



SAFETY DATA SHEET

1. Identification

Product Identifier	Lock-N-Load #101 Glass and Hard Surface Cleaner	
Other means of identification		
Product code	CU-L-101	
Recommended use	Glass and hard surface cleaner.	
Recommended restrictions	Professional use only.	
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	Flammable liquids	Category 4
Health hazards	Acute toxicity, oral	Category 5
	Skin irritant	Category 2
	Eye irritant	Category 2A
	Aspiration hazard	Category 1
Environmental hazards	Not classified	
OSHA defined hazards	Not listed.	
Label elements		



Signal word	Danger.
Hazard statement	Combustible liquid. May be harmful if swallowed. Causes skin irritation. Causes serious eye irritation. May be fatal if swallowed and enters airways.
Precautionary statement	
Prevention	Keep away from flames and hot surfaces. No smoking. Wear protective gloves/eye protection/face protection. Wash hands and exposed skin thoroughly after handling.
Response	In case of fire: use water or fire extinguisher to extinguish. Call a POISON CENTER/doctor/medical professional if you feel unwell. IF ON SKIN: Wash with plenty of water for at least 15 minutes. Specific treatment (see section 4 on this SDS). If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. If sys irritation persists: Get medical advice/attention. IF SWALLOWED: Immediately call a POISON CENTER/doctor/medical professional. Do NOT induce vomiting.
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

Mixtures

Chemical name	CAS number	%
2-butoxyethanol	111-76-2	25-35
Nonionic surfactant	127087-87-0	1-2
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	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	Combustible 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. 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 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 Store in original tightly closed container. Keep away from heat, sparks and open flame. Do not store in extreme conditions.

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-butoxyethanol	PEL	50 ppm

US ACGIH Threshold Limit Values

Components	Type	Value
2-butoxyethanol	STEL	20 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Species	Sampling Time
2-butoxyethanol	200 mg/g	Creatinine	Urine	End of shift.

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 Wear long sleeve shirts with pants.

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 Liquid

Color	Blue.
Odor	Characteristic
Odor threshold	Not available.
pH	7.5-8.5
Melting/freezing point	7.3°F (-13.7°C)
Initial boiling point and boiling range	220°F (104.4°C)
Flash point	194°F (90°C)
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)	0.97 @ 68°F (20°C)
Solubility in water	Soluble
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Decomposes on heating.
Viscosity	1.7 cP @ 80°F (26.7°C)

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	Strong acids, strong bases, strong oxidizing agents.
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	May cause mild skin irritation.
Eye contact	May cause serious eye irritation
Symptoms related to the physical, chemical and toxicological characteristics	Dermatitis. Rash. May cause an allergic skin reaction.
Acute toxicity	This product is considered acutely toxic, do not ingest.

Product	Route and Species	LD ₅₀
Lock-N-Load #101 Glass and Hard Surface Cleaner (CAS mixture)		
Acute	<i>Oral, rat</i>	4,333 mg/kg estimated

*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 irritation
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	This product is an aspiration hazard. Do not ingest or allow product into airways. Do NOT induce vomiting if ingested.

12. Ecological information

Ecotoxicity

Product	Species	Test Results
Lock-N-Load #101 Glass and Hard Surface Cleaner (CAS mixture)		
Aquatic		
Crustacea	Daphnia	EC ₅₀ (48hr): 5,200 mg/L estimated
Fish	Oncorhynchus mykiss	LC ₅₀ (96hr): 4,900 mg/L estimated

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

Persistence and degradability	2-butoxyethanol is considered readily biodegradable.
Bioaccumulative potential	Potential to bioaccumulate is low.
Mobility in soil	Not available.
Other adverse effects	Not 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. 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

Not regulated as dangerous goods.

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 – No

SARA 313 (TRI reporting)

2-butoxyethanol (Glycol Ether Category)

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: 1 Physical hazard: 0
NFPA ratings	Health: 2 Flammability: 1 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