



SAFETY DATA SHEET

1. Identification

Product Identifier Lock-N-Load All-Temp Dish Detergent

Other means of identification

Product code CU-5400-LL

Recommended use Aluminum-safe automatic dish machine detergent.

Recommended restrictions None.

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 Serious eye damage Category 1
Skin irritant Category 2

Environmental hazards Not classified.

OSHA defined hazards Not listed.

Label elements



Signal word Danger

Hazard statement Causes serious eye damage.
Causes skin irritation.

Precautionary statement

Prevention Wear eye protection/face protection. Wash hands and exposed skin thoroughly after handling. Wear protective gloves.

Response 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 ON SKIN: Wash with plenty of water for at least 15 minutes. Specific treatment (see section 4 on the Safety Data Sheet). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.

Storage

Disposal

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

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Sodium metasilicate	6834-92-0	1-10

Sodium xylene sulfonate	7757-82-6	1-5
Tertasodium ethylenediamine tetraacetate	7732-18-5	1-5
Other components below reportable levels		90-100

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. Get medical attention. Eye wash stations should be located in work area.
Ingestion	Rinse mouth. Get medical attention if symptoms occur. 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. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂)
Unsuitable extinguishing media	None known.
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	Wear appropriate protective equipment and clothing during clean-up. Wear eye/face protection.
Methods and materials for containment and cleaning up	Caution – spillages may be slippery. 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. 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	Do not release into the environment (see section 12). Avoid discharge into areas not consistent with package labeling.

7. Handling and storage

Precautions for safe handling	Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Do not store in extreme conditions.

8. Exposure controls/personal protection

Occupational exposure limits	None established.
Biological limit values	None established.
Appropriate engineering controls	Emergency eye wash stations and showers should be readily accessible. Provide natural or mechanical ventilation.
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.
Other	None.
Respiratory protection	Respiratory protection not required.
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	Red.
Odor	Indistinct.
Odor threshold	Not available.
pH	13-14
Melting/freezing point	Not available.
Initial boiling point and boiling range	>212°F (100°C)
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)	1.02
Solubility in water	Soluble
Partition coefficient (n-octanol/water)	Not available.

Auto-ignition temperature Not available.
Decomposition temperature Decomposes on heating.
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.
Possibility of hazardous reactions Hazardous polymerization does not occur.
Conditions to avoid Heat, flames can cause product to decompose.
Incompatible materials Strong acids, strong bases, strong oxidizing agents.
Hazardous decomposition products Aldehydes, ketones, organic acids, carbon dioxide, carbon monoxide.

11. Toxicological information

Information on likely routes of exposure

Ingestion May be harmful if swallowed. Do not ingest
Inhalation Expected to be a low inhalation hazard.
Skin contact Repeated and/or prolonged skin contact causes irritation and/or burns.
Eye contact Causes severe eye damage. May cause severe corneal injury.

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

Acute toxicity Expected to have a low toxicity.

Product	Route and Species	LD ₅₀
Lock-N-Load All-Temp Dish Detergent (CAS mixture)		
Acute	<i>Oral</i> , rat	12,000 mg/kg estimated
	<i>Dermal</i> , rabbit	>2,000 mg/kg

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

Skin corrosion/irritation Causes skin irritation.
Serious eye damage/irritation Causes serious eye damage.
Respiratory sensitization Not classified.
Skin sensitization Not classified.
Germ cell mutagenicity Not classified.
Carcinogenicity Not considered a carcinogen.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
 Not Listed.
Reproductive toxicity Not classified.
Specific target organ toxicity – single exposure Not classified.
Specific target organ toxicity – repeated exposure Not classified.
Aspiration hazard Not considered an aspiration hazard.

12. Ecological information

Ecotoxicity

Product	Species	Test Results
Lock-N-Load All-Temp Dish Detergent (CAS mixture)		
Aquatic		
Crustacea	Daphnia	EC ₅₀ (48hr): 3,200 mg/L estimated
Fish	Fathead	LC ₅₀ (96hr): 2,360 mg/L estimated

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

Persistence and degradability	Not available.
Bioaccumulative potential	No data available.
Mobility in soil	Not available.
Other adverse effects	The pH of this product may cause it to be toxic to aquatic and terrestrial organisms.

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. Do not release to the environment.
Local disposal regulations	Dispose in accordance with all applicable regulations
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: Sodium Metasilicate)
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 1/14/2015

Revision date 1/14/2015

Version # 1

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 First issue.