



SAFETY DATA SHEET

1. Identification

Product Identifier	Encapsulated Dish Machine Detergent	
Other means of identification		
Product code	CU-5418	
Recommended use	Heavy duty dishwashing powder.	
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	(800) 633-8253
	24-hour Emergency	(800) 633-8253

2. Hazard(s) Identification

Physical hazards	Not classified.	
Health hazards	Acute toxicity, oral	Category 4
	Serious eye damage	Category 1
	Skin corrosion	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 section 4 on the Safety Data Sheet. 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.



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Hazard(s) not otherwise classified (HNOC) None.
Supplemental information None.

3. Composition/information on ingredients

Mixture Component(s)		
Chemical name	CAS number	%
Sodium carbonate	497-19-8	30-40
Sodium hydroxide	1310-73-2	30-40
Sodium tripolyphosphate	7758-29-4	10-15
Sodium dichloroisocyanurate	2893-78-9	1-5
Other components below reportable levels		1-28

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.

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 None reported.

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



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Methods and materials for containment and cleaning up

authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

This product is miscible in water.

Large spills: Place the material in containers using a broom or shovel. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Small spills: Sweep up and put into containers. 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 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
Sodium Hydroxide	PEL	2 mg/m ³

US ACGIH Threshold Limit Values

Components	Type	Value
Sodium Hydroxide	STEL	2 mg/m ³

Biological limit values

No data available.

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. Nitrile and latex 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, 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



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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	Powder
Color	White
Odor	Characteristic.
Odor threshold	Not available.
pH	12-13 (10% solution)
Melting/freezing point	Not applicable.
Initial boiling point and boiling range	Not applicable.
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)	2.1
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.
Hazardous decomposition products	Hydrogen. 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 severe skin burns.
Eye contact	Can cause serious eye damage.



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Symptoms related to the physical, chemical and toxicological characteristics Coughing, wheezing, shortness of breath.

Acute toxicity Harmful if swallowed.

Product - Encapsulated Dish Machine Detergent (CAS mixture)

Exposure Classification	Route and Species	LD ₅₀
Acute	Oral, rat	1,200 mg/kg (estimated)

*Estimates for product may be based on additional component data not shown

Skin corrosion/irritation Can cause severe skin burns.
Serious eye damage/ irritation Can cause 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 No data available.
Specific target organ toxicity – repeated exposure No data available.
Aspiration hazard No data available.

12. Ecological information

Ecotoxicity		
Product Encapsulated Dish Machine Detergent (CAS mixture)		
Aquatic Receptor	Species	Test Threshold
Fish	Fathead minnow	LC ₅₀ = 110 mg/L (estimated)
Crustacea	Daphnia magna	EC ₅₀ = 145 mg/L (estimated)

*Estimates for product may be based on additional component data not shown

Persistence and degradability No data available
Bio-accumulative potential Bio-accumulative potential is low. Components are highly water-soluble
Mobility in soil No data available. Chemicals of these classes 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.



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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	UN1759
UN proper shipping name	Corrosive solids, n.o.s. (contains: 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.

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 9/13/2016
Revision date 3/26/2019
Version # 2
HMIS® ratings Health: 3
 Flammability: 0
 Physical hazard: 0



NFPA ratings Health: 3
 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

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