according to Hazard Communication Standard; 29 CFR 1910.1200

MMCD Dishliquid-Lemon Verbena

Version 1.3 Print Date 05/30/2018

Revision Date 01/24/2018 SDS Number 350000025157

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Product name : MMCD Dishliquid-Lemon Verbena

Recommended use : Hard Surface Cleaner

Restrictions on use : Use only as directed on label

Manufacturer, importer,

supplier

: Caldrea

1525 Howe Street

Racine WI 53403-2236

Telephone : +1-800-558-5252

Emergency telephone

number

24 Hour Medical Emergency Phone: (866)231-5406 24 Hour International Emergency Phone: (703)527-3887 24 Hour Transport Emergency Phone: (800)424-9300

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Globally Harmonized System (GHS) Classification

Hazard classification	Hazard category	Hazards identification
Skin sensitisation	Category 1	May cause an allergic skin
		reaction.

Labelling

Hazard symbols

Exclamation mark

Signal word

Warning

Hazard statements

May cause an allergic skin reaction.

according to Hazard Communication Standard; 29 CFR 1910.1200

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Precautionary statements

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Specific treatment (see supplemental first aid instructions on this label).

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/ attention.

Wash contaminated clothing before reuse.

Dispose of contents/ container to an approved incineration plant.

Wear protective gloves. Avoid breathing spray.

Contaminated work clothing should not be allowed out of the workplace.

Other hazards : None identified

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No.	Weight percent
Sulfuric acid, mono-C10-16-alkyl esters, sodium salts	68585-47-7	5.00 - 10.00
Alkylpolyglycoside C10-16	110615-47-9	5.00 - 10.00
Lauryl dimethyl amine oxide	1643-20-5	1.00 - 5.00
Glycerin	56-81-5	1.00 - 5.00
Fragrance - Trade Secret	Mixture	1.00 - 5.00

The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

For additional information on product ingredients, see www.caldrea.com.

4. FIRST AID MEASURES

Description of first aid measures

Eye contact : No special requirements

Skin contact : Wash off with plenty of water. If skin irritation or rash occurs:

Get medical advice/ attention.

according to Hazard Communication Standard; 29 CFR 1910.1200

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Inhalation : No special requirements.

Ingestion : No special requirements

Most important symptoms and effects, both acute and delayed

Eyes : No adverse effects expected when used as directed.

Skin effect : May cause allergic skin reaction.

No adverse effects expected when used as directed.

Inhalation : May cause allergic respiratory reaction.

Ingestion : May cause irritation to mouth, throat and stomach.

May cause abdominal discomfort.

No adverse effects expected when used as directed.

Indication of any immediate medical attention and special treatment needed

See Description of first aid measures unless otherwise stated.

5. FIREFIGHTING MEASURES

Suitable extinguishing

media

: Use water spray, alcohol-resistant foam, dry chemical or

carbon dioxide.

Specific hazards during

firefighting

: Container may melt and leak in heat of fire.

Further information : Fight fire with normal precautions from a reasonable distance.

Standard procedure for chemical fires. Wear full protective clothing and positive pressure self-contained breathing

apparatus.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions : Wear personal protective equipment.

according to Hazard Communication Standard; 29 CFR 1910.1200

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Wash thoroughly after handling.

Environmental precautions

: Outside of normal use, avoid release to the environment.

Methods and materials for containment and

cleaning up

Dike large spills.

Clean residue from spill site.

7. HANDLING AND STORAGE

Handling

Precautions for safe

handling

: Avoid contact with skin, eyes and clothing. For personal protection see section 8.

Use only as directed.

KEEP OUT OF REACH OF CHILDREN AND PETS.

Contaminated work clothing should not be allowed out of the

workplace.

Avoid breathing vapours, mist or gas.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Storage

Requirements for storage

areas and containers

: Keep container closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Components	CAS-No.	mg/m3	ppm	Non- standard units	Basis
Glycerin	56-81-5	15 mg/m3	-	-	OSHA TWA
Glycerin	56-81-5	5 mg/m3	-	-	OSHA TWA

Personal protective equipment

according to Hazard Communication Standard; 29 CFR 1910.1200

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Respiratory protection : No special requirements.

Hand protection : Wear suitable gloves.

Eye protection : No special requirements.

Skin and body protection : No special requirements.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : liquid

Color : Colorless

Odour : Citrus

Odour Threshold : Test not applicable for this product type

pH : 7.4 - 7.9

Melting point/freezing point : 0 °C

Initial boiling point and

boiling range

: Test not applicable for this product type

Flash point : does not flash

Evaporation rate : Test not applicable for this product type

Flammability (solid, gas) : Does not sustain combustion.

according to Hazard Communication Standard; 29 CFR 1910.1200

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explosive limits

Upper/lower flammability or : Test not applicable for this product type

Vapour pressure : Test not applicable for this product type

Vapour density : Test not applicable for this product type

Relative density : 1.01 g/cm3 at 25 °C

Solubility(ies) : soluble

Partition coefficient: n-

octanol/water

: Test not applicable for this product type

Auto-ignition temperature : Test not applicable for this product type

Decomposition temperature: Test not applicable for this product type

Viscosity, dynamic : Test not applicable for this product type

Viscosity, kinematic : Test not applicable for this product type

Oxidizing properties : Test not applicable for this product type

Volatile Organic Compounds Total VOC (wt. %)* : 0.3 % - additional exemptions may apply

*as defined by US Federal and State Consumer Product

Regulations

Other information : None identified

according to Hazard Communication Standard; 29 CFR 1910.1200

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10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous

reactions

: If accidental mixing occurs and toxic gas is formed, exit area

immediately. Do not return until well ventilated.

Conditions to avoid : Direct sources of heat.

Incompatible materials : Do not mix with bleach or any other household cleaners.

Strong bases

Hazardous decomposition

products

: Thermal decomposition can lead to release of irritating gases

and vapours.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 > 5000 mg/kg

Acute inhalation toxicity : LC50 > 10 mg/L

Acute dermal toxicity : LD50 > 5000 mg/kg

GHS Properties	Classification	Routes of entry
Acute toxicity	No classification proposed	Oral
Acute toxicity	No classification proposed	Dermal
Acute toxicity	No classification proposed	Inhalation - Dust and Mist

according to Hazard Communication Standard; 29 CFR 1910.1200

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Acute toxicity	No classification proposed	Inhalation - Vapour
Acute toxicity	No classification proposed	Inhalation - Gas
Skin corrosion/irritation	No classification proposed	-
Serious eye damage/eye irritation	No classification proposed	-
Skin sensitisation	Category 1	-
Respiratory sensitisation	No classification proposed	-
Germ cell mutagenicity	No classification proposed	-
Carcinogenicity	No classification proposed	-
Reproductive toxicity	No classification proposed	-
Specific target organ toxicity - single exposure	No classification proposed	-
Specific target organ toxicity - repeated exposure	No classification proposed	-
Aspiration hazard	No classification proposed	-

Aggravated Medical Condition

: None known.

12. ECOLOGICAL INFORMATION

Product : The product itself has not been tested.

Toxicity

The ingredients in this formula have been reviewed and no adverse impact to the environment is expected when used according to label directions.

Toxicity to fish

according to Hazard Communication Standard; 29 CFR 1910.1200

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Components	End point	Species	Value	Exposure time
Sulfuric acid, mono-C10-16- alkyl esters, sodium salts	LC50 Read- across (Analogy)		> 10 mg/l	
Alkylpolyglycoside C10-16	semi- static test LC50 ISO 7346/2	Fish	1 - 10 mg/l	
	NOEC	Fish	> 1 - 10 mg/l	
Lauryl dimethyl amine oxide	semi- static test LC50	Danio rerio (zebra fish)	31.8 mg/l	96 h
	flow- through test NOEC Read- across (Analogy)	Pimephales promelas (fathead minnow)	0.42 mg/l	302 d
Glycerin	LC50	Oncorhynchus mykiss (rainbow trout)	51,000 - 57,000 mg/l	96 h
Fragrance - Trade Secret	No data available			

according to Hazard Communication Standard; 29 CFR 1910.1200

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Toxicity to aquatic invertebrates

Components	End point	Species	Value	Exposure time
Sulfuric acid, mono-C10-16- alkyl esters, sodium salts	No data available			
Alkylpolyglycoside C10-16	static test EC50	Daphnia magna (Water flea)	7 mg/l	48 h
	NOEC	Daphnia	> 1 - 10 mg/l	
Lauryl dimethyl amine oxide	static test EC50	Daphnia magna (Water flea)	3.9 mg/l	48 h
	flow- through test NOEC Read- across (Analogy) OECD Guideline 211 (Daphnia magna Reproduct ion Test)	Daphnia magna (Water flea)	0.7 mg/l	21 d
Glycerin	LC50	Daphnia magna (Water flea)	1,955 mg/l	48 h
Fragrance - Trade Secret	No data available			

Toxicity to aquatic plants

according to Hazard Communication Standard; 29 CFR 1910.1200

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Components	End point	Species	Value	Exposure time
Sulfuric acid, mono-C10-16-alkyl esters, sodium salts	No data available			
Alkylpolyglycoside C10-16	static test EC50	Desmodesmus subspicatus (green algae)	12.5 mg/l	72 h
Lauryl dimethyl amine oxide	static test EC50	Pseudokirchneriella subcapitata (green algae)	0.2 mg/l	72 h
Glycerin	No data available	Scenedesmus quadricauda (Green algae)	> 10,000 mg/l	168 h
Fragrance - Trade Secret	No data available			

Persistence and degradability

Component	Biodegradation	Exposure time	Summary
Sulfuric acid, mono-C10-16- alkyl esters, sodium salts	100 %		Readily biodegradable.
Alkylpolyglycoside C10-16	> 70 %	28 d	Readily biodegradable.
Lauryl dimethyl amine oxide	96 %	19 d	
Glycerin	94 %	24 h	Readily biodegradable.
Fragrance - Trade Secret	No data available		

Bioaccumulative potential

Component	Bioconcentration factor (BCF)	Partition Coefficient n- Octanol/water (log)
Sulfuric acid, mono-C10-16- alkyl esters, sodium salts		
Alkylpolyglycoside C10-16	No data available	<= -0.07
Lauryl dimethyl amine oxide	> 87	< 2.7
Glycerin	0.89 estimated	-1.76
Fragrance - Trade Secret	No data available	No data available

according to Hazard Communication Standard; 29 CFR 1910.1200

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Mobility

Component	End point	Value
Sulfuric acid, mono-C10-16- alkyl esters, sodium salts	No data available	
Alkylpolyglycoside C10-16	log Koc	1.7
Lauryl dimethyl amine oxide	Koc	> 2113 Calculated
Glycerin	No data available	-
Fragrance - Trade Secret	No data available	

PBT and vPvB assessment

Component	Results
Sulfuric acid, mono-C10-16- alkyl esters, sodium salts	Not fulfilling PBT and vPvB criteria
Alkylpolyglycoside C10-16	Not fulfilling PBT and vPvB criteria
Lauryl dimethyl amine oxide	Not fulfilling PBT and vPvB criteria
Glycerin	Not fulfilling PBT and vPvB criteria
Fragrance - Trade Secret	Not fulfilling PBT and vPvB criteria

Other adverse effects : None known.

13. DISPOSAL CONSIDERATIONS

Observe all applicable Federal, Provincial and State regulations and Local/Municipal ordinances regarding disposal.

Consumer may discard empty container in trash, or recycle where facilities exist.

according to Hazard Communication Standard; 29 CFR 1910.1200

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14. TRANSPORT INFORMATION

Please refer to the Bill of Lading/receiving documents for up-to-date shipping information.

Land transport

Not classified as dangerous in the meaning of transport regulations.

Sea transport

Not classified as dangerous in the meaning of transport regulations.

Air transport

Not classified as dangerous in the meaning of transport regulations.

15. REGULATORY INFORMATION

Notification status : All ingredients of this product are listed or are excluded from

listing on the U.S. Toxic Substances Control Act (TSCA)

Chemical Substance Inventory.

Notification status : All ingredients of this product comply with the New Substances

Notification requirements under the Canadian Environmental

Protection Act (CEPA).

California Prop. 65 : This product is not subject to the reporting requirements under

California's Proposition 65.

according to Hazard Communication Standard; 29 CFR 1910.1200

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16. OTHER INFORMATION

HMIS Ratings

HIVIS Ratings		
Health	1	
Flammability	0	
Reactivity	0	

NFPA Ratings

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Health	1	
Fire	0	
Reactivity	0	
Special	-	

This information is being provided in accordance with the Occupational Safety and Health Administration (OSHA) regulation (29 CFR 1910.1200). The information supplied is designed for workplaces where product use and frequency of exposure exceeds that established for the labeled consumer use.

Further information

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