



Safety Data Sheet

Issue Date: 27-Feb-2026

Revision Date: 04-Mar-2026

Version 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Product Name TMS02 Madoov Orange All-Purpose Cleaner

Other means of identification

SDS # TMS02

Recommended use of the chemical and restrictions on use

Recommended use All-purpose cleaner.

Uses Advised Against For industrial or institutional use only.

Details of the supplier of the safety data sheet

Supplier Address

TRION Chemicals.
P.O. Box 410
St. Charles, IL 60174
www.trionchemicals.com

Emergency telephone number

Company Phone Number 855-513-1314 (to reorder)
Emergency Telephone INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Orange liquid

Physical state Liquid

Odor Orange

Classification

This product is not considered hazardous by the US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200).

Label elements

Hazard statements

This product is not considered hazardous by the US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200).

Other Information

Harmful to aquatic life with long lasting effects.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No.	Weight-%
Potassium hydroxide	1310-58-3	<0.1
Benzyl Acetate	140-11-4	<0.1
Diphenyl Oxide	101-84-8	<0.1
Subtilisin	9014-01-1	<0.1

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes.
Inhalation	Remove to fresh air.
Ingestion	Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms	None known.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Not determined.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment as required.
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Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.
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Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
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Methods for Clean-Up	Keep in suitable, closed containers for disposal.
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7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	Handle in accordance with good industrial hygiene and safety practice.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.
Incompatible Materials	None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Exposure Guidelines**

Chemical name	ACGIH TLV	OSHA PEL	NIOSH
Citral 5392-40-5	TWA: 5 ppm inhalable fraction and vapor pSk DS	-	-
Potassium hydroxide 1310-58-3	Ceiling: 2 mg/m ³	(vacated) Ceiling: 2 mg/m ³	Ceiling: 2 mg/m ³
Benzyl Acetate 140-11-4	TWA: 10 ppm	-	-
Diphenyl Oxide 101-84-8	TWA: 1 ppm vapor STEL: 2 ppm vapor fraction	TWA: 1 ppm vapor TWA: 7 mg/m ³ vapor (vacated) TWA: 1 ppm vapor (vacated) TWA: 7 mg/m ³ vapor	TWA: 1 ppm; vapor TWA: 7 mg/m ³ ; vapor IDLH: 100 ppm vapor
Subtilisin 9014-01-1	Ceiling: 0.00006 mg/m ³ crystalline active enzyme	(vacated) STEL: 0.00006 mg/m ³ 60 min	STEL: 0.00006 mg/m ³ 60 min Subtilisins

Appropriate engineering controls

Engineering Controls	Apply technical measures to comply with the occupational exposure limits.
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Individual protection measures, such as personal protective equipment

Eye/Face Protection	Refer to 29 CFR 1910.133 for eye and face protection regulations.
Skin and Body Protection	Refer to 29 CFR 1910.138 for appropriate skin and body protection.
Respiratory Protection	Refer to 29 CFR 1910.134 for respiratory protection requirements.
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	Liquid	Odor	Orange
Appearance	Orange liquid	Odor Threshold	Not determined
Color	Orange		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	7.0-8.0	
Melting point / freezing point	No data available	
Initial boiling point and boiling range	No data available	
Flash point	No data available	
Evaporation rate	Not determined	
Flammability (Solid, Gas)	Not determined	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>

Lower flammability or explosive limits	No data available
Vapor Pressure	Not determined
Relative vapor density	No data available
Relative Density	1.00
Water Solubility	Not determined
Solubility in other solvents	Not determined
Partition Coefficient	Not determined
Autoignition temperature	No data available
Decomposition temperature	Not determined
Kinematic viscosity	Not applicable
Dynamic viscosity	Not determined
Particle characteristics	No data available
Explosive Properties	Not determined
Oxidizing Properties	Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible materials

None known based on information supplied.

Hazardous decomposition products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Avoid contact with eyes.

Skin Contact Avoid contact with skin.

Inhalation Do not inhale.

Ingestion Do not ingest.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Citrus Aurantium Dulcis (Orange) Peel Extract 8008-57-9	= 4400 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Decanal 112-31-2	= 3730 mg/kg (Rat)	= 5040 mg/kg (Rabbit)	-

1,2-Benzisothiazolin-3-one 2634-33-5	= 1020 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
Citral 5392-40-5	= 4960 mg/kg (Rat)	= 2250 mg/kg (Rabbit)	-
Octanal 124-13-0	= 4616 mg/kg (Rat)	= 5207 mg/kg (Rabbit)	> 4.7 mg/L (Rat) 4 h
Potassium hydroxide 1310-58-3	= 284 mg/kg (Rat)	-	-
Benzyl Acetate 140-11-4	= 2490 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Nonanal 124-19-6	> 5 g/kg (Rat)	> 5000 mg/kg (Rabbit)	0.6 - 3.8 mg/L (Rat) 4 h
1,2 Propanediol 57-55-6	= 20 g/kg (Rat)	= 20800 mg/kg (Rabbit)	-
2,6-Dimethyl-7-octen-2-ol 18479-58-8	= 3600 mg/kg (Rat)	> 5 g/kg (Rabbit)	-
Vanillin 121-33-5	= 3978 mg/kg (Rat)	> 5010 mg/kg (Rabbit)	-
Citronellol 106-22-9	= 3450 mg/kg (Rat)	= 2650 mg/kg (Rabbit)	-
Citronellal 106-23-0	= 2420 mg/kg (Rat)	> 2.5 g/kg (Rabbit)	-
1-octanol 111-87-5	> 5000 mg/kg (Rat)	> 5 g/kg (Rabbit)	-
Orange Terpenes 8028-48-6	-	> 5000 mg/kg (Rabbit)	-
Clove Oil 8000-34-8	= 1370 mg/kg (Rat)	= 1200 mg/kg (Rabbit)	-
Alkyloxypolyethyleneoxyethanol 84133-50-6	= 2100 mg/kg (Rat)	-	-
Allyl hexanoate 123-68-2	-	= 820 mg/kg (Rabbit)	-
Lauric aldehyde 112-54-9	= 23 g/kg (Rat)	> 2000 mg/kg (Rabbit)	-
Amyl Salicylate 2050-08-0	= 4100 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
3-Methyl-4-(2,6,6-Trimethyl-2-Cyclohexen-1-YL)-3-Buten-2-One 127-51-5	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Diphenyl Oxide 101-84-8	= 2450 mg/kg (Rat)	> 7940 mg/kg (Rabbit)	-
2-Methyl-3-(p-isopropylphenyl)propionaldehyde 103-95-7	= 3810 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
Cinnamaldehyde 104-55-2	= 2220 mg/kg (Rat)	= 1260 mg/kg (Rabbit)	-
Rhodamine B 81-88-9	= 174 mg/kg (Rat)	-	-
Subtilisin 9014-01-1	= 3700 mg/kg (Rat)	-	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity

Group 3 IARC components are "not classifiable as human carcinogens".

Chemical name	ACGIH	IARC	NTP	OSHA
Citral 5392-40-5	A4 - Not Classifiable as a Human Carcinogen			
Benzyl Acetate 140-11-4	A4 - Not Classifiable as a Human Carcinogen	Group 3 - Unclassifiable as to carcinogenicity in humans		
Rhodamine B 81-88-9		Group 3 - Unclassifiable as to carcinogenicity in humans		

Numerical measures of toxicity

Not determined.

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Harmful to aquatic life with long lasting effects.

Component Information

Not determined.

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Chemical name	Partition coefficient
Potassium hydroxide 1310-58-3	0.83
Benzyl Acetate 140-11-4	1.96
Diphenyl Oxide 101-84-8	4.21
Subtilisin 9014-01-1	499

Other adverse effects

Not determined.

13. DISPOSAL CONSIDERATIONS**Disposal methods****Disposal of Wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status This product contains one or more substances that are listed with the State of California as a hazardous waste

Chemical name	California Hazardous Waste Status
Potassium hydroxide 1310-58-3	Toxic Corrosive

14. TRANSPORT INFORMATION**Note**

Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

Not regulated

IATA

Not regulated

IMDG

Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
All other listed ingredients	X	ACTIVE	X	X	X	X	X	X	X
Citrus Aurantium Dulcis (Orange) Peel Extract	X	ACTIVE	X			X	X	X	X
Orange Terpenes	X		X	X		X	X	X	X
Clove Oil	X	ACTIVE	X			X	X	X	X
Subtilisin	X	ACTIVE	X	X		X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing Chemicals Inventory

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	Reportable Quantity (RQ)
Potassium hydroxide 1310-58-3	1000 lb / 54 kg (final RQ)		RQ 1000 lb final RQ RQ 454 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Potassium hydroxide	1000 lb			X

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical name	California Proposition 65
Rhodamine B - 81-88-9	Carcinogen

U.S. State Right-to-Know Regulations

This product contains the following State Right-to-Know chemicals:

Chemical name	New Jersey	Massachusetts	Pennsylvania
Octanal 124-13-0		X	
Potassium hydroxide 1310-58-3	X	X	X
Benzyl Acetate	X		

140-11-4			
1,2 Propanediol 57-55-6	X		X
1-octanol 111-87-5			X
Diphenyl Oxide 101-84-8	X	X	X
Rhodamine B 81-88-9	X	X	X

16. OTHER INFORMATION

NFPA HMIS

Health hazards -
Health hazards 1

Flammability -
Flammability 0

Instability -
Physical hazards 0

Special hazards -
Personal protection B-

Issue Date: 27-Feb-2026
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Revision Note: New format

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. 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 relates 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 in the text.

End of Safety Data Sheet