

SAFETY DATA SHEET

According to OSHA Hazard Communication Standard Rule - 29 CFR 1910.1200 and the Canadian Hazardous Products Act



LIPLA HD US FLUSH

SUBID:000001014547

Version 1

Print Date 03-01-2016

Revision Date 03-01-2016

SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Identification of the substance or mixture:

Product name : LIPLA HD US FLUSH
MSDS Number : 000001014547

1.2 Use of the substance/mixture:

Use of the : Flushing solution
Substance/Preparation

1.3 Company/undertaking identification

CMYK Engineering
1450 2nd Street, Los Angeles CA 90401

Ph: (424) 296-7227

Transport Emergency

Non-transportation

Call CHEMTREC : +1 800 4249300
International : +1 703 5273887

Health Emergency Phone : +1 303 6235716

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

GHS (Globally Harmonized System of Classification and Labelling of Chemicals)	
• Hazard classes	Flammable liquids
Hazard categories	Category 4
Hazard statements	H227

2.2 Label elements:

Signal word : WARNING
Precautionary statements: P210
prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280

Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements: P501NA
disposal

Dispose of contents / container to an approved waste disposal facility.

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance related information:

CAS-No. : 29911-28-2

3.2 Hazard ingredients:

The hazard and labelling information in this section is that of the individual ingredients. The corresponding information relative to this product as supplied is given in section 2.1.

Hazardous components

• CAS-No. : 29911-28-2 Concentration [%] : 80.0 - 100.0

Components with a community workplace exposure limit

This product does not contain components with a community exposure limit.

3.3 Remark:

Full text of each relevant H-phrase is listed in section 16.

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures:

Eye contact : Rinse immediately with plenty of water.
Skin contact : Remove contaminated clothing and wash the skin thoroughly with soap and water after work.
Ingestion : Rinse mouth thoroughly.
Inhalation : Move to fresh air.

4.2 Most important symptoms and effects:

4.3 Indication of immediate medical attention and special treatment needed:

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media : Use fire-extinguishing media appropriate for surrounding materials. Use fire-extinguishing media appropriate for surrounding materials.
Extinguishing media which must not be used for safety reasons : Do not use water jet as an extinguisher, as this will spread the fire.

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5.2 Special hazards arising from the substance or mixture:

Specific hazards during fire fighting : During fire, gases hazardous to health may be formed.

Further information : No unusual fire or explosion hazards noted.

5.3 Advice for fire-fighters:

Special protective equipment for fire-fighters : Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Personal precautions : Use personal protective equipment. Put on protective equipment before entering danger area.

Additional advice : For personal protection see section 8. For waste disposal, see section 13 of the SDS.

6.2 Environmental precautions:

Environmental precautions : Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.

6.3 Methods and material for containment and cleaning up:

Methods for cleaning up : Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.

6.4 Reference to other sections:

For waste disposal see section 13.

For personal protection see section 8.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

Advice on safe handling : Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Hygiene measures : Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

7.2 Conditions for safe storage:

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Requirements for storage : Store away from incompatible materials.
areas and containers

7.3 Specific end use:

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters:

8.1.1 Components with occupational exposure limits resp. biological occupational exposure limits requiring monitoring:

8.1.1.1 Occupational exposure limits:

Air limit values (US)

We are not aware of any national exposure limit.

Air limit values (CA)

We are not aware of any national exposure limit.

Biological limit values (US)

We are not aware of any national exposure limit.

Biological limit values (CA)

We are not aware of any national exposure limit.

8.1.1.2 Additional exposure limits under the conditions of use:

8.2 Exposure controls:

Occupational exposure controls:

➤ Instruction measures to prevent exposure:

➤ Technical measures to prevent exposure:

➤ Personal measures to prevent exposure:

Respiratory protection : In case of inadequate ventilation, use respiratory protection. If respirators are used, OSHA requires compliance with its respiratory protection program (29 CFR 1910.134).

Hand protection : Protective gloves should be used if there is a risk of direct contact or splash. Chemical resistant gloves required for prolonged or repeated contact. Butyl rubber. Glove thickness: > 0.70 mm Break-through time: > 480 min Risk of splashes: Nitrile rubber. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves

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	supplier, who can inform about the breakthrough time of the glove material.
Eye protection	: Safety goggles
Body Protection	: Wear suitable protective clothing as protection against splashing or contamination.
Personal protective equipment	: Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Basic physical and chemical properties:

9.1.1 Appearance:

State of matter	: liquid
Form	: liquid
Color	: Colourless. Clear.
Odor	: Characteristic smell. Smell of ether.
Odor threshold	: No data available

9.1.2 Important health, safety and environmental information:

pH	: Not applicable	
Melting point/range	: -75 °C	Method: Literature.
Boiling point/range	: 229 °C	Method: Literature.
Flash point (1,013 hPa)	: > 100 °C	Method: Literature.
Autoignition temperature	: 189 °C	Method: Literature.
Vapour pressure (20 °C)	: 0.06 hPa	Method: Literature.
Relative vapour density	: No data available	
Relative density (20 °C)	: 0.910	Method: Literature.
Density	: No data available	
Solubility/qualitative	: Partly soluble in water.	
Water solubility (20 °C)	: 45 g/l	Method: Literature.
Partition coefficient (n-octanol/water)	: log Pow: 1.130	Method: Literature.
Viscosity, dynamic (25.5 °C)	: 4.35 mPa.s	Method: Information taken from Reach Registration (ECHA).
Viscosity, kinematic	: No data available	
Lower explosion limit	: 0.60 %(V)	Method: Literature.
Upper explosion limit	: 20.4 %(V)	Method: Literature.
Evaporation rate	: No data available	
Flammability (solid, gas)	: Not flammable.	Method: Literature.

9.2 Other information:

VOC content	: 0.0 g/l	
Ignition temperature	: 189 °C	Method: Literature.

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SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity:

10.2 Chemical stability:

10.3 Possibility of hazardous reactions:

10.4 Conditions to avoid:

Conditions to avoid : Avoid heat or contamination.

10.5 Materials to avoid:

10.6 Hazardous decomposition products:

Hazardous decomposition products : By heating and fire, harmful vapors/gases may be formed.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Toxicokinetics, metabolism and distribution:

Acute effects (toxicity tests):

➤ Acute Toxicity

•

	Effect dose	Species	Value	Method
Acute oral toxicity	LD 50	Rat	3,700 mg/kg	
	Experimental result, Key study			
Acute dermal toxicity	LD 50	Rat	> 2,000 mg/kg	
Acute inhalation toxicity	LC 50	Rat	> 5.4 mg/l/ 4 h	
	Aerosol Experimental result, Key study			

➤ Specific target organ toxicity (STOT):

➤ Irritant and corrosive effects:

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	Exposure time	Species	Evaluation	Method
Primary irritation to the skin		Rabbit	Not irritating	in vivo
Irritation to eyes	24 - 72 hrs	Rabbit	Not irritating	in vivo
	EU			

➤ Irritation to the respiratory tract:

➤ Sensitisation:

•			
Species	Evaluation	Method	

➤ Aspiration hazard:

Sub-acute, sub-chronic and chronic toxicity

➤ Repeated dose toxicity:

•				
	Effect dose	Value	Exposure time	Species
Dermal			13 Weeks	Rat
	Evaluation: 1 = reliable without restrictions Method: Open, animals with collar Dermal			

➤ Specific target organ toxicity (STOT):

•

➤ CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):

- Carcinogenicity

•

- Mutagenicity

- Genetic toxicity in vitro

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- Genetic toxicity in vivo

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- **Teratogenicity**
-
- **Toxicity to reproduction**
-
- **Summarised evaluation of the CMR properties:**

Experiences made in practice:

SECTION 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity:

-

	Effect dose	Exposure time	Species	Value
Toxicity to fish	LC 50	96 h	Poecilia reticulata	841 mg/l
	Method: Static experimental result			
Toxicity to daphnia	EC 50	48 h		> 100 mg/l
	Method: Static experimental result			

12.2 Persistence and degradability:

Physico-chemical removability

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Chemical Oxygen Demand (COD)

-

Adsorbed organic bound halogens (AOX)

-

Biodegradation

-

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Biochemical Oxygen Demand (BOD)

-

12.3 Bioaccumulative potential:

Partition coefficient (n-octanol/water)

Value	pH	°C	Method
log Pow: 1.130			Literature.

Bioconcentration factor (BCF)

-

12.4 Mobility in soil:

Henry's constant

Transport between environmental compartments

-

12.5 Results of PBT and vPvB assessment:

Evaluation
Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria Not fulfilling vPvB (very persistent/very bioaccumulative) criteria

12.6 Other adverse effects:

SECTION 13. DISPOSAL CONSIDERATIONS

Waste disposal methods

Wash before disposal. Dispose to controlled facilities.

SECTION 14. TRANSPORT INFORMATION

SECTION 15. REGULATORY INFORMATION

US. Toxic Substances Control Act (TSCA)

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All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substance Control Act (U.S. EPA TSCA) 8(b) inventory.

US. OSHA Classification

This product is hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200.

US. SARA 311/312 Hazard Categories

Fire

State Right-to-Know Information

The following chemicals are specifically listed by individual states. Other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements you should contact the appropriate agency in your state.

US. Massachusetts, New Jersey, Pennsylvania or Rhode Island Right to Know Substance Lists :
See Section 2.

Canadian WHMIS Classification

B3 : Combustible Liquids

Canadian Environmental Protection Act (CEPA)

All components of this product are on the Canadian DSL list.

SECTION 16. OTHER INFORMATION

Text of H-phrases referred to under headings 2 and 3:

This MSDS is replacing previous MSDS number 1540C

This information is furnished without warranty, expressed or implied, and is believed to be accurate to the best knowledge of CMYK ENGINEERING. The data on this SDS relates only to the specific material designated herein. CMYK ENGINEERING assumes no legal responsibility for use or reliance upon these data. This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.