

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

MMCD Dishliquid-Radish

Version 1.3

Print Date 06/29/2021

Revision Date 04/03/2020

SDS Number 350000025159

1. PRODUCT AND COMPANY IDENTIFICATION

Product information

Product name : MMCD Dishliquid-Radish

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

This product does not meet the criteria for classification in any hazard class according to regulation OSHA 29 CFR 1910.1200.

Labelling

Precautionary statements

Other hazards : None identified

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS-No.	Weight percent
Sulfuric acid, mono-C10-16-alkyl	68585-47-7	5.00 - 10.00

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

MMCD Dishliquid-Radish

Version 1.3

Print Date 06/29/2021

Revision Date 04/03/2020

SDS Number 350000025159

esters, sodium salts		
Alkylpolyglycoside C10-16	110615-47-9	5.00 - 10.00
Glycerin	56-81-5	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** : No special requirements
- 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** : No adverse effects expected when used as directed.
- Inhalation** : No adverse effects expected when used as directed.
- Ingestion** : 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.

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

MMCD Dishliquid-Radish

Version 1.3

Print Date 06/29/2021

Revision Date 04/03/2020

SDS Number 350000025159

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 : 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.
KEEP OUT OF REACH OF CHILDREN AND PETS.

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.

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

MMCD Dishliquid-Radish

Version 1.3

Print Date 06/29/2021

Revision Date 04/03/2020

SDS Number 350000025159

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

Components	CAS-No.	mg/m ³	ppm	Non-standard units	Basis
Glycerin	56-81-5	15 mg/m ³	-	-	OSHA TWA
Glycerin	56-81-5	5 mg/m ³	-	-	OSHA TWA

Personal protective equipment

Respiratory protection : No special requirements.

Hand protection : No special requirements.

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 : spicy

Odour Threshold : Test not applicable for this product type

pH : 7.40 - 7.90

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

MMCD Dishliquid-Radish

Version 1.3

Print Date 06/29/2021

Revision Date 04/03/2020

SDS Number 350000025159

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.
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	: 1.01 g/cm ³ 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	: 400 - 600 mPa.s

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

MMCD Dishliquid-Radish

Version 1.3

Print Date 06/29/2021

Revision Date 04/03/2020

SDS Number 350000025159

Viscosity, kinematic	:	Test not applicable for this product type	:
Oxidizing properties	:	Test not applicable for this product type	:
Volatile Organic Compounds Total VOC (wt. %)*	:	0.7 % - 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	:	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	:	Stable under recommended storage conditions.	:

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	:	LD50 > 5000 mg/kg	:
----------------------------	---	-------------------	---

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

MMCD Dishliquid-Radish

Version 1.3

Print Date 06/29/2021

Revision Date 04/03/2020

SDS Number 350000025159

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
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	No classification proposed	-
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	-

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

MMCD Dishliquid-Radish

Version 1.3

Print Date 06/29/2021

Revision Date 04/03/2020

SDS Number 350000025159

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

Components	End point	Species	Value	Exposure time
Sulfuric acid, mono-C10-16-alkyl esters, sodium salts	LC50	Oncorhynchus mykiss (rainbow trout)	3.6 mg/l	96 h
	NOEC	Pimephales promelas (fathead minnow)	1.357 mg/l	42 d
Alkylpolyglycoside C10-16	semi-static test LC50 ISO 7346/2	Fish	1 - 10 mg/l	96 h
	NOEC	Fish	> 1 - 10 mg/l	
Glycerin	LC50	Oncorhynchus mykiss (rainbow trout)	51,000 - 57,000 mg/l	96 h

Toxicity to aquatic invertebrates

Components	End point	Species	Value	Exposure time
Sulfuric acid, mono-C10-16-alkyl esters, sodium salts	EC50	Daphnia magna (Water flea)		48 h

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

MMCD Dishliquid-Radish

Version 1.3

Print Date 06/29/2021

Revision Date 04/03/2020

SDS Number 350000025159

			1.18 - 2.21 mg/l	
	EC10		0.24 mg/l	48 d
Alkylpolyglycoside C10-16	static test EC50	Daphnia magna (Water flea)	7 mg/l	48 h
	NOEC	Daphnia	> 1 - 10 mg/l	
Glycerin	LC50	Daphnia magna (Water flea)	1,955 mg/l	48 h

Toxicity to aquatic plants

Components	End point	Species	Value	Exposure time
Sulfuric acid, mono-C10-16-alkyl esters, sodium salts	NOEC	Scenedesmus quadricauda (Green algae)	0.6 mg/l	72 h
Alkylpolyglycoside C10-16	static test EC50	Desmodesmus subspicatus (green algae)	12.5 mg/l	72 h
Glycerin	EC10	Microcystis aeruginosa (blue-green algae)	2,900 mg/l	168 h

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.
Glycerin	94 %	24 h	Readily biodegradable.

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

MMCD Dishliquid-Radish

Version 1.3

Print Date 06/29/2021

Revision Date 04/03/2020

SDS Number 350000025159

--	--	--	--

Bioaccumulative potential

Component	Bioconcentration factor (BCF)	Partition Coefficient n-Octanol/water (log)
Sulfuric acid, mono-C10-16-alkyl esters, sodium salts	34.31	2.42
Alkylpolyglycoside C10-16	No data available	<= -0.07
Glycerin	0.89 estimated	-1.76

Mobility

Component	End point	Value
Sulfuric acid, mono-C10-16-alkyl esters, sodium salts	No data available	
Alkylpolyglycoside C10-16	log Koc	1.7
Glycerin	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
Glycerin	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.

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

MMCD Dishliquid-Radish

Version 1.3

Print Date 06/29/2021

Revision Date 04/03/2020

SDS Number 350000025159

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.

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

16. OTHER INFORMATION

HMIS Ratings

Health	1
Flammability	0
Reactivity	0

Safety Data Sheet

according to Hazard Communication Standard; 29 CFR 1910.1200

MMCD Dishliquid-Radish

Version 1.3

Print Date 06/29/2021

Revision Date 04/03/2020

SDS Number 350000025159

NFPA Ratings

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

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)
-------------	---