

Safety Data Sheet

Issue date: 12/31/2015

Section 1: Product and Company Information

Product Identifier: ACS Tornado I Disinfectant Cleaner

Product Code/SKU: 14001403, 14001404, 360030, 360031, 360032

Recommended Use: Disinfectant / Sanitizer / Deodorizer

Restrictions on Use: Use only for purpose found on label.

Product Dilution Information: Normal usage range 0.3906 - 1.5625%

Manufacturer: **American Chemical Systems II, LLC**

3505 W. 29th Street South

Wichita, KS USA 67217

(800)889-3489

americanchemicalsystems.com

Emergency Telephone: Chemtrec 1-800-424-9300 USA and Canada

Chemtrec 1-703-527-3887 Outside USA and Canada

Section 2: Hazard Identification

	Product as Sold	Product at use Dilution
GHS Classification:	Harmful if swallowed Causes severe skin burns and eye damage	Not classified
GHS Labeling Element		
Signal Word:	No signal word	No signal word
Symbol:	No symbol	No symbol
Hazard Statement:	Harmful if swallowed Causes severe skin burns and eye damage	No known significant effects or hazards
Precautionary Statements:		
Prevention:	Wash hands with water after handling	Wash hands with water after handling
Response:		
If swallowed:	Drink promptly a large amount of milk, egg whites, gelatin solution, or water. Avoid alcohol. Do not induce vomiting.	Seek medical assistance if symptoms persist.
If on skin:	Wash with water, remove contaminated clothing.	
Inhalation:	Remove person to fresh air - administer artificial respiration if not breathing.	
If in eye:	Flush continuously with water - remove contacts and continue flushing with water.	
Treatment:	Seek medical assistance if symptoms persist.	
Storage:	Keep product stored in original container, in an upright position, with container tightly closed.	
Disposal:	Dispose of contents/container according to local/regional regulations.	Dispose of contents/container according to local/regional regulations.
Other Hazards:	None known	None known

Section 3: Composition/Information on Ingredients

	Product as Sold	Product at use Dilution
Substance/Mixture:	Mixture	
Chemical name	Product Identifier	%
Didecyl Dimethyl Ammonium Chloride	CAS 7173-51-5	9-12%
		Within the current knowledge of the manufacturer and in the concentrations applicable, there are no hazardous

There are no additional ingredients present which, within the current knowledge of the manufacturer and in the concentrations applicable, are classified as hazardous to health or to the environment and hence require reporting in this section. Concentrations are given in a range as a claim for a trade secret is being made.

ingredients that would require reporting.

Section 4: First Aid Measures

First Aid Measures:	Product as Sold	Product at use Dilution
General:	Never give anything by mouth to an unconscious person. If you feel unwell, then seek medical assistance.	Never give anything by mouth to an unconscious person. If you feel unwell, then seek medical assistance.
If swallowed:	Sip water if able to swallow. Do not induce vomiting unless directed by poison control or doctor. Do not give anything by mouth to an unconscious person.	Seek medical assistance if symptoms persist.
If on skin:	Wash with water, remove contaminated clothing.	No known effect after skin contact. Rinse w/ water.
Inhalation:	Remove person to fresh air - administer artificial respiration if not breathing.	No specific measures required.
If in eye:	Flush continuously with water - remove contacts and continue flushing with water.	No know effect with eye contact. Flush with water.
Treatment:	Seek medical assistance if symptoms persist.	
Important Symptoms and Effects, both Acute and Delayed		
Symptoms/Injuries:	Effects of exposure may be delayed.	
If swallowed:	Sip water if able to swallow. Do not induce vomiting unless directed by poison control or doctor. Do not give anything by mouth to an unconscious person.	Seek medical assistance if symptoms persist.
If on skin:	No known effects. Rinse with water.	
Inhalation:	No special measures required. Treat symptomatically.	
If in eye:	Rinse with water. Remove contacts. Continue rinsing.	
Recommendation:	Seek medical assistance if symptoms persist or concerns are present.	Seek medical assistance if symptoms persist or concerns are present.
First Aid Providers	All first aid providers should receive proper training before performing any first aid act that would involve personal risk. Wash contaminated clothing with water thoroughly before removal or wear gloves.	

Section 5: Firefighting Measures

Suitable Fire Extinguishing	
Media:	No special media necessary. Use extinguishing media appropriate for surrounding fire.
Special Hazards:	Product is non flammable and is not explosive.
Advice for Firefighters:	Exercise caution when fighting any chemical fire. Use a water spray to cool containers. Do not enter fire area without proper protective equipment, including respiratory protection.

Section 6: Accidental Release Measures

Personal Precautions:	Initiate company's spill procedures. Do not walk through or touch spilled product. Do not get on skin, in eyes, or on clothing. Put on appropriate personal protection equipment.
Environmental Precautions:	Avoid runoff into public waterways, sewers, or onto soil.
Methods for Clean Up:	Follow company's spill procedures. Put on appropriate protective clothing. Neutralize/absorb spilled product with inert material. Dispose of inert material by placing in suitable container. Dispose of waste safely. Rinse with water for a final clean up.

Section 7: Handling and Storage

Precautions for Safe	
Handling:	Do not get on skin, in eyes, or on clothing. Do not breathe vapor or mist. Do not handle until all safety procedures have been read and understood. Wash hands and other exposed areas with soap and water after handling.
Conditions for Safe Storage:	Keep product in original container, in an upright position, with container tightly closed. Keep out of reach of children.

Section 8: Exposure Controls/Personal Protection

Control parameters:	
Ingredient Name	Exposure Limits _____

Didecyl Dimethyl Ammonium Chloride CAS 7173-51-5

Acute Oral LD50: 450 / mg/kg

	Product as Sold	Product at use Dilution
Engineering Controls:	Use adequate ventilation. Keep vapor/fumes below statutory limits. Provide availability to water to flush skin or eyes in case of exposure.	Normal ventilation should be adequate to control vapor/fumes.
Personal Protection:		
Hand protection:	Wear gloves when handling concentrate	None needed under normal use conditions
Eye protection:	Wear safety glasses when handling concentrate	None needed under normal use conditions
Skin protection:	Wear gloves when handling concentrate	None needed under normal use conditions
Respiratory protection:	None needed under normal use conditions	None needed under normal use conditions
General:	Wash hands, face, and arms after handling chemical products and before eating, drinking, or using restroom. Wash contaminated clothing before wearing again.	

Section 9: Physical and Chemical Properties

	Product as Sold	Product at use Dilution
Physical state:	Liquid	Liquid
Color:	Green	Light green
Odor:	Chemical	Chemical
pH:	11 - 13	
Evaporation rate:	No data available	
Melting point:	No data available	
Freezing point:	No data available	
Boiling point:	No data available	
Flash point:	No data available	
Explosion limits:	No data available	
Flammability (solid/gas):	No data available	
Vapor pressure:	No data available	
Vapor density:	No data available	
Relative density:	>1 (water=1)	
Solubility:	Complete	
Decomposition temperature:	No data available	

Section 10: Stability and Reactivity

Reactivity:	Product is not reactive
Chemical stability:	Stable.
Hazardous Reactions:	Hazardous polymerization will not occur under normal use conditions.
Conditions to Avoid:	Direct sunlight. Extreme temperatures.
Incompatible Materials:	Strong oxidizers.
Hazardous Decomposition Products:	Carbon dioxide, carbon monoxide, ammonia, nitrous oxides, hydrogen chloride not occur.

Section 11: Toxicological Information

Routes of Exposure:	Ingestion. Skin contact. Inhalation. Eye contact.	
	Product as Sold	Product at use Dilution
Symptoms:		
Ingestion:	Ingestion may be harmful.	No specific data
Skin Contact:	Adverse effects: irritation, redness	No specific data
Inhalation:	Adverse effects: cough, respiratory irritation	No specific data
Eye Contact:	Adverse effects: redness, watering, irritation	No specific data
Acute Toxicity:		
Ingestion:	Ingestion may be harmful	No known effects or critical hazards
Skin Contact:	No known effects or critical hazards	No known effects or critical hazards
Inhalation:	No known effects or critical hazards	No known effects or critical hazards
Eye Contact:	No known effects or critical hazards	No known effects or critical hazards
Toxicity Data:	Didecyl Dimethyl Ammonium Chloride CAS 7173-51-5	Acute Oral LD50: 450 / mg/kg
Carcinogenicity:	No known effects or critical hazards	
Reproductivity:	No known effects or critical hazards	

Section 12: Ecological Information

Toxicity:		Exposure	Species
Persistence and degradability:	Not established		
Bioaccumulative potential:	Not established		
Mobility in Soil:	Not established		
Other adverse effects:	None noted		

Section 13: Disposal Considerations

Product as Sold

Product at use Dilution

Disposal methods: Dispose of waste in accordance with local, regional, and national regulations

Diluted product may be drained to sanitary sewer. Discard empty container into trash.

Section 14: Transport Information

In accordance with: ICAO/IATA/DOT/TDG

	Product as Sold	
DOT Classification:	Not regulated	Product at use Dilution Product not to be transported in this manner
DOT Shipping name:	Not regulated	
Class:		
Packing Group:		
Bulk Transport:	See shipping documents for specific transportation information	
Marine Pollutant:	No	

Section 15: Regulatory Information

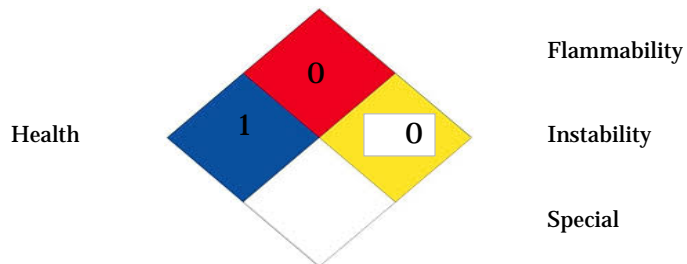
US Federal Regulations:

TSCA 8(b) Inventory	All components are listed or exempted
SARA 304	No chemicals subject to reporting
SARA 311/312	Acute health hazard
SARA 302	No chemicals subject to reporting
SARA 313	No chemicals subject to reporting

Section 16: Other Information

	Product as Sold	Product at use Dilution																
Hazardous Material Information System:																		
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National Fire Protection Association (U.S.A.)



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