



SAFETY DATA SHEET

1. Identification

Product Identifier	Surface TB Hard Surface Disinfectant	
Other means of identification		
Product code	CU-1862	
Recommended use	Ready to use disinfectant.	
Recommended restrictions	Professional use only. Use as directed	
Manufacturer information		
Company name	Chemical Universe, Inc.	
Address	1133 Saline St. North Kansas City, MO 64116	
Telephone	(816) 471-3602	
Emergency phone number	PERS (800) 633-8253	24-hour Emergency (800) 633-8253

2. Hazard(s) Identification

Physical hazards	Not classified.	
Health hazards	Acute Toxicity – Oral	Category 4
	Skin irritant	Category 2
	Serious eye irritation	Category 2A
Environmental hazards	Not classified.	
OSHA defined hazards	None.	
Label elements		



Signal word	WARNING
Hazard statement	Causes mild skin irritation. Causes serious eye irritation. May be harmful if swallowed
Precautionary statement	
Prevention	Wear eye protection/face protection.
Response	If skin irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue Rinsing. Immediately call a POISON CENTER/doctor/medical professional. IF SWALLOWED: Immediately call a poison center/doctor. Rinse mouth. Do NOT induce vomiting.
Storage	No prescriptive instruction
Disposal	Dispose of contents/containers in accordance with local/regional/national/international regulations. This product is a registered pesticide under USEPA FIFRA registry. Dispose in accordance with labels direction and/or applicable state/local rule and regulation.
Hazard(s) not otherwise classified (HNOC)	None.
Supplemental information	None.



SAFETY DATA SHEET

3. Composition/information on ingredients

Mixture Component(s)		
Chemical name	CAS number	%
Diethylene glycol monobutyl ether	112-34-5	8
Alkyl (68% C12, 32% C14) ammonium chloride	85409-23-0	0.105
Alkyl dimethyl benzyl ammonium chloride	68391-01-5	0.105
Other components below reportable levels		92-95

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	Rinse with water for at least 15 minutes. Remove contact lenses if present and easy to do so. Immediately call a physician or transport to hospital.
Ingestion	Rinse mouth. Get medical attention immediately. Do not induce vomiting.
Most important symptoms/effects, acute and delayed	Dermatitis. Rash. May cause an allergic skin reaction.
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.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂)
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	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.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

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.



SAFETY DATA SHEET

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.

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

Never return spills to original container for re-use. For waste disposal, see section 13 of the SDS. This product is a registered pesticide under USEPA FIFRA registry. Dispose in accordance with labels direction and/or applicable state/local rule and regulation

Environmental precautions

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

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 Safety Data Sheet).

8. Exposure controls/personal protection

Occupational exposure limits

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Ethyl alcohol	STEL	1,000 ppm
	PEL	1,000 ppm

US ACGIH Threshold Limit Values

Components	Type	Value
Ethyl alcohol	TWA (8-Hour)	1,000 ppm
2-(2-butoxyethoxy)ethanol	TWA (8-Hour)	10 ppm

Biological limit values

Not classified.

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

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

Skin protection

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



SAFETY DATA SHEET

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	Wear appropriate chemical resistant clothing. Use of a chemically- impervious apron is recommended.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment. Respiratory protection will not typically be indicated for prescribed use of this product
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.

9. Physical and chemical properties

Appearance	
Physical State	Liquid.
Color	Colorless
Odor	Citrus/floral
Odor threshold	Not available.
pH	12-12.5
Melting/freezing point	32°F (0°C) estimated.
Initial boiling point and boiling range	>212°F (>100°C) estimated.
Flash point	>212°F (>100°C) estimated.
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)	1.01
Solubility in water	Soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

10. Stability and reactivity

Reactivity	This product is stable and non-reactive under normal conditions of use.
Chemical stability	Material is stable under normal conditions. Store in a cool dark place.
Possibility of hazardous reactions	Hazardous polymerization does not occur
Conditions to avoid	Avoid storage in elevated temperatures.
Incompatible materials	Bases, amines, metals.



SAFETY DATA SHEET

Hazardous decomposition products No hazardous decomposition products occur. In case of fire see section 5.

11. Toxicological information

Information on likely routes of exposure

- Ingestion** Do not ingest. May be harmful if swallowed.
- Inhalation** Do not inhale. May cause damage to the upper respiratory tract.
- Skin contact** Can cause skin irritation with persistent contact.
- Eye contact** Can cause serious eye irritation. Wear appropriate protective eyewear (see section 8).

Symptoms related to the physical, chemical and toxicological characteristics Dermatitis. Rash. May cause an allergic skin reaction.

Acute toxicity Not classified.

Product Surface TB Hard Surface Disinfectant (CAS mixture)		
Exposure Classification	Route and Species	LD ₅₀ /LC ₅₀
Acute	Oral, rat	>6,300 mg/kg (estimated)
Acute	Dermal, rabbit	> 9,500 mg/kg (estimated)
Acute	Inhalation. Rat	> 375 mg/L (Literature)
*Estimates for product may be based on additional component data not shown		

- Skin corrosion/irritation** Causes mild skin irritation.
- Serious eye damage/ irritation** Causes serious eye irritation.
- Respiratory sensitization** Not considered a respiratory sensitizer.
- Skin sensitization** Not 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 toxicity** No data available.
- Specific target organ toxicity – single exposure** No data available.
- Specific target organ toxicity – repeated exposure** No data available.
- Aspiration hazard** No data available.

12. Ecological information

Ecotoxicity		
Product Surface TB Hard Surface Disinfectant (CAS mixture)		
Aquatic Receptor	Species	Test Thresholds
Fish	Fathead Minnow	LC ₅₀ =243 mg/L (estimated)
Fish	Lepomis macrochirus	LC ₅₀ >940 mg/L (estimated)
Crustacea	Daphnia magna	EC ₅₀ =6 mg/L (estimated)
*Estimates for product may be based on additional component data not shown		

Persistence and degradability No data available. Chemicals of this class are not expected to be persistent in an open, aerobic environment



SAFETY DATA SHEET

Bio-accumulative potential	Not data available. Components are highly water-soluble and not expected to accumulate in dynamic biological systems
Partition coefficient n-octanol/water (log K_{ow})	Not available.
Mobility in soil	No data available. Chemicals of these classes are highly water soluble and will partition readily to water and weakly to particles in low-clay soil matrices. They are expected to exhibit moderate to high mobility in saturated and semi-saturated soils
Other adverse effects	Harmful to plants or wildlife in highly concentrated solutions. No other adverse environmental effects known (<i>i.e. ozone depleting substance, tropospheric ozone precursor, greenhouse gas emission, endocrine disruptor or other deleterious environmental effect</i>)

13. Disposal considerations

Disposal instructions	PESTICIDE DISPOSAL - Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or reconstituted concentrate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.
Local disposal regulations	Dispose in accordance with all applicable regulations
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company. As packaged, this product is not believed to meet criteria defining RCRA hazardous wastes 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. This product is an EPA-registered pesticide. Disposal restrictions apply.
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 consistent with contact pesticides (see: Disposal instructions).
Contaminated packaging	CONTAINER DISPOSAL - Nonrefillable Container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse empty container with water. Then offer for recycling or reconditioning. If not available, puncture and dispose in a sanitary landfill. This product is a registered pesticide under USEPA FIFRA registry. Dispose in accordance with label direction and/or applicable state/local rule and regulation.

14. Transport information

USDOT Not classified as dangerous goods.

15. Regulatory information

US federal regulations

TSCA All chemical components used to manufacture this product comply with the Toxic Substances Control Act (TSCA) registry requirements and are either listed within, or exempted from, the current TSCA 8(b) inventory.

FIFRA - This product is a pesticide regulated by the USEPA under authority of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). EPA product registration number: **1839-83-74357**

SARA 302 Extremely hazardous substance Not listed.

SARA 304 Emergency release notification Not listed.

SARA 311/312 Hazard Categories



SAFETY DATA SHEET

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 (3/2021)

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

Issue date 4/1/2015
Revision date 7/10/2019, 3/18/2020, 3/27/2020
Version # 4
HMIS® ratings Health: 1
Flammability: 0
Physical hazard: 0

HEALTH	1
FLAMMABILITY	0
REACTIVITY	0
PERSONAL PROTECTION	<input type="checkbox"/>

NFPA ratings Health: 1
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 Change skin irritant category from 3 to 2 (definition); Reduce eye irritation category from 1 (raw product BTC) to 2A to reflect dilution of 4 orders of magnitude in final product; Eliminate corrosive pictogram; Insert Exclamation point pictogram. Signal word change from DANGER to WARNING; Add Acute Toxicity category 4 – Raw BTC product GHS



SAFETY DATA SHEET

category bridge. Added hazard statement for Cat 4 Oral Toxicity insertion. General format update; Refine composition table, amend physical data; Update toxicology thresholds and environmental fate information; Text clarification amendments Sections 5,6,8,9 and 12. PPE recommendation updated; California Proposition 65 notice; HMIS and NFPA pictograms added. Inserted Section 1 Disposal instructions
1/22/2020 Dye removed from formula; Changed product name to include Dye Free suffix
3/18/2020 Add pesticide registry notification and TSCA registry language.
3/27/2020 Amend environmental fate language; Add exposure table information (ethanol and 2-(2-butoxyethoxy)ethanol.