

CALC REMOVER

Creation date	11th February 2021	Version	2.0
Revision date			

- 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/attention.
- P501 Dispose of contents/container to in accordance with national regulations.

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. Floor with the spilled product might be slippery. This mixture is acidic - it may damage acid-sensitive surfaces (eg. marble, limestone, common metals, etc.).

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixture of substances and additives specified below.

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: 77-92-9 EC: 201-069-1 Registration number: 01-2119457026-42	citric acid	20-30	Eye Irrit. 2, H319	
CAS: 3088-31-1 EC: 221-416-0	Sodium 2-(2-dodecyloxyethoxy)ethyl sulphate	<5	Skin Irrit. 2, H315 Eye Irrit. 2, H319	

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

If any health problems are manifested or if in doubt, inform a doctor and show him information from this safety data sheet. If unconscious, put the person in the stabilized (recovery) position on his side with his head slightly bent backwards and make sure that airways are free. In the event of unconsciousness, do not provide food by mouth.

If inhaled

Not expected. Terminate the exposure immediately; move the affected person to fresh air. Provide medical treatment if irritation, dyspnoea or other symptoms persist. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

If on skin

Immediately wash with water and soap and rinse thoroughly. Remove contaminated clothes immediately. 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. In the event of issues, find medical advice.

If swallowed

Rinse mouth immediately and drink large quantities of water. Do not provide anything by mouth if the person is unconscious or if having cramps. DO NOT INDUCE VOMITING! If the affected person vomits, make sure to prevent inhalation of the vomit. Provide medical treatment.

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

If inhaled

Not expected.

If on skin

Prolonged or repeated contact with the product causes skin degreasing and drying.

If in eyes

Causes serious eye irritation.

If swallowed

Possible irritation. Stomach pain, vomiting, diarrhoea. Ingestion may result in foamy vomit.

CALC REMOVER

Creation date 11th February 2021
Revision date Version 2.0

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

Symptomatic treatment. Caution should be taken when emesis is induced or gastric lavage is used.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Water spray jet. Alcohol-resistant foam. Powder. Carbon dioxide. Accommodate according to the location of the fire.

Unsuitable extinguishing media

Water - full jet.

5.2. Special hazards arising from the substance or mixture

The mixture is non-flammable. In the event of fire, carbon monoxide, carbon dioxide and other toxic gases may arise.

5.3. Advice for firefighters

Evacuate area. Use a self-contained breathing apparatus and full-body protective clothing. Closed containers with the product near the fire should be cooled with water. Do not allow run-off of contaminated fire extinguishing material to enter drains or surface and ground water.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

Follow the usual measures for health protection at work. Prevent contact with skin and eyes. Keep unprotected persons away. Use personal protective equipment for work. Provide sufficient ventilation. Danger of slipping on spilled product.

6.2. Environmental precautions

Stop leak if safe to do so. Prevent contamination of the soil and entering surface or ground water. In the event of leakage of the substantial amount of the product, the dilution with water may reduce adverse impacts on the environment. In the event of substantial pollution, contact respective authorities.

6.3. Methods and material for containment and cleaning up

Suck up large amounts. 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. After removal of the product, wash the contaminated site with plenty of water.

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. Treat with regenerative cream. Use personal protective equipment as per Section 8. Observe valid legal regulations on safety and health protection. Handle products carefully to avoid spills.

7.2. Conditions for safe storage, including any incompatibilities

Keep only in original packaging. Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose. Protect from sunlight. Keep away from heat, open flames. Protect against frost.

Content	Packaging type	Material of package
1 l	bottle	
20 l	jerry can	

Storage temperature min 5 °C, max 30 °C

7.3. Specific end use(s)

not available

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

The mixture contains substances for which occupational exposure limits are set.

CALC REMOVER

Creation date

11th February 2021

Revision date

Version

2.0

8.2. Exposure controls

No special requirements. Follow the usual measures for health protection at work. Wash your hands thoroughly with water and soap after work and before breaks for a meal and rest. Take off contaminated clothing. And wash it before reuse. Do not eat, drink and smoke during work. Prevent contact with skin and eyes.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Protective goggles or face shield (based on the nature of the work performed).

Skin protection

Under regular circumstances it is not necessary. Hand protection: When handling in long-term or repeatedly, use protective gloves. Protective gloves resistant to the product. Material of gloves: Nitrile rubber, NBR. Butyl rubber. Fluororubber. PVC. Rubber (natural, latex). Recommended thickness of the material: > 0.1 mm. The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed. Observe other recommendations of the manufacturer. Protective gloves shall be replaced immediately when damaged. Other protection: protective workwear.

Respiratory protection

Under regular circumstances it is not necessary. Provide sufficient ventilation.

Thermal hazard

None.

Environmental exposure controls

Observe usual measures for protection of the environment, see Section 6.2. Keep container tightly closed. Do not allow product to reach sewage system or any water course.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state	liquid
Color	colourless
Odour	without fragrance
Melting point/freezing point	data not available
Boiling point or initial boiling point and boiling range	100 °C
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	1,5 - 3 (undiluted at 20 °C)
Kinematic viscosity	data not available
Solubility in water	almost insoluble
Solubility in fats	data not available
Partition coefficient n-octanol/water (log value)	data not available
Vapour pressure	data not available
Density and/or relative density	
Density	1,08 - 1,14 g/cm ³ at 20 °C
Form	liquid
data not available	

9.2. Other information

Evaporation rate	non-applicable
Explosive properties	The product does not have explosive properties.
Content of organic solvents (VOC)	0 %

SECTION 10: Stability and reactivity**10.1. Reactivity**

The product is stable under normal conditions. As an acid, it can react violently with strong bases. May be corrosive to marble, limestone and light metals.

10.2. Chemical stability

The product is stable under normal conditions.

CALC REMOVER

Creation date 11th February 2021
Revision date Version 2.0

10.3. Possibility of hazardous reactions

Product in contact with light metals can generate explosive hydrogen. May react violently with strong bases. Chlorine gas can be released from products that contain active chlorine (hypochlorites/chlorine-based bleaches).

10.4. Conditions to avoid

The product is stable under normal conditions. Protect against direct sunlight. Keep away from heat, open flames. Protect against frost.

10.5. Incompatible materials

Strong bases, strong oxidizing agents, hydroxides. Hypochlorites. Light metals.

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.

citric acid

Route of exposure	Parameter	Value	Time of exposure	Species	Sex
Oral	LD ₅₀	1170 mg/kg		Rat	
Dermal	LD ₅₀	885 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

Based on available data the classification criteria are not met.

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.

Aspiration hazard

Based on available data the classification criteria are not met.

11.2. Information on other hazards

not available

CALC REMOVER

Creation date 11th February 2021
Revision date Version 2.0

SECTION 12: Ecological information**12.1. Toxicity****Acute toxicity**

Data for the mixture are not available.

citric acid

Parameter	Value	Time of exposure	Species	Environment
LC ₅₀	440-706 mg/l	94 hour	Fishes	

More information

The product is not classified as harmful to the aquatic environment. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

12.2. Persistence and degradability

Surfactants are biodegradable according to the European Parliament and Council Regulation (EC) No. 648/2004 on detergents, as amended.

12.3. Bioaccumulative potential

No bioaccumulation potential.

12.4. Mobility in soil

The product is soluble and mobile in water and soil.

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

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.

12.7. Other adverse effects

not available

SECTION 13: Disposal considerations**13.1. Waste treatment methods**

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. The product must not be disposed of with municipal waste. Small amounts may be flushed with water to sewer. 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.

Waste type code

06 01 06 other acids *

Packaging waste type code

15 01 02 plastic packaging

(*) - Hazardous waste according to Directive 2008/98/EC on hazardous waste

SECTION 14: Transport information**14.1. UN number or ID number**

Not subject to ADR

14.2. UN proper shipping name

not available

14.3. Transport hazard class(es)

not available

14.4. Packing group

not available

14.5. Environmental hazards

not available

CALC REMOVER

Creation date	11th February 2021	Version	2.0
Revision date			

14.6. Special precautions for user

Reference in the Sections 4 to 8.

14.7. Maritime transport in bulk according to IMO instruments

not available

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.

Additional information in accordance with Regulation (EC) no. 648/2004 on detergents, as amended

<5 % anionic surfactants

15.2. Chemical safety assessment

not available

SECTION 16: Other information**A list of standard risk phrases used in the safety data sheet**

H315 Causes skin irritation.
H319 Causes serious eye irritation.

Guidelines for safe handling used in the safety data sheet

P264 Wash hands and exposed parts of the body thoroughly after handling.
P280 Wear eye protection.
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/attention.
P501 Dispose of contents/container to in accordance with national regulations.

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 Identification code for each substance listed in EINECS
EC₅₀ Concentration of a substance when it is affected 50% of the population
EINECS European Inventory of Existing Commercial Chemical Substances
EmS Emergency plan
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
IC₅₀ Concentration causing 50% blockade
ICAO International Civil Aviation Organization
IMDG International Maritime Dangerous Goods
INCI International Nomenclature of Cosmetic Ingredients
ISO International Organization for Standardization

CALC REMOVER

Creation date	11th February 2021	Version	2.0
Revision date			

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
LOAEC	Lowest observed adverse effect concentration
LOAEL	Lowest observed adverse effect level
log K _{ow}	Octanol-water partition coefficient
MARPOL	International Convention for the Prevention of Pollution From Ships
NOAEC	No observed adverse effect concentration
NOAEL	No observed adverse effect level
NOEC	No observed effect concentration
NOEL	No observed effect level
OEL	Occupational Exposure Limits
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted no-effect concentration
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

Eye Irrit.	Eye irritation
Skin Irrit.	Skin irritation

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 30 October 2018. Changes were made in sections 2, 13, 15 and 16.

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.