



SAFETY DATA SHEET

1. Identification

Product Identifier	Break	
Other means of identification	CU-7200	
Product code		
Recommended use	Laundry break, alkaline builder.	
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	
Fax	(816) 474-3302	
Emergency phone number	PERS 24 hour Emergency	(800) 633-8253 (800) 633-8253

2. Hazard(s) Identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral Serious eye damage Skin corrosion	Category 4 Category 1 Category 1A
Environmental hazards	Not classified.	
OSHA defined hazards	None.	
Label elements		



Signal word	DANGER
Hazard statement	Harmful if swallowed. Causes severe skin burns and eye damage.
Precautionary statement	
Prevention	Wash hands and exposed skin thoroughly after handling. Do not eat, drink, or smoke when using this product. Do not breathe dust or mists. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF SWALLOWED: Immediately call a poison center/doctor/medical professional. Specific treatment: see first aid instructions in section 4. 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. 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	Dispose of contents/containers in accordance with local/regional/national/international regulations.
Hazard(s) not otherwise classified (HNOC)	None.
Supplemental information	None.



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3. Composition/information on ingredients

Mixture Component(s)		
Chemical name	CAS number	%
Sodium hydroxide	1310-73-2	10-20
Potassium hydroxide	1310-58-3	5-10
Other components below reportable levels		70-185

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. Neutralize burns with vinegar. 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	Can cause serious eye damage. Can cause burning sensation in affected areas. Shortness of breath, respiratory tract irritation or damage. Potassium hydroxide is extremely destructive to tissues of the mucous membranes and upper respiratory tract, eyes, and skin.
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 (CO ₂).
Unsuitable extinguishing media	Avoid use of protein foam extinguishing media.
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. Ks. 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 totally miscible in water.



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Large spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.. 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 and dilute acid such as vinegar or citrate.

Small spills: Wipe up with absorbent material (e.g. cloth, fleece). 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 waterways and 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

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

Components	Type	Value
Potassium Hydroxide	PEL	2 mg/m ³
Sodium Hydroxide	PEL	2 mg/m ³

US ACGIH Threshold Limit Values

Components	Type	Value
Potassium Hydroxide	STEL	2 mg/m ³
Sodium Hydroxide	STEL	2 mg/m ³

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

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

Skin protection

Hand protection

Wear appropriate chemical resistant gloves. Latex, PVC and nitrile/butyl rubber are recommended barrier materials

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, as 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.



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9. Physical and chemical properties

Appearance

Physical State	Liquid.
Color	Colorless
Odor	Characteristic
Odor threshold	Not available.
pH	14
Melting/freezing point	-29.2°F (-34°C) estimated.
Initial boiling point and boiling range	246°F (118.9 °C) estimated.
Flash point	Not applicable.
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)	1.24
Solubility in water	Fully soluble.
Partition coefficient (n-octanol/water)	Not applicable
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	@ 1.124 cPS.

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 (>120°F).
Incompatible materials	Bases, amines, metals. Product will generate heat when mixed with water.
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. Harmful if swallowed.
Inhalation	Do not inhale. May cause damage to the upper respiratory tract.
Skin contact	Causes severe 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	Burning sensation, coughing, wheezing, shortness of breath. Potassium hydroxide is extremely destructive to mucous membranes and upper respiratory tract, eyes, and skin.



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Acute toxicity Harmful if swallowed.

Product - Break (CAS mixture)		
Exposure Classification	Route and Species	LD ₅₀
Acute	Oral, rat	960 mg/kg estimated
*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 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	May cause damage to the upper respiratory tract with prolonged inhalation.
Specific target organ toxicity – repeated exposure	No data available.
Aspiration hazard	No data available.

12. Ecological information

Ecotoxicity		
Product Break (CAS mixture)		
Aquatic Receptor	Species	Test Threshold
Fish	Fathead minnow	LC ₅₀ = 250 mg/L estimated
Crustacea	Daphnia Magna	EC ₅₀ = 170 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 exhibit persistence in an open environment
Bioaccumulative potential	Chemicals of this class are readily ionizable in an aqueous medium and are not expected to accumulate in biological systems
Mobility in soil	No data available. Expected to be highly mobile in low-clay saturated soils
Other adverse effects	May be harmful to plants or wildlife in high concentrations.

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)
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).



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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



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 - No	
Pressure Hazard - No	
Reactivity Hazard - No	
SARA 313 (TRI reporting)	Not listed.

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

Issue date	1/16/2015
Revision date	11/7/2016; 3/13/2019
Version #	3

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

Product identifier. 3/13/2019 General format update, Prop 65 statement; Update toxicology and environmental fate information; PPE notations; Physical data update; miscellaneous text corrections; HMIS and NFPA pictograms inserted