CHEMICAL UNIVERSE

SAFETY DATA SHEET

1. Identification

Product Identifier Low Temp Sanitizer 5.25%

Other means of

identification CU-5435

Product code

Recommended useBleach sanitizer.Recommended restrictionsProfessional use only.

Manufacturer information

Company name Chemical Universe, Inc.

Address 1133 Saline St.

North Kansas City, MO 64116

Telephone (816) 471-3602 **Fax** (816) 474-3302

Emergency phone number PERS (800) 633-8253

24- hour Emergency (800) 633-8253

2. Hazard(s) Identification

Physical hazards Not classified.

Health hazards Serious eye damage Category 1

Skin corrosion Category 2

Environmental hazards Acute Aquatic Toxicity Category 1

None

Acute Chronic Toxicity Category 1

OSHA defined hazards

Label elements





Signal word DANGER

Hazard statement Causes severe skin burns and eye damage.

Very toxic to aquatic life with long lasting effect

Precautionary statement

Prevention Wash hands and exposed skin thoroughly after handling. Do not breathe dust, gas or

mists. Wear protective gloves/protective clothing/eye protection/face protection.

Response IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower. Wash contaminated clothing before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Immediately call a POISON CENTER/doctor/medical professional. Specific treatment (see

section 4 on the Safety Data Sheet).

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 Avoid release to the environment. Dispose of contents/containers in accordance with

local/regional/national/international regulations.



Hazard(s) not otherwise

None.

classified (HNOC)

Supplemental information None.

3. Composition/information on ingredients

Mixture Component(s)			
Chemical name	CAS number	%	
Sodium hypochlorite	7681-52-9	5.25	
Other components below reportable levels		94.75	

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Remove contaminated clothing immediately and wash skin with soap and water. In case of

eczema or other skin disorders: Seek medical attention and take along these instructions.

Eye contact Immediate medical attention is required. Rinse immediately with plenty of water, also

under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub

affected area.

Ingestion Rinse mouth. Get medical attention immediately. Do not induce vomiting.

Most important

symptoms/effects, acute and

delayed

Can cause serious eye damage. Can cause burning sensation in affected areas. Shortness of

breath, respiratory tract irritation or damage.

Indication of immediate medical attention and special treatment needed Provide general support measures and treat symptomatically. Keep victim under

observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions

to protect themselves. Wash contaminated clothing before reuse. Use with extreme

caution.

5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO₂).

Unsuitable extinguishing

media

the chemical

Do not use water jet as an extinguisher, as this will spread liquid sourced fire.

Specific hazards arising from

During fire, gases hazardous to health may be formed.

Special protective equipment

and precautions for

firefighters

Self-contained breathing apparatus and full protecting clothing must be worn in case of

Fire-fighting

equipment/instructions

Specific methods General fire hazards Move containers from fire area if you can do so without risk.

Use standard firefighting procedures and consider the hazards of other involved materials.

No unusual fire or explosion hazards noted. This product contains a dilute oxidizing chemical that could increase oxygen to a fire as it degrades at high temperature

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during clean-up. Avoid inhalation of vapors or mists. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.



Methods and materials for containment and cleaning up This product is fully miscible in water.

Large spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Keep liquid clear of organic substrates that can easily burn

Small spills: Wipe up with absorbent material (e.g. cloth, sorbent wipes. Clean surface thoroughly to remove residual contamination.

Never return spills to original container for re-use. For waste disposal, see section 13 of the

SDS.

Environmental precautions Avoid discharge into surface drainage paths, confined vessels and other areas not

consistent with package labeling.

7. Handling and storage

Precautions for safe handling Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged

exposure. Provide adequate ventilation. Wear appropriate personal protective equipment.

Observe good industrial hygiene practices.

Conditions for safe storage,

including any incompatibilities Store in original tightly closed container. Store away from incompatible materials (see

section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits Sodium Hydroxide:

> ACGIH TLV 2mg/m3 ACGIH STEL not listed OSHA PEL 2mg/m3 OSHA STEL not listed

Biological limit values No information.

Appropriate engineering

controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels to an acceptable level. It is recommended that users of this product perform a risk assessment to determine

the appropriate personal protective equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection

Skin protection

Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Hand protection The use of gloves impervious to the specific material handled is advised to prevent skin

> contact. Users should check with manufacturers to confirm the breakthrough performance of their products. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Suggested protective materials: Nitrile and PVC rubber.

Other Depending on exposure and use conditions, additional protection may be necessary to

prevent skin contact including use of items such as chemical-resistant boots, aprons, arm

covers, hoods and/or coveralls

Respiratory protection

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke or use chewing tobacco. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Contaminated work clothing should not be allowed out of the workplace.

In case of insufficient ventilation, wear suitable respiratory equipment.

Material Name: Low Temp Sanitizer 5.25%

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9. Physical and chemical properties

Appearance

Physical State Liquid.
Color Light amber.
Odor Chlorine.
Odor threshold Not available.

pH 12-13

Melting/freezing point 3°F(-16.11°C)
Initial boiling point and <230°F(<110°C)

boiling range

Flash point Not available.

Evaporation rate Not available.

Flammability Not available.

Flammability Limits

Upper Not available.
Lower Not available.
Vapor pressure Not available
Vapor density Not available.

Specific gravity (water=1) 1.13
Solubility in water Soluble.

Partition coefficient Not applicable

(n-octanol/water)

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

10. Stability and reactivity

Reactivity Reacts vigorously with strong acids. This product may react with other strong oxidizing

agents.

Chemical stability Material is stable under normal conditions. Stability decreases with increased

 $concentration,\,heat,\,light\,\,exposure,\,decrease\,\,in\,\,pH\,\,and\,\,contamination\,\,with\,\,heavy\,\,metals$

such as nickel, cobalt, copper and iron.

Possibility of hazardous

reactions

Hazardous polymerization does not occur.

Conditions to avoid Exposure to air or moisture over prolonged periods; Excessive heat, exposure to light,

reduced alkalinity, and contamination of any kind. Reduced alkalinity or contamination can result in evolution of chlorine (toxic) gas. Decrease in pH such as by mixing with other than water, and contamination with items mentioned below as incompatible can result in

evolution of chlorine (toxic) gas. .

Incompatible materials Strong acids and bases; Oxidizing agents; Ether, ammonia compounds, hydrogen peroxide,

all acids, alum, reducing agents, human or animal waste, oxidizable or combustible materials such as wood, cloth or organic materials, organic chemicals such as solvents and solvent based cleaning compounds, fuels and fuel oils, amines, methanol, propane, organic polymers, ethylene glycol, insecticides, heavy metals such as iron, copper, magnesium, aluminium, tin, steel, stainless steel, carbon steel, manganese, zinc, chromium, nickel,

cobalt and their alloys, sodium sulphite, sodium bisulfite, sodium hydrosulfite, sodium thiosulfate. Do not mix this product with any of the foregoing or hazardous gases can

result.



Hazardous decomposition

products

Chlorine, hydrogen chloride. In case of fire see section 5.

11. Toxicological information

Information on likely routes

of exposure

Ingestion Do not ingest. Causes digestive tract burns.

Inhalation Prolonged inhalation may be harmful. May cause irritation to the respiratory system.

Skin contact Can cause severe skin burns.

Eye contact Can cause serious eye damage. Corrosive to eyes; may cause permanent damage if not

removed promptly

Symptoms related to the physical, chemical and toxicological characteristics

Burning sensation, coughing, wheezing, and shortness of breath. Sodium hypochlorite is

extremely destructive to mucous membranes, eyes, and skin.

Acute toxicity Not classified.

Product Low Temp Sanitizer 5.25% (CAS mixture			
Exposure Classification	Route and Species	LD ₅₀	
Acute	Oral, rat	>5,000 mg/kg (estimated)	
*Estimates for product may be based on additional component data not shown			

Skin corrosion/irritationCauses severe skin burns.Serious eye damage/ irritationCauses serious eye damage.

Respiratory sensitizationNot considered a respiratory sensitizer.Skin sensitizationNot considered a skin sensitizer.

Germ cell mutagenicity

No data available to indicate product or any components

present at greater than 0.1% are mutagenic or

genotoxic.

Carcinogenicity Not considered a carcinogen.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not Listed.

Reproductive toxicityNo data available.Specific target organ toxicity – single exposureNo data available.Specific target organ toxicity – repeated exposureNo data available.Aspiration hazardNo data available.

12. Ecological information

Ecotoxicity				
Product Low Temp Sanitizer 5.25% (CAS mixture)				
Aquatic	Species	Test Thresholds		
Fish	Fathead Minnow (Pimephales promelas)	$LC_{50} = 0.11 \text{ mg/L estimated}$		
Crustacea	Daphnia Magna	$EC_{50} = 1.67 \text{ mg/L estimated}$		
Algae	(Skeletonema costatum	EC ₅₀ (24-hr 0.095mg/L (Literature)		
*Estimates for product	may be based on additional component data not show	ın		

Persistence and

No data available. Components are readily degraded in an open oxic environment

degradability

Bio-accumulative potential Accumulation in aquatic organisms is not expected.



Mobility in soil No data available. Chemicals of these classes are expected to exhibit moderate to high

mobility in saturated and semi-saturated soils but will degrade quickly even in a low

organic substrate medium.

Other adverse effects Persistent exposure may be very toxic to aquatic life with long-lasting effects.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose

of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code As packaged, this product may meet criteria defining RCRA ignitable (D001) hazardous

waste [oxidizing material] when disposed. (40 CFR Part 261, Subpart C). Before selecting disposal method, ensure that the waste materials have been properly assessed and, as necessary, tested to confirm regulatory status and permissible disposal methods.

Waste from residues/unused

product

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

(see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or

disposal. Since emptied containers may contain product residue, follow label warnings

even after container is emptied.

14. Transport information

USDOT Not regulated as hazardous material

15. Regulatory information

US federal regulations .

FIFRA - This product is registered item with the United States Environmental Protection Agency, Office of Pesticides. Refer to the specific product label for registration number, approved usage, restrictions and disposal guidance.

SARA 302 Extremely hazardous substance Not listed.

SARA 304 Emergency release notification Not listed.

SARA 311/312 Hazard Categories

Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 313 (TRI reporting) Not listed.

California Proposition 65 California Safe Drinking Water and Toxic Enforcement Act of 1986

This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins under California Proposition 65 at levels which would be subject to

threshold determination and Safe Harbor notification (1/2019)

16. Other information, including date of preparation or last revision

Issue date 12/14/2015

Revision date 8/30/2017, 3/14/2019

Version #



HMIS® ratings

Health: 2 Flammability: 0 Physical hazard: 0



NFPA ratings

Health: 2 Flammability: 0 Instability: 0



Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, and have been obtained from resources believed to be reliable. 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. The information related only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified by the text.

Revision information

Transportation information.

3/14/2019 Change skin corrosion category from 1 to 1C (definition). General format update, Prop 65 statement; Update toxicology, PPE and environmental fate information; PPE notations; Composition chart update; Physical data update; miscellaneous text corrections; HMIS and NFPA pictograms inserted; Add FIFRA registration statement. Add environmental hazard classifications (acute and chronic).

Update eco-toxicology data