SAFETY DATA SHEET

1. Identification

Product Identifier	**Healthcare Laundry Spotter**	
Other means of identification		
Product code	CUQNC-7070	
Recommended use	Heavy duty laundry spotter.	
Recommended restrictions	Professional use only.	
Manufacturer information		
Company name	Chemical Universe, Inc.	
Address	1841 Vernon 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	Flammable Liquids	Category 3
Health hazards	Serious eye damage.	Category 1
	Skin corrosion.	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	None.	
Label elements		

Signal word	**DANGER**
Hazard statement	Flammable liquid and vapor. Causes severe skin burns and eye damage.
Precautionary statement	
Prevention	Keep away from heat/sparks/open flames/ hot surfaces. No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dusts or mists. Wash skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.
Response	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction. **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 breathing. Immediately call a POISON CENTER/doctor/medical professional. Specific treatment (see supplemental information on this label). **IF IN EYES**: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek qualified medical attention in follow-up to initial flushing and first aid

Storage	Store in a well-ventilated place. Keep cool. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None.
Supplemental information	None.

3. Composition/information on ingredients

Mixture Component(s)		
Chemical name	**CAS number**	**%**
2-butoxyethanol	111-76-2	6-12
2-propanol	67-63-0	2-5
Sodium hydroxide	1310-73-2	2-3
Potassium hydroxide	1310-58-3	2-3
Ammonium hydroxide	1336-21-6	0.1-1
Other components below reportable levels		79-91

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. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur. Only induce vomiting at the instruction of medical personnel.
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. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to the hospital. 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.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Carbon dioxide (CO_2). Dry chemical powder, sand, or earth may be used for small fires only.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source or ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. 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. This product is highly alkaline and mildly corrosive to skin and some metals

Fire-fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. 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	Flammable liquid and vapor.

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. Ensure adequate ventilation. Remove all sources of ignition. 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	Eliminate all ignition sources. Use only non-sparking tools. Take precautionary measures against static discharge. Keep combustibles away from spilled material. 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: Absorb with earth, sand, or other non-combustible material and transfer to container for later disposal. 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 release to the open environment. Avoid discharge into sewers, surface drainage paths or other areas not consistent with package labeling.

7. Handling and storage

Precautions for safe handling	Do not handle, store or open near an open flame, sources of heat or sources of ignition. Do not smoke. Use explosion proof equipment and non-sparking tools. Take precautionary measures against static discharge. 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	Keep away from heat, sparks and open flame. Ground/bond container and equipment. 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

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

Components	Type	Value
2-propanol	STEL	500 ppm 1,225 mg/m^3
	TWA	400 ppm 980 mg/m^3
2-butoxyethanol	PEL	50 ppm 240 mg/m^3
Potassium hydroxide	PEL	2 mg/m^3
Sodium hydroxide	PEL	2 mg/m^3

US ACGIH Threshold Limit Values

Components	Type	Value
2-propanol	STEL	400 ppm
	TWA	200 ppm
2-butoxyethanol	TWA	20 ppm
Potassium Hydroxide	STEL	2 mg/m³
Sodium Hydroxide	STEL	2 mg/m³

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Species	Sampling Time
2-propanol	40 mg/L	Acetone	Urine	End of shift at end of workweek.
2-butoxyethanol	200 mg/g	Creatinine	Urine	End of shift.

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 below recommended exposure limits.

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 Wear appropriate chemical resistant gloves. 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. 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, coveralls, or encapsulated suits. Suggested protective materials: Nitrile and PVC rubber.

Other Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

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 Clear liquid.

Color Light green.

Odor Ammonia.

Odor threshold Not available.

pH 13.5

Melting/freezing point Not available

Initial boiling point and boiling range >212°F (>100°C) estimated.

Flash point 128°F (53°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)	1.02
Solubility in water	Complete.
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 heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Oxidizing agents, acids.
Hazardous decomposition products	Carbon dioxide, carbon monoxide.

11. Toxicological information

Information on likely routes of exposure

Ingestion	May be harmful if swallowed.
Inhalation	Prolonged inhalation may be harmful.
Skin contact	Causes skin burns. See section 8 for personal protection.
Eye contact	Causes serious eye damage. See section 8 for personal protection.
Symptoms related to the physical, chemical and toxicological characteristics	Dermatitis. Rash.
Acute toxicity	Not established.

Product Healthcare Laundry Spotter (CAS mixture)		
Exposure Classification	**Route and Species**	**LD_{50} /LC_{50}**
Acute	*Oral*, rat	> 3,100 mg/kg (estimated)
Acute	*Dermal*, rabbit	> 560 mg/kg (estimated)
Acute	*Inhalation (rat)*	446 mg/m^3 (butoxyethanol)
*Estimates for product may be based on additional component data not shown		

Skin corrosion/irritation	Causes severe skin burns.
Serious eye damage/ irritation	Causes serious eye damage.
Respiratory sensitization	Not available.
Skin sensitization	Not available.

Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
Carcinogenicity	This product is not expected to be a carcinogen.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not Listed.
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity – single exposure	Not classified.
Specific target organ toxicity – repeated exposure	Not classified.
Aspiration hazard	Not classified.

12. Ecological information

Ecotoxicity		
Product Healthcare Laundry Spotter (CAS mixture)		
Aquatic Receptor	**Species**	**Test Thresholds**
Crustacea	Daphnid (water flea)	EC_{50} (48-hr): 630 mg/l (estimated)
Fish	Oncorhynchus mykiss	LC_{50} (96-hr): >1,490 mg/l (estimated)
Fish	Pimephales promelas	LC_{50} (96-hr): >2,950 mg/l (Literature)
Algae	Freshwater BG	EC_{50} (72-hr) >1,840 mg/L (Literature)
*Estimates for product may be based on additional component data not shown		

Persistence and degradability	2-butoxyethanol and 2-propanol are considered readily biodegradable.
Bio-accumulative potential	Potential to bio-accumulation is expected to be very low.
Mobility in soil	No data available. Chemicals of these classes are highly water soluble and are expected to exhibit moderate to high mobility in saturated and semi-saturated soils
Other adverse effects	No data available.

13. Disposal considerations

Disposal instructions	Collect 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	The waste code should be assigned in discussion between the user, the producer and the waste disposal company. As packaged, this product may meet criteria defining RCRA corrosive (D002) 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
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

DOT

UN number	UN1760
UN proper shipping name	Corrosive liquids, n.o.s. (Contains: Potassium hydroxide, Sodium hydroxide)

Transport hazard class(es)

Class	8
Subsidiary risk	-
Packaging group	III
Marine pollutant	No

Special precautions for user	Read safety instructions, SDS, and emergency procedures before handling.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not intended to be transported in bulk.

DOT Label/Placard

15. Regulatory information

US federal regulations .

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 – Yes
Pressure Hazard – No
Reactivity Hazard – Yes

SARA 313 (TRI reporting)	-butoxyethanol (Glycol ether category)
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 (12/2023)

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

Issue date	2/21/2024
Revision date	
Version #	1
HMIS® ratings	Health: 2 Flammability: 2 Physical hazard: 1

NFPA ratings

Health: 2
Flammability: 2
Instability: 1

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

First issue.