

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

MMCD Autodish Lemon Verbena US

Version 1.0

Print Date 06/29/2021

Revision Date 04/27/2018

SDS Number 350000034537

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Product name : MMCD Autodish Lemon Verbena US

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 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 irritation	Category 2	Causes skin irritation.
Eye irritation	Category 2A	Causes serious eye irritation.
Respiratory sensitisation	Category 1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Labelling

Hazard symbols

Exclamation mark
Health hazard

Signal word

Danger

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Hazard statements

Causes skin irritation.

Causes serious eye irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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 INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

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

If skin irritation occurs: Get medical advice/ attention.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/ attention.

Take off contaminated clothing and wash before reuse.

Dispose of contents/ container to an approved incineration plant.

Wear protective gloves/ eye protection/ face protection.

In case of inadequate ventilation wear respiratory protection.

Avoid breathing spray.

Wash hands thoroughly after handling.

Other hazards : None identified

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No.	Weight percent
Sodium sulfate	7757-82-6	30.00 - 60.00
Sodium carbonate	497-19-8	10.00 - 30.00
Sodium silicate	1344-09-8	10.00 - 30.00
Sodium percarbonate peroxyhydrate	15630-89-4	5.00 - 10.00
Subtilisins (proteolytic enzymes)	9014-01-1	0.10 - 1.00
Citronella oil	8000-29-1	0.0001 - 0.10

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

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

4. FIRST AID MEASURES

Description of first aid measures

- Eye contact** : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/ attention.
- Skin contact** : Wash off with plenty of water. Take off contaminated clothing and wash before reuse.
- Inhalation** : IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
- Ingestion** : No special requirements

Most important symptoms and effects, both acute and delayed

- Eyes** : Causes serious eye irritation.
- Skin effect** : Causes skin irritation.
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.

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5. FIREFIGHTING MEASURES

Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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. Wash thoroughly after handling.

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

Methods and materials for containment and cleaning up : Sweep up and shovel into suitable containers for disposal. 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. Avoid breathing vapours, mist or gas. In case of insufficient ventilation, wear suitable respiratory equipment. Wash thoroughly after handling.

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

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Components	CAS-No.	mg/m ³	ppm	Non-standard units	Basis
Sodium carbonate	497-19-8	10 mg/m ³	-	-	SUPPLIER
Sodium percarbonate peroxyhydrate	15630-89-4	5 mg/m ³	-	-	SUPPLIER

Personal protective equipment

- Respiratory protection** : Use only with adequate ventilation. Substantial amounts of mist/vapors can be controlled with local exhaust ventilation or respiratory protection.
- Hand protection** : Wear suitable gloves.
- Eye protection** : Safety glasses with side-shields
- Skin and body protection** : No special requirements.
- Hygiene measures** : Handle in accordance with good industrial hygiene and safety practice. Wash thoroughly after handling. Smoking, eating and drinking should be prohibited in the application area.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Form** : solid
- Color** : white
- Odour** : Citrus
- Odour Threshold** : Test not applicable for this product type

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pH : Test not applicable for this product type

Melting point/freezing point : Test not applicable for this product type

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.

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

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

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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. %)*	:	1.1 % - additional exemptions may apply *as defined by US Federal and State Consumer Product Regulations	:
Other information	:	None identified	:

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	:	Stable under recommended storage conditions.	:
Conditions to avoid	:	Direct sources of heat.	:
Incompatible materials	:	None known.	:
Hazardous decomposition products	:	Thermal decomposition can lead to release of irritating gases and vapours.	:

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11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 > 5000 mg/kg

Acute inhalation toxicity : LC50 2.0 mg/L

Acute dermal toxicity : LD50 2725 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
Acute toxicity	No classification proposed	Inhalation - Vapour
Acute toxicity	No classification proposed	Inhalation - Gas
Skin irritation	Category 2	-
Eye irritation	Category 2A	-
Skin sensitisation	No classification proposed	-
Respiratory sensitisation	Category 1	-
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	No classification proposed	-

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toxicity - repeated exposure		
Aspiration hazard	No classification proposed	-

Aggravated Medical Condition : Individuals with chronic respiratory disorders such as asthma, chronic bronchitis, emphysema, etc. may be more susceptible to irritating effects

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

Components	End point	Species	Value	Exposure time
Sodium sulfate	static test LC50	Lepomis macrochirus	3,040 - 4,380 mg/l	96 h
Sodium carbonate	static test LC50	Lepomis macrochirus	300 mg/l	96 h
Sodium silicate	LC50	Oncorhynchus mykiss (rainbow trout)	260 - 310 mg/l	96 h
Sodium percarbonate peroxyhydrate	semi- static test LC50 Measured	Pimephales promelas (fathead minnow)	70.7 mg/l	96 h
Subtilisins (proteolytic enzymes)	LC50 Measured OECD Test	Oncorhynchus mykiss (rainbow trout)	8.2 mg/l	96 h

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	Guideline 203 flow-through test NOEC OECD Guideline 210 (Fish, Early-Life Stage Toxicity Test)	Pimephales promelas (fathead minnow)	0.042 mg/l	
Citronella oil	No data available			

Toxicity to aquatic invertebrates

Components	End point	Species	Value	Exposure time
Sodium sulfate	EC50	Daphnia magna (Water flea)	650 mg/l	96 h
Sodium carbonate	semi-static test EC50	Ceriodaphnia sp.	200 - 227 mg/l	48 h
Sodium silicate	static test EC50	Daphnia magna (Water flea)	1,700 mg/l	48 h
Sodium percarbonate peroxyhydrate	semi-static test EC50 Measured	daphnia pulex	4.9 mg/l	48 h

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Subtilisins (proteolytic enzymes)	semi-static EC50 Measured OECD Test Guideline 202	Daphnia magna (Water flea)	0.170 mg/l	48 h
	flow-through test NOEC Measured OECD Guideline 211 (Daphnia magna Reproduction Test)	Daphnia magna	0.324 mg/l	21 d
Citronella oil	No data available			

Toxicity to aquatic plants

Components	End point	Species	Value	Exposure time
Sodium sulfate	No data available			
Sodium carbonate	No data available			
Sodium silicate	EC50	Desmodesmus subspicatus (green algae)	> 345.4 mg/l	72 h
Sodium percarbonate peroxyhydrate	No data available			
Subtilisins (proteolytic	ErC50	Pseudokirchneriella	0.83 mg/l	72 h

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enzymes)	Measured OECD Test Guideline 201 NOEC Measured OECD Test Guideline 201	subcapitata (green algae) Pseudokirchneriella subcapitata (green algae)	0.317 mg/l	72 h
Citronella oil	No data available			

Persistence and degradability

Component	Biodegradation	Exposure time	Summary
Sodium sulfate	No data available		
Sodium carbonate	No data available		
Sodium silicate	No data available		
Sodium percarbonate peroxyhydrate	No data available		
Subtilisins (proteolytic enzymes)	100 %	29 d	Readily biodegradable.
Citronella oil	No data available		

Bioaccumulative potential

Component	Bioconcentration factor (BCF)	Partition Coefficient n- Octanol/water (log)
Sodium sulfate	No data available	-4.38
Sodium carbonate	No data available	No data available
Sodium silicate	No data available	No data available
Sodium percarbonate peroxyhydrate	No data available	No data available
Subtilisins (proteolytic enzymes)	No data available	-3.1 Measured
Citronella oil	No data available	No data available

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Mobility

Component	End point	Value
Sodium sulfate	No data available	
Sodium carbonate	No data available	
Sodium silicate	No data available	
Sodium percarbonate peroxyhydrate	No data available	
Subtilisins (proteolytic enzymes)	No data available	
Citronella oil	No data available	-

PBT and vPvB assessment

Component	Results
Sodium sulfate	Not fulfilling PBT and vPvB criteria
Sodium carbonate	Not fulfilling PBT and vPvB criteria
Sodium silicate	Not fulfilling PBT and vPvB criteria
Sodium percarbonate peroxyhydrate	Not fulfilling PBT and vPvB criteria
Subtilisins (proteolytic enzymes)	Not fulfilling PBT and vPvB criteria
Citronella oil	Not fulfilling PBT and vPvB criteria

Other adverse effects : None known.

13. DISPOSAL CONSIDERATIONS

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

14. TRANSPORT INFORMATION

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

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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.

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

16. OTHER INFORMATION

HMIS Ratings

Health	2
Flammability	0
Reactivity	0

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NFPA Ratings

Health	2
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

This document has been prepared using data from sources considered to be technically reliable. It does not constitute a warranty, expressed or implied, as to the accuracy of the information contained herein. Actual conditions of use are beyond the seller's control. User is responsible to evaluate all available information when using product for any particular use and to comply with all Federal, State, Provincial and Local laws and regulations.

Prepared by	Global Safety Assessment & Regulatory Affairs (GSARA)
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