONENT / (CAS/PERC) / CODES

*Acetic acid, hydroxy- (79141 <20%) NJHS, PA, SARA311/312, TSCA

*Trade Secret (25155300 <2%) CERCLA, CSWHS, MASS, NJHS, PA, TSCA

REGULATORY KEY DESCRIPTIONS

CERCLA = Superfund cleanup substance

CSWHS = Clean Water Act Hazardous substances

MASS = MA Massachusetts Hazardous Substances List

NJHS = NJ Right-to-Know Hazardous Substances

PA = PA Right-To-Know List of Hazardous Substances

SARA311/312 = SARA 311/312 Toxic Chemicals TSCA = Toxic Substances Control Act

TSCA = Toxic Substances Control Act

16. OTHER INFORMATION

Disclaimer:

The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that Titan Laboratories believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of Titan Laboratories' control, Titan Laboratories makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.