SAFETY DATA SHEET

Texrite Crystal Clean GTM

As of date: 2018

Section 1 Product Description

Product Name: Crystal Clean GTM
Recommended Use: Cement, grout, ceramic tile and masonry cleaner
Synonyms: Sulfamic Acid

Manufacturer: Texas Cement Products, dba Texrite
4000 Pinemont, Houston, Texas 77018, USA
713-682-8411
www.texrite.com

General Phone Number: 713-682-8411 (8am-3pm, CST, M-F)
General Fax Number: 713-688-2488

Section 2 Hazards Identification

Classification of the chemical in accordance with paragraph (d) of 1910.1200;

Signal Word: Warning!

GHS Class: Serious Eye Damage/Eye Irritation Category 1,
Skin Corrosion/Irritation Category 2,
Hazardous to the aquatic environment – Acute Category 3,
Hazardous to the aquatic environment - Chronic Category 3

Hazard Statements: H100s = General, H200s = Physical, H300s = Health, H400s = Environmental
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H320 Causes eye irritation.
H332 Harmful if inhaled.

Precautionary Statements: P261 - Do not breathe dust/fume/gas/mist/vapors/spray.
P264 - Wash hands thoroughly after handling.
P272 - Contaminated work clothing should not be allowed out of the work place.
P280 - Wear protective gloves/protective clothing/e ye protection/face protection.
P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do not induce vomiting.
P303+P361+P353 - IF ON SKIN (or hair): Remove /Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing.
P310 - Call a POISON CENTER or doctor/physician.
P333+313 - If skin irritation or a rash occurs: Get medical advice /attention.
P337+313 - If eye irritation persists get medical advice /attention.
P362+P364 - Take off contaminated clothing and wash before use.
P391 - Collect spillage.
P501 - Dispose of contents/container in accordance with Local, State, Federal and Provincial regulations.

Emergency Overview: Irritant. Corrosive. Avoid contact with skin, eyes and clothing. Avoid contact with the skin and the eyes.

Route of Exposure: Eyes. Skin. Inhalation. Ingestion.

Potential Health Effects:

Eye:	Causes eye irritation.
Skin:	Causes skin irritation.
Inhalation:	Prolonged or excessive inhalation may cause respiratory tract irritation.
Ingestion:	May be harmful if swallowed. May cause vomiting.
Chronic Health Effects:	Prolonged or repeated skin contact may cause sensitization, with itching, swelling, or rashes on later exposure.

Target Organs: Eyes. Skin. Respiratory system. Digestive system.

Aggravation of Pre-Existing Conditions: None generally recognized.

Section 3 Composition Information and Ingredients

Chemical Name	CAS #	WT %
Sulfamic Acid	5329-14-6	100

Section 4 First-Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin Contact: IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Ingestion: If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

Section 5 Fire Fighting Measures

Extinguishing Media: Use alcohol foam, carbon dioxide, or water spray when fighting fires involving this material.

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

Fire and/or Explosion Hazards: Avoid Dusting. May become explosive when dispersed in air. Fire or excessive heat may produce hazardous decomposition products.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide, Nitrogen oxides, Sulfur Oxides

Section 6 Accidental Release Measures

Steps to Take in Case Material Is Released or Spilled: Ventilate the contaminated area.
Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed. Wear a self-contained breathing apparatus and appropriate Personal protection. (See Section 8.)
Very fine particles can cause a fire or explosion, eliminate all ignition sources Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Do not allow the spilled product

to enter public drainage system or open waterways. Gather and store in a sealed container pending a waste disposal evaluation.

Section 7 Handling and Storage

Handling: Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Avoid contact with skin and eyes.

Storage: Keep separated from strong bases, food & feedstuffs. Keep dry. Do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage. Reacts with most metals producing which is extremely flammable & may explode. Wear full face shield, gloves & full protective clothing when opening or handling. When empty, drain completely, replace bungs securely.

Storage Code: White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

Section 8 Exposure Controls / Personal Protection

	ACGIH		OSHA PEL	
Chemical Name	**(TWA)**	**(STEL)**	**(TWA)**	**(STEL)**
Sulphamic Acid	N/A	N/A	N/A	N/A

Control Parameters

Engineering Measures: This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%. . General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection: No respiratory protection required under normal conditions of use. Provide general room exhaust ventilation if symptoms of overexposure occur as explained Section 11. A respirator is not normally required. Wear a NIOSH approved respirator if any exposure is possible.

Respirator Type(s): NIOSH approved air purifying respirator with dust/mist filter.

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Nitrile

Section 9 Physical and Chemical Properties

Formula: H_2NSO_3H
Molecular Weight: 97.09 g/mol
Appearance: Solid, Opaque, White Powder
Odor: Odorless
Odor Threshold: Not Available
pH (Neutrality): 1.1 (1% solution @ 20 C / 68 F)
Melting Point/Freezing Point: 205 C / 401 F
Boiling Range (Ibp,50%,Dry Point): Decomposes @ 209 C / 408 F
Flash Point (Test Method): Not Applicable
Evaporation Rate (n-Butyl Acetate=1): Not Applicable
Flammability Classification: Non-Combustible

Lower Flammable Limit In Air (% by vol):	9.3
Upper Flammable Limit In Air (% by vol):	9.3
Vapor Pressure (mm of Hg)@20 C:	0.0
VAPOR DENSITY (Air=1):	Not Applicable
GRAVITY @ 68/68F / 20/20C:	
Specific Gravity (Water=1):	2.130
Pounds/Gallon:	17.744
Water Solubility:	14.7 @ 0 C / 32 F
Partition Coefficient (n-Octane/Water):	Not Available
Auto Ignition Temperature:	Not Applicable
Decomposition Temperature:	209 C / 408 F

and Reactivity

Reactivity:	No data available
Chemical Stability:	Stable under normal conditions.
Conditions to Avoid:	None known.
Incompatible Materials:	Strong oxidizing agents, Caustics (bases)
Hazardous Decomposition Products:	Sulfur Oxides, Nitrogen oxides, Carbon dioxide, Carbon monoxide

Section 11 Toxicological Information

Routes of Entry Inhalation, ingestion, eye or skin contact.
Symptoms (Acute): None Known
Delayed Effects: No data available
Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
No data available	5329-14-6	Not listed	Not listed	Not listed

Acute Hazards:

Eye & Skin Contact: Severe burns to skin, defatting, dermatitis.
Severe burns to eyes, redness, tearing, blurred vision.
Solid can cause severe skin & eye burns. Wash thoroughly after handling.

Inhalation: Vapor harmful. Sulfamic Acid is a respiratory tract irritant, and inhalation may cause nose irritation, sore throat, coughing, and chest tightness and possibly, ulceration and perforation of the nasal sapum. Inhalation exposures to high levels cause pulmonary edema (buildup of fluid in the lungs) which could result in death.

Swallowing: Harmful or fatal if swallowed. Ingestion can result in severe gastric distress with possible circulatory collapse, kidney failure and liver and heart damage.

Subchronic Hazards/Conditions Aggravated

Conditions Aggravated
None Known.

Chronic Hazards
CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:
This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%.

Irritancy of Product: This product is irritating to contaminated tissue.

Sensitization to the Product: No component of this product is known to be a sensitizer.

Mutagenicity: This product is not reported to produce mutagenic effects in humans.

Embryotoxicity: This product is not reported to produce embryotoxic effects in humans.

Teratogenicity: This product is not reported to produce teratogenic effects in humans.

Reproductive Toxicity: This product is not reported to cause reproductive effects in humans. A mutagen is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines. An embryotoxin is a chemical which causes damage to a developing embryo (such as: within the eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A teratogen is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A reproductive toxin is any substance which interferes in any way with the reproductive process.

Mammalian Toxicity Information

Mild irritation effects (skin-rabbit): 500 mg/24 hours (adult)
Severe irritation effects (eye-rabbit): 20 mg (adult)
LD50 (Oral): 3160 mg/kg (Rat)
LD50 (Oral): 1312 mg/kg (Mouse)
LD50 (Oral): 1050 mg/kg (Guinea Pig)

Target Organ Effects:

Acute: See Section 2

Chronic: Not listed as a carcinogen by IARC, NTP or OSHA.

Section 12 Ecological Information

Overview: Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife. Harmful to fish and other water organisms.

Mobility: No data

Persistence: No data

Bioaccumulation: No data

Degradability: No data

Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Sulfamic Acid	5329-14-6	96 HR LC50 PIMEPHALES PROMELAS 14.2 MG/L [STATIC]

Section 13 Disposal Considerations

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance. Spent or discarded material may be a hazardous waste.

Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name:
UN2967 SULFAMIC ACID, Class 8, P.G. III

Air - IATA Proper Shipping Name:
UN number: 2967 Class: 8 Packing group: III Proper shipping name: Sulfamic acid

Section 15 Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

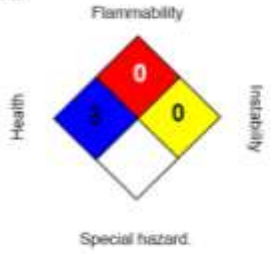
Chemical Name	CAS Number	313 Name	304 RQ	CERCLA RQ	302 TPQ	CAA112(2) TQ
Sulfamic Acid	5329-14-6	No	No	No	No	No

Section 16 Other Information

Hazard Ratings:

This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

HMIS Health:	3 = HIGH
HMIS Health	- Is health hazard chronic?: Yes
HMIS Flammability:	0 = Not Combustible
HMIS Reactivity:	0 = MINMAL
HMIS P.P.E.:	Safety glasses, gloves, dust respirators

NFPA Health:	3 = HIGH
NFPA Flammability:	0 = Not Combustible
NFPA Reactivity:	0 = MINIMAL
NFPA Special Risk:	NONE

Employee Training

See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Texrite makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH -American Conference of Governmental Industrial Hygienists
CAS -Chemical Abstract Service Number
CERCLA -Comprehensive Environmental Response, Compensation, and Liability Act
DOT -U.S. Department of Transportation
IARC -International Agency for Research on Cancer
N/A -Not Available
NTP -National Toxicology Program
OSHA -Occupational Safety and Health Administration
PEL -Permissible Exposure Limit
ppm -Parts per million
RCRA -Resource Conservation and Recovery Act
SARA -Superfund Amendments and Reauthorization
TLV -Threshold Limit Value
TSCA -Toxic Substances Control Act
IDLH -Immediately dangerous to life and health