

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Twister Dishwashing Liquid Lime

Creation date	04th November 2019	Version	2.0
Revision date	23rd March 2022		

SECTION 1: Identification of the substance/mixture and of the company/undertaking

- 1.1. Product identifier**
Twister Dishwashing Liquid Lime
Substance / mixture mixture
Number 996
UFI KHR2-W0YS-D000-N40G
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Mixture's intended use
Cleaning agent. The product is intended for sale to the consumer and the professional/industrial use.
Main intended use
PC-DET-2.2 Fabric softeners
Mixture uses advised against
The product should not be used in ways other than those referred in Section 1.
- 1.3. Details of the supplier of the safety data sheet**
Supplier
Name or trade name UNION COSMETIC s.r.o.
Address Za Tratí 975, Třebechovice pod Orebem, 503 46
Czech Republic
Identification number (CRN) 25965841
VAT Reg No CZ25965841
Phone +420 495 592 228
E-mail k.stanclova@unioncosmetic.cz
- Competent person responsible for the safety data sheet**
Name GRACILIS s.r.o.
E-mail info@gracilis.cz
- 1.4. Emergency telephone number**
European emergency number: 112

SECTION 2: Hazards identification

- 2.1. Classification of the substance or mixture**
Classification of the mixture in accordance with Regulation (EC) No 1272/2008
The mixture is classified as dangerous.
- Skin Sens. 1A, H317
Eye Irrit. 2, H319
Aquatic Chronic 3, H412
- Full text of all classifications and hazard statements is given in the section 16.
- Most serious adverse effects on human health and the environment**
May cause an allergic skin reaction. Causes serious eye irritation. Harmful to aquatic life with long lasting effects.
- 2.2. Label elements**
Hazard pictogram



Signal word
Warning

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Twister Dishwashing Liquid Lime

Creation date	04th November 2019	Version	2.0
Revision date	23rd March 2022		

Hazardous substances

(R)-p-mentha-1,8-diene
2-methylisothiazol-3(2H)-one

Hazard statements

H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 Wear protective gloves/eye protection.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/container to be handing over to the person authorized to dispose of waste or by returning to the supplier.

Supplemental information

5-<15 % anionic surfactants, perfumes, 1,2-benzisothiazol-3(2H)-on, 2-methylisothiazol-3(2H)-on, N-(3-aminopropyl)-N-dodecylpropan-1,3-diamin, Limonene

2.3. Other hazards

The mixture does not contain substances with endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. Mixture does not contain any substance meet the criteria for PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 (REACH) as amended.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Mixture contains these hazardous substances and substances with the highest permissible concentration in the working environment

Identification numbers	Substance name	Content in % weight	Classification according to Regulation (EC) No 1272/2008	Note
CAS: 68891-38-3 EC: 500-234-8 Registration number: 01-2119488639-16	alcohols C12-C14, ethoxylated, sulphated, sodium salts	<5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412 Specific concentration limit: Eye Dam. 1, H318: C ≥ 10 % Eye Irrit. 2, H319: 5 % ≤ C < 10 %	2
Index: 601-029-00-7 CAS: 5989-27-5 EC: 227-813-5 Registration number: 01-2119529223-47-XXXX	(R)-p-mentha-1,8-diene	≤0,2	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	1
Index: 613-326-00-9 CAS: 2682-20-4 EC: 220-239-6	2-methylisothiazol-3(2H)-one	<0,005	Acute Tox. 3, H301+H311 Skin Corr. 1B, H314 Skin Sens. 1A, H317 Eye Dam. 1, H318 Acute Tox. 2, H330 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1) EUH071 Specific concentration limit: Skin Sens. 1A, H317: C ≥ 0,0015 %	

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Twister Dishwashing Liquid Lime

Creation date	04th November 2019	Version	2.0
Revision date	23rd March 2022		

Notes

- Note C: Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.
- Substance of unknown or variable composition, complex reaction products or biological materials - UVCB.

Full text of all classifications and hazard statements is given in the section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Take care of your own safety. If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet.

If inhaled

Terminate the exposure immediately; move the affected person to fresh air. Protect the person against growing cold. Provide medical treatment if irritation, dyspnoea or other symptoms persist.

If on skin

Remove contaminated clothes. Wash the affected area with plenty of water, lukewarm if possible. Soap, soap solution or shampoo should be used if there is no skin injury. Provide medical treatment if skin irritation persists.

If in eyes

Rinse eyes immediately with a flow of running water, open the eyelids (also using force if needed); remove contact lenses immediately if worn by the affected person. Rinsing should continue at least for 10 minutes. Provide medical treatment, specialized if possible.

If swallowed

DO NOT INDUCE VOMITING - even the induced vomiting can cause complications as in case of detergents and other foaming substances.

4.2. Most important symptoms and effects, both acute and delayed

If inhaled

Not expected.

If on skin

May cause an allergic skin reaction.

If in eyes

Causes serious eye irritation.

If swallowed

Irritation, nausea.

4.3. Indication of any immediate medical attention and special treatment needed

Symptomatic treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Alcohol-resistant foam, carbon dioxide, powder, water spray jet, water mist.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise. Inhalation of hazardous degradation (pyrolysis) products may cause serious health damage.

5.3. Advice for firefighters

Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit only where personal (close) contact is likely. Use a self-contained breathing apparatus and full-body protective clothing. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Twister Dishwashing Liquid Lime

Creation date	04th November 2019	Version	2.0
Revision date	23rd March 2022		

SECTION 6: Accidental release measures

- 6.1. Personal precautions, protective equipment and emergency procedures**
Use personal protective equipment for work. Follow the instructions in the Sections 7 and 8. Prevent contact with skin and eyes.
- 6.2. Environmental precautions**
Prevent contamination of the soil and entering surface or ground water.
- 6.3. Methods and material for containment and cleaning up**
Spilled product should be covered with suitable (non-flammable) absorbing material (sand, diatomaceous earth, earth and other suitable absorption materials); to be contained in well closed containers and removed as per the Section 13. In the event of leakage of the substantial amount of the product, inform fire brigade and other competent bodies. After removal of the product, wash the contaminated site with plenty of water. Do not use solvents.
- 6.4. Reference to other sections**
See the Section 7, 8 and 13.

SECTION 7: Handling and storage

- 7.1. Precautions for safe handling**
Prevent contact with skin and eyes. Wash hands and exposed parts of the body thoroughly after handling. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Avoid release to the environment.
- 7.2. Conditions for safe storage, including any incompatibilities**
Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose.

Content	Packaging type	Material of package
1 l	bottle	

- 7.3. Specific end use(s)**
not available

SECTION 8: Exposure controls/personal protection

- 8.1. Control parameters**
The mixture contains no substances for which occupational exposure limits are set.
DNEL

alcohols C12-C14, ethoxylated, sulphated, sodium salts

Workers / consumers	Route of exposure	Value	Effect	Determining method
Consumers	Oral	15 mg/kg bw/day		
Consumers	Dermal	1650 mg/kg bw/day		
Workers	Dermal	2750 mg/kg bw/day		
Consumers	Inhalation	52 mg/m ³		
Workers	Inhalation	175 mg/m ³		

PNEC

alcohols C12-C14, ethoxylated, sulphated, sodium salts

Route of exposure	Value	Determining method
Freshwater environment	0.24 mg/l	
Seawater	0.024 mg/l	
Soil (agricultural)	0.946 mg/kg of dry substance of soil	

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Twister Dishwashing Liquid Lime

Creation date	04th November 2019	Version	2.0
Revision date	23rd March 2022		

alcohols C12-C14, ethoxylated, sulphated, sodium salts

Route of exposure	Value	Determining method
Microorganisms in wastewater treatment plants	10000 mg/l	

8.2. Exposure controls

Follow the usual measures intended for health protection at work and especially for good ventilation. This can be achieved only by local suction or efficient general ventilation. Do not eat, drink and smoke during work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest.

Eye/face protection

Protective goggles.

Skin protection

Hand protection: Protective gloves resistant to the product. Contaminated skin should be washed thoroughly.

Respiratory protection

It is not needed.

Thermal hazard

Not available.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	liquid
Colour	green
Odour	according to fragrance
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	data not available
Flammability	data not available
Lower and upper explosion limit	data not available
Flash point	data not available
Auto-ignition temperature	data not available
Decomposition temperature	data not available
pH	6-7 (undiluted)
Kinematic viscosity	data not available
Viscosity	30-50 (Ø 7 mm)
Solubility in water	soluble
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	data not available

9.2. Other information

not available

SECTION 10: Stability and reactivity

10.1. Reactivity

not available

10.2. Chemical stability

The product is stable under normal conditions.

10.3. Possibility of hazardous reactions

Unknown.

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Twister Dishwashing Liquid Lime

Creation date	04th November 2019	Version	2.0
Revision date	23rd March 2022		

10.4. Conditions to avoid

The product is stable and no degradation occurs under normal use. Protect against flames, sparks, overheating and against frost.

10.5. Incompatible materials

Protect against strong acids, bases and oxidizing agents.

10.6. Hazardous decomposition products

Not developed under normal uses. Dangerous outcomes such as carbon monoxide and carbon dioxide are formed at high temperature and in fire.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

No toxicological data is available for the mixture.

Acute toxicity

Based on available data the classification criteria are not met.

2-methylisothiazol-3(2H)-one

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD ₅₀	120 mg/kg		Rat	
Dermal	LD ₅₀	242 mg/kg		Rat	
Inhalation (dust/mist)	LC ₅₀	0.11 mg/l	4 hour	Rat	

alcohols C12-C14, ethoxylated, sulphated, sodium salts

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD ₅₀	>2500 mg/kg		Rat	
Dermal	LD ₅₀	>2000 mg/kg		Rat	
Dermal	LD ₅₀	>2000 mg/kg		Rabbit	

Skin corrosion/irritation

Based on available data the classification criteria are not met.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

May cause an allergic skin reaction.

Germ cell mutagenicity

Based on available data the classification criteria are not met.

Carcinogenicity

Based on available data the classification criteria are not met.

Reproductive toxicity

Based on available data the classification criteria are not met.

Toxicity for specific target organ - single exposure

Based on available data the classification criteria are not met.

Toxicity for specific target organ - repeated exposure

Based on available data the classification criteria are not met.

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Twister Dishwashing Liquid Lime

Creation date	04th November 2019	Version	2.0
Revision date	23rd March 2022		

Aspiration hazard

Based on available data the classification criteria are not met.

11.2. Information on other hazards

not available

SECTION 12: Ecological information

12.1. Toxicity

Acute toxicity

Harmful to aquatic life with long lasting effects.

2-methylisothiazol-3(2H)-one

Parameter	Value	Time of exposure	Species	Environment
LC ₅₀	5.45 mg/l	96 hour	Fishes (Branchydanio rerio)	
EC ₅₀	0.0695 mg/l	48 hour	Fishes (Skeletonema costatum)	

alcohols C12-C14, ethoxylated, sulphated, sodium salts

Parameter	Value	Time of exposure	Species	Environment
LC ₅₀	7.1 mg/l	96 hour	Fishes	
EC ₅₀	27 mg/l	72 hour	Algae	
EC ₅₀	7.2 mg/l	48 hour	Daphnia (Daphnia magna)	
NOEC	1 mg/l		Fishes	
NOEC	0.27 mg/l		Daphnia (Daphnia magna)	

12.2. Persistence and degradability

Biodegradability

alcohols C12-C14, ethoxylated, sulphated, sodium salts

Parameter	Value	Time of exposure	Environment	Result
	>60 %	28 day		

The mixture is biodegradable.

12.3. Bioaccumulative potential

alcohols C12-C14, ethoxylated, sulphated, sodium salts

Parameter	Value	Time of exposure	Species	Environment	Surrounding temperature [°C]
Log Pow	-1.38				

Not available.

12.4. Mobility in soil

Not available.

12.5. Results of PBT and vPvB assessment

Product does not contain any substance meeting the criteria for PBT or vPvB in accordance with the Annex XIII of Regulation (EC) No 1907/2006 (REACH) as amended.

12.6. Endocrine disrupting properties

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Twister Dishwashing Liquid Lime

Creation date	04th November 2019	Version	2.0
Revision date	23rd March 2022		

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12.7. Other adverse effects

Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Hazard of environmental contamination; dispose of the waste in accordance with the local and/or national regulations. Proceed in accordance with valid regulations on waste disposal. Any unused product and contaminated packaging should be put in labelled containers for waste collection and submitted for disposal to a person authorised for waste removal (a specialized company) that is entitled for such activity. Do not empty unused product in drainage systems. The product must not be disposed of with municipal waste. Empty containers may be used at waste incinerators to produce energy or deposited in a dump with appropriate classification. Perfectly cleaned containers can be submitted for recycling.

Waste management legislation

Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste, as amended. Decision 2000/532/EC establishing a list of wastes, as amended.

SECTION 14: Transport information

14.1. UN number or ID number

not subject to transport regulations

14.2. UN proper shipping name

not relevant

14.3. Transport hazard class(es)

not relevant

14.4. Packing group

not relevant

14.5. Environmental hazards

not relevant

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not relevant

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended. REGULATION (EC) No 648/2004 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on detergents, as amended.

15.2. Chemical safety assessment

not available

SECTION 16: Other information

A list of standard risk phrases used in the safety data sheet

H226

Flammable liquid and vapour.

H314

Causes severe skin burns and eye damage.

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Twister Dishwashing Liquid Lime

Creation date	04th November 2019	Version	2.0
Revision date	23rd March 2022		

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
H301+H311	Toxic if swallowed or in contact with skin.

Guidelines for safe handling used in the safety data sheet

P101	If medical advice is needed, have product container or label at hand.
P102	Keep out of reach of children.
P280	Wear protective gloves/eye protection.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents/container to by handing over to the person authorized to dispose of waste or by returning to the supplier.

A list of additional standard phrases used in the safety data sheet

EUH071	Corrosive to the respiratory tract.
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Other important information about human health protection

The product must not be - unless specifically approved by the manufacturer/importer - used for purposes other than as per the Section 1. The user is responsible for adherence to all related health protection regulations.

Key to abbreviations and acronyms used in the safety data sheet

ADR	European agreement concerning the international carriage of dangerous goods by road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substance and mixtures
DNEL	Derived no-effect level
EC ₅₀	Concentration of a substance when it is affected 50% of the population
EINECS	European Inventory of Existing Commercial Chemical Substances
EmS	Emergency plan
ES	Identification code for each substance listed in EINECS
EU	European Union
EuPCS	European Product Categorisation System
IATA	International Air Transport Association
IBC	International Code For The Construction And Equipment of Ships Carrying Dangerous Chemicals
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
INCI	International Nomenclature of Cosmetic Ingredients
ISO	International Organization for Standardization
IUPAC	International Union of Pure and Applied Chemistry
LC ₅₀	Lethal concentration of a substance in which it can be expected death of 50% of the population
LD ₅₀	Lethal dose of a substance in which it can be expected death of 50% of the population
log K _{ow}	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution from Ships
NOEC	No observed effect concentration
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration

SAFETY DATA SHEET



according to Regulation (EC) No 1907/2006 (REACH) as amended

Twister Dishwashing Liquid Lime

Creation date	04th November 2019	Version	2.0
Revision date	23rd March 2022		

ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Agreement on the transport of dangerous goods by rail
UN	Four-figure identification number of the substance or article taken from the UN Model Regulations
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials
VOC	Volatile organic compounds
vPvB	Very Persistent and very Bioaccumulative

Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment
Aquatic Chronic	Hazardous to the aquatic environment (chronic)
Eye Dam.	Serious eye damage
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquid
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization

Training guidelines

Inform the personnel about the recommended ways of use, mandatory protective equipment, first aid and prohibited ways of handling the product.

Recommended restrictions of use

not available

Information about data sources used to compile the Safety Data Sheet

REGULATION (EC) No. 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL (REACH) as amended. REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL as amended. Data from the manufacturer of the substance / mixture, if available - information from registration dossiers.

The changes (which information has been added, deleted or modified)

The version 2.0 replaces the SDS version from 04 November 2019. Changes were made in sections 1, 2, 3, 4, 8, 9, 11, 12, 13, 15 and 16.

More information

Classification procedure - calculation method.

Statement

The safety data sheet provides information aimed at ensuring safety and health protection at work and environmental protection. The provided information corresponds to the current status of knowledge and experience and complies with valid legal regulations. The information should not be understood as guaranteeing the suitability and usability of the product for a particular application.