

SUN DISHWASHING LIQUID - LEMON

Revision: 2025-09-11

Version: 02.0

SECTION 1: Identification of the substance/mixture and supplier

1.1 Product identifier

Product name: SUN DISHWASHING LIQUID - LEMON

Sun is a registered trade mark and is used under licence of Unilever

1.2 Recommended use and restrictions on use

Identified uses:

Hand dishwashing detergent

Restrictions of use:

Uses other than those identified are not recommended

1.3 Details of the supplier

DIVERSEY NEW ZEALAND LTD.

24 Bancroft Crescent, Glendene, Auckland, 0602, New Zealand

Telephone: 0800 803 615 (toll free)

Website: www.diversey.com

1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible)

Call 0800 243 622 (24 hrs)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Eye irritation, Category 2

Chronic aquatic toxicity, Category 3

2.2 Label elements



Signal word: Warning

Hazard statements:

H319 - Causes serious eye irritation.

H412 - Harmful to aquatic life with long lasting effects.

Prevention statement(s):

P264 - Wash face, hands and any exposed skin thoroughly after handling.

P280 - Wear eye protection.

Response statement(s):

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical advice or attention.

2.3 Other hazards

No other hazards known.

2.4 Classification diluted product:

Recommended maximum concentration (% w/w): 0.2

Not classified as hazardous

SECTION 3: Composition/information on ingredients

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3.1 Substances / Mixtures

Ingredient(s)	CAS#	EC number	Weight percent
sodium alkylbenzenesulphonate	90194-45-9	290-656-6	10-30
urea	57-13-6	200-315-5	3-10
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	68155-09-9	268-938-5	1-3
d-limonene	5989-27-5	227-813-5	0.1-1

Non-hazardous ingredients are the remainder and add up to 100%.

Workplace exposure limit(s), if available, are listed in subsection 8.1.

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation:	Get medical attention or advice if you feel unwell.
Skin contact:	Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.
Eye contact:	Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation occurs and persists, get medical attention.
Ingestion:	Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious person. Get medical attention or advice if you feel unwell.
Self-protection of first aider:	Consider personal protective equipment as indicated in subsection 8.2.
First aid facilities:	Eyewash facilities should be considered in a workplace where necessary.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation:	No known effects or symptoms in normal use.
Skin contact:	No known effects or symptoms in normal use.
Eye contact:	Causes severe irritation.
Ingestion:	No known effects or symptoms in normal use.

4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

Poison Information Center: Call 0800 764 766 (0800 POISON)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

5.2 Special hazards arising from the substance or mixture

No special hazards known.

5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

5.4 Hazchem code

None allocated

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Wear eye/face protection.

6.2 Environmental precautions

Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

6.3 Methods and material for containment and cleaning up

Dyke to collect large liquid spills. Absorb with liquid-binding material (sand, diatomite, universal binders). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

SECTION 7: Handling and storage

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7.1 Precautions for safe handling**Measures to prevent fire and explosions:**

No special precautions required.

Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

Advice on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless advised by Diversey. Wash hands before breaks and at the end of workday. Avoid contact with eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging. For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

7.3 Specific end use(s)

No specific advice for end use available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters**Workplace exposure limits**

Air limit values, if available:

Biological limit values, if available:

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the undiluted product:

Covering activities such as filling and transfer of product to application equipment, flasks or buckets

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin contact, the personal protection equipment as described in this section is not required.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal protective equipment**Eye / face protection:**

Safety glasses or goggles (AS/NZS 1337.1).

Hand protection:

Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.

Body protection:

No special requirements under normal use conditions.

Respiratory protection:

No special requirements under normal use conditions.

Environmental exposure controls: No special requirements under normal use conditions.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 0.2

Appropriate engineering controls: No special requirements under normal use conditions.

Appropriate organisational controls: No special requirements under normal use conditions.

Personal protective equipment**Eye / face protection:**

No special requirements under normal use conditions.

Hand protection:

Rinse and dry hands after use. For prolonged contact protection for the skin may be necessary.

Body protection:

No special requirements under normal use conditions.

Respiratory protection:

No special requirements under normal use conditions.

Environmental exposure controls: No special requirements under normal use conditions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties**Method / remark**

Physical state: Liquid

Colour: Clear , Yellow

Odour: Product specific

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Odour threshold: Not applicable**pH:** ≈ 7.75 (neat)**Dilution pH:** ≈ 8.5 (0.2 %)**Melting point/freezing point (°C):** Not determined**Initial boiling point and boiling range (°C):** Not determined

ISO 4316

ISO 4316

Not relevant to classification of this product

Flammability (liquid): Not flammable.**Flash point (°C):** Not determined**Sustained combustion:** Not applicable.

(UN Manual of Tests and Criteria, section 32, L.2)

Evaporation rate: Not determined

Not relevant to classification of this product

Flammability (solid, gas): Not applicable to liquids**Lower and upper explosion limit/flammability limit (%):** Not determined**Vapour pressure:** Not determined**Relative density:** ≈ 1.03 (20 °C)

OECD 109 (EU A.3)

Relative vapour density: No data available.

Not relevant to classification of this product

Particle characteristics: No data available.

Not applicable to liquids.

Solubility in / Miscibility with water: Fully miscible**Partition coefficient: n-octanol/water** No information available.

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Autoignition temperature: Not determined**Decomposition temperature:** Not applicable.**Kinematic viscosity:** Not determined

DM-006 Viscosity - Standard

Explosive properties: Not explosive.**Oxidising properties:** Not oxidising.

EC 440/2008 A17-A21

9.2 Other information**Surface tension (N/m):** Not determined**Corrosion to metals:** Not corrosive**SECTION 10: Stability and reactivity****10.1 Reactivity**

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal storage and use conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

10.4 Conditions to avoid

None known under normal storage and use conditions.

10.5 Incompatible materials

None known under normal use conditions.

10.6 Hazardous decomposition products

None known under normal storage and use conditions.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**Mixture data: .**Relevant calculated ATE(s):**

ATE - Oral (mg/kg): >2000

Skin irritation and corrosivity**Result:** Not corrosive or irritant**Species:** Not applicable**Method:** Weight of evidence**Eye irritation and corrosivity****Result:** Eye irritant 2**Species:** Not applicable.**Method:** Weight of evidence

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Substance data, where relevant and available, are listed below:.

Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate	LD ₅₀	> 1470	Rat	OECD 401 (EU B.1)	
urea	LD ₅₀	11500	Mouse	Method not given	
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	LD ₅₀	500-1000	Rat	OECD 423 (EU B.1 tris)	
d-limonene	LD ₅₀	4400 - 5100	Rat	Method not given	

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate		No data available			
urea		No data available			
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides		No data available			
d-limonene	LD ₅₀	> 5000	Rabbit	Method not given	

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate		No data available			
urea		No data available			
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides		No data available			
d-limonene		No data available			

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	Irritant	Rabbit	OECD 404 (EU B.4)	
urea	No data available			
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	Irritant			
d-limonene	Irritant	Rabbit	Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	Severe damage	Rabbit	OECD 405 (EU B.5)	
urea	No data available			
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	Severe damage	Rabbit	OECD 405 (EU B.5)	
d-limonene	No data available			

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
sodium alkylbenzenesulphonate	No data available			
urea	No data available			
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	No data available			
d-limonene	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
urea	No data available			
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	
d-limonene	Sensitising	Guinea pig	Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
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sodium alkylbenzenesulphonate	No data available			
urea	No data available			
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	No data available			
d-limonene	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
sodium alkylbenzenesulphonate	No data available		No data available	
urea	No data available		No data available	
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	No data available		No data available	
d-limonene	No data available		No data available	

Carcinogenicity

Ingredient(s)	Effect
sodium alkylbenzenesulphonate	No data available
urea	No data available
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	No data available
d-limonene	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
sodium alkylbenzenesulphonate			No data available				
urea			No data available				
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides			No data available				
d-limonene			No data available				

Repeated dose toxicity

Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium alkylbenzenesulphonate		No data available				
urea		No data available				
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides		No data available				
d-limonene		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium alkylbenzenesulphonate		No data available				
urea		No data available				
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides		No data available				
d-limonene		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
sodium alkylbenzenesulphonate		No data available				
urea		No data available				
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides		No data available				
d-limonene		No data available				

Chronic toxicity

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Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
sodium alkylbenzenesulphonate			No data available					
urea			No data available					
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides			No data available					
d-limonene			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
sodium alkylbenzenesulphonate	No data available
urea	No data available
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	No data available
d-limonene	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
sodium alkylbenzenesulphonate	No data available
urea	No data available
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	No data available
d-limonene	No data available

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3.

Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

SECTION 12: Ecological information

12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

Aquatic short-term toxicity

Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate	LC ₅₀	1.67	<i>Lepomis macrochirus</i>	EPA-OPPTS 850.1075	96
urea	LC ₅₀	> 6810	<i>Leuciscus idus</i>	Method not given	96
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	LC ₅₀	2.3	<i>Fish</i>	Method not given	96
d-limonene	LC ₅₀	0.72	<i>Pimephales promelas</i>	OECD 203 (EU C.1)	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate	EC ₅₀	1.62	<i>Daphnia magna</i> Straus		48
urea	EC ₅₀	> 10000	<i>Daphnia magna</i> Straus	Method not given	24
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides		No data available			
d-limonene	EC ₅₀	0.36	<i>Daphnia magna</i> Straus	OECD 202 (EU C.2)	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
sodium alkylbenzenesulphonate	EC ₅₀	29	<i>Selenastrum capricornutum</i>		96
urea		> 10000	<i>Scenedesmus quadricauda</i>	Method not given	
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides		No data available			

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d-limonene	E _r C ₅₀	150	<i>Desmodesmus subspicatus</i>	OECD 201 (EU C.3)	72
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Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
sodium alkylbenzenesulphonate		No data available			
urea		No data available			
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides		No data available			
d-limonene		No data available			

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
sodium alkylbenzenesulphonate		No data available			
urea		> 10000	<i>Pseudomonas putida</i>	Method not given	16 hour(s)
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides		No data available			
d-limonene		No data available			

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium alkylbenzenesulphonate	NOEC	> 2.5-1		Method not given		
urea		No data available				
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides		No data available				
d-limonene		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
sodium alkylbenzenesulphonate		No data available				
urea		No data available				
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides		No data available				
d-limonene		No data available				

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Terrestrial toxicity

Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Terrestrial toxicity - plants, if available:

Terrestrial toxicity - birds, if available:

Terrestrial toxicity - beneficial insects, if available:

Terrestrial toxicity - soil bacteria, if available:

12.2 Persistence and degradability

Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

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Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
sodium alkylbenzenesulphonate	Activated sludge, aerobe	CO ₂ production	85% in 29 day(s)	OECD 301B	Readily biodegradable
urea					Readily biodegradable
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides		CO ₂ production	98% in 28 day(s)	OECD 301B	Readily biodegradable
d-limonene			80 % in 28 day(s)	OECD 301D	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potentialPartition coefficient n-octanol/water (log K_{ow})

Ingredient(s)	Value	Method	Evaluation	Remark
sodium alkylbenzenesulphonate	No data available			
urea	-1.09		No bioaccumulation expected	
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	No data available			
d-limonene	No data available		High potential for bioaccumulation	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
sodium alkylbenzenesulphonate	No data available				
urea	No data available				
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	No data available				
d-limonene	683.1		Method not given	High potential for bioaccumulation	

12.4 Mobility in soil

Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log K _{oc}	Desorption coefficient Log K _{oc} (des)	Method	Soil/sediment type	Evaluation
sodium alkylbenzenesulphonate	No data available				
urea	No data available				Potential for mobility in soil, soluble in water
Amides, coco, N-[3-(dimethylamino)propyl], N-oxides	No data available				
d-limonene	No data available				High potential for mobility in soil

12.5 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Waste from residues / unused products:**

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation.

Empty packaging**Recommendation:**

Dispose of observing national or local regulations.

Suitable cleaning agents:

Water, if necessary with cleaning agent.

SECTION 14: Transport information**ADG, IMO/IMDG, ICAO/IATA****14.1 UN number or ID number:** Non-dangerous goods**14.2 UN proper shipping name:** Non-dangerous goods**14.3 Transport hazard class(es):** Non-dangerous goods**14.4 Packing group:** Non-dangerous goods**14.5 Environmental hazards:** Non-dangerous goods

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14.6 Special precautions for user: Non-dangerous goods

14.7 Maritime transport in bulk according to IMO instruments: Non-dangerous goods

Other relevant information:

Hazchem code: None allocated

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

HSNO Approval Number	HSR002530.
Group standard	Cleaning Products (Subsidiary Hazard) Group Standard 2020
Inventory Listing(s)	New Zealand: NZIoC (New Zealand Inventory of Chemicals) All components are listed on the NZIoC inventory, or are exempt

HSNO Classification	6.4A - Irritating to the eye 9.1C - Harmful in the aquatic environment
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SECTION 16: Other information

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MS3200508

Version: 02.0

Revision: 2025-09-11

Abbreviations and acronyms:

- ATE - Acute Toxicity Estimate
- AUH - Non GHS hazard statement
- DNEL - Derived No Effect Limit
- EC No. - European Community Number
- EC50 - effective concentration, 50%
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- LD50 - Lethal Dose, 50% / Median Lethal dose
- NOAEL - No observed adverse effect level
- NOEL - No observed effect level
- OECD - Organisation for Economic Cooperation and Development
- PNEC - Predicted No Effect Concentration
- STOT-RE - Specific target organ toxicity (repeated exposure)
- STOT-SE - Specific target organ toxicity (single exposure)
- H319 - Causes serious eye irritation.

End of Safety Data Sheet