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

1.1 Product identifier

rea-clean Bio-Reiniger

1.2 Relevant identified uses of the substance or mixture and uses advised against

1.2.1 Relevant uses

Cleaning agent

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company

CHEMOTEC GmbH
Blochbachstrasse 40
63486 Bruchköbel / GERMANY
Phone +49(0)6181 / 72668
Fax +49(0)6181 / 77652
Homepage www.chemotec.de
E-mail info@chemotec.de

Address enquiries to

Technical information info@chemotec.de

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency telephone number

Advisory body +49 (0)89-19240 (24h) (English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Eye Irrit. 2: H319 Causes serious eye irritation.

2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

Hazard pictograms

Signal word WARNING

Hazard statements H319 Causes serious eye irritation.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 Wear eye protection / face 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.

Cleaner, 648/2004/CE, contains:

5 - <15% non-ionic surfactants
< 5% anionic surfactant

2.3 Other hazards

Environmental hazards Does not contain any PBT or vPvB substances.

Other hazards Further hazards were not determined with the current level of knowledge.

SECTION 3: Composition / Information on ingredients

3.1 Substances

not applicable

3.2 Mixtures

The product is a mixture.

Range [%]	Substance
5 - <10	Fatty alcohol alkoxylated
	CAS: 27252-75-1, EINECS/ELINCS: 500-058-1
	GHS/CLP: Eye Irrit. 2: H319
1 - <3	3,5,5-Trimethylhexanoic acid
	CAS: 3302-10-1, EINECS/ELINCS: 221-975-0, Reg-No.: 01-2119517580-45-XXXX
	GHS/CLP: Acute Tox. 4: H302 - Skin Irrit. 2: H315 - Eye Dam. 1: H318
1 - < 3	Sodium p-cumenesulphonate
	CAS: 15763-76-5, EINECS/ELINCS: 239-854-6, Reg-No.: 01-2119489411-37-XXXX
	GHS/CLP: Eye Irrit. 2: H319

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Take off contaminated clothing and wash before reuse.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

Skin contact In case of contact with skin wash off immediately with plenty of water.
Consult a doctor if skin irritation persists.

Eye contact Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

Ingestion Rinse out mouth and give plenty of water to drink.
Do not induce vomiting.
Seek medical advice immediately.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects

4.3 Indication of any immediate medical attention and special treatment needed

Forward this sheet to your doctor.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Product itself is non-combustible. Fire extinguishing method of surrounding areas must be considered.

Extinguishing media that must not be used Full water jet.

5.2 Special hazards arising from the substance or mixture

Risk of formation of toxic pyrolysis products.
Sulphur oxides (SOx).
Nitrogen oxides (NOx), carbon monoxide (CO).

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

High risk of slipping due to leakage/spillage of product.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).

6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, sawdust, universal absorbent, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See SECTION 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with eyes and skin. Use personal protective equipment.

Do not eat, drink or smoke when using this product.
Wash hands before breaks and after work.
Use barrier skin cream.
Take off contaminated clothing and wash before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in original container.
Prevent penetration into the ground.

Do not store together with food and animal food/diet.

Keep container tightly closed.
Protect from heat/overheating.

7.3 Specific end use(s)

See product use, SECTION 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

not applicable

DNEL

Substance
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
Industrial, inhalative, Long-term - systemic effects: 7 mg/m³.
Industrial, dermal, Long-term - systemic effects: 2 mg/kg bw/day.
general population, oral, Long-term - systemic effects: 1 mg/kg bw/day.
general population, dermal, Long-term - systemic effects: 1 mg/kg bw/day.
general population, inhalative, Long-term - systemic effects: 2 mg/m³.
Sodium p-cumenesulphonate, CAS: 15763-76-5
Industrial, inhalative, Long-term - systemic effects: 26,9 mg/m³.
Industrial, dermal, Long-term - systemic effects: 136,25 mg/kg bw/day.
general population, oral, Long-term - systemic effects: 3,8 mg/kg bW/d.
general population, dermal, Long-term - systemic effects: 68,1 mg/kg bw/day.
general population, inhalative, Long-term - systemic effects: 6,6 mg/m³.

PNEC

Substance
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
soil, 0,141 mg/kg.
sediment (seawater), 0,0904 mg/kg.
sediment (freshwater), 0,904 mg/kg.
sewage treatment plants (STP), 23 mg/l.
seawater, 0,0068 mg/l.
freshwater, 0,068 mg/l.
Sodium p-cumenesulphonate, CAS: 15763-76-5
soil, 0,037 mg/kg.
sediment (seawater), 0,086 mg/kg.
sediment (freshwater), 0,862 mg/kg.
seawater, 0,023 mg/L.
sewage treatment plants (STP), 100 mg/L.
freshwater, 0,23 mg/L.

8.2 Exposure controls

Additional advice on system design	Ensure adequate ventilation on workstation.
Eye protection	Safety glasses. (EN 166:2001)
Hand protection	0,4 mm; Butyl rubber, >480 min (EN 374-1/-2/-3). The details concerned are recommendations. Please contact the glove supplier for further information.
Skin protection	Protective clothing (EN 340)
Other	Avoid contact with eyes and skin. Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.
Respiratory protection	Not required under normal conditions.
Thermal hazards	none
Delimitation and monitoring of the environmental exposition	Protect the environment by applying appropriate control measures to prevent or limit emissions.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Color	not determined
Odor	characteristic
Odour threshold	not determined
pH-value	10,5
pH-value [1%]	not determined
Boiling point [°C]	not determined
Flash point [°C]	not applicable
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	not applicable
Upper explosion limit	not applicable
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	not determined
Density [g/ml]	not determined
Bulk density [kg/m³]	not applicable
Solubility in water	miscible
Solubility other solvents	No information available.
Partition coefficient [n-octanol/water]	not determined
Kinematic viscosity	not applicable
Relative vapour density	not applicable
Evaporation speed	not applicable
Melting point [°C]	not determined
Auto-ignition temperature	not applicable
Decomposition temperature [°C]	not determined
Particle characteristics	not applicable

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

No hazardous reactions known.

10.4 Conditions to avoid

See SECTION 7.2.

10.5 Incompatible materials

Oxidizing agent

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute oral toxicity

Product
ATE-mix, oral, Based on the available information, the classification criteria are not fulfilled.:

Substance
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
LD50, oral, Rat: 1160 mg/kg bw OECD 401.
Sodium p-cumenesulphonate, CAS: 15763-76-5
LD50, oral, Rat: > 2000 mg/kg OECD 401.
NOAEL, oral, 763-3534 mg/kg/90d (OECD 408).
NOAEL, oral, Rat: > 936 mg/kg.
Fatty alcohol alkoxylated, CAS: 27252-75-1
LD50, oral, > 2000 - < 5000 mg/kg.

Acute dermal toxicity

Product
ATE-mix, dermal, Based on the available information, the classification criteria are not fulfilled.:

Substance
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
LD50, dermal, Rat: >2000 mg/kg bw.
Sodium p-cumenesulphonate, CAS: 15763-76-5
LD50, dermal, Rabbit: > 2000 mg/kg.
NOAEL, dermal, > 440 mg/kg/90d (OECD 411).

Acute inhalational toxicity

Product
ATE-mix, inhalative, Based on the available information, the classification criteria are not fulfilled.:

Serious eye damage/irritation

Irritant
Based on the available information, the classification criteria are fulfilled.
Calculation method

Substance
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
OECD 405.
Eye, Rabbit:
Eye corrosive.
Sodium p-cumenesulphonate, CAS: 15763-76-5
OECD 405.
Eye, Rabbit:
irritant.
Fatty alcohol alkoxylated, CAS: 27252-75-1
No information available.:
irritant.

Skin corrosion/irritation

Based on the available information, the classification criteria are not fulfilled.

Substance
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
OECD 404.
dermal, Rabbit:
irritant.
Sodium p-cumenesulphonate, CAS: 15763-76-5
OECD 404.
dermal, Rabbit:
negative.
Fatty alcohol alkoxylated, CAS: 27252-75-1
No information available.:
negative.

Respiratory or skin sensitisation Based on the available information, the classification criteria are not fulfilled.

Substance
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
OECD 406.
dermal, Guinea pig:
negative.
Sodium p-cumenesulphonate, CAS: 15763-76-5
OECD 406.
dermal, Guinea pig:
negative.
Fatty alcohol alkoxylated, CAS: 27252-75-1
No information available.:
negatv.

Specific target organ toxicity — single exposure Based on the available information, the classification criteria are not fulfilled.

Substance
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
No information available.:
Sodium p-cumenesulphonate, CAS: 15763-76-5
No information available.:
negative.
Fatty alcohol alkoxylated, CAS: 27252-75-1
No information available.:
negative.

Specific target organ toxicity — repeated exposure Based on the available information, the classification criteria are not fulfilled.

Substance
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
No information available.:
Sodium p-cumenesulphonate, CAS: 15763-76-5
No information available.:
negative.
NOAEL, oral, Rat: 763 mg/kg bw/day.
Fatty alcohol alkoxylated, CAS: 27252-75-1

No information available.:
negative.

Mutagenicity Based on the available information, the classification criteria are not fulfilled.

Substance
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
Ames-test (OECD 471).
negative.
Sodium p-cumenesulphonate, CAS: 15763-76-5
No information available.:
negative.
Fatty alcohol alkoxylated, CAS: 27252-75-1
No information available.:
negative.

Reproduction toxicity Based on the available information, the classification criteria are not fulfilled.

Substance
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
OECD 415.
negative.
NOAEL, oral, Rat (female): 79 - 228 mg/kg bw/day.
Sodium p-cumenesulphonate, CAS: 15763-76-5
OECD 421.
negative.
NOAEL, oral, Rat: 300 mg/kg bw/day.
Fatty alcohol alkoxylated, CAS: 27252-75-1
No information available.:
negative.

Carcinogenicity Based on the available information, the classification criteria are not fulfilled.

Substance
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
No information available.:
Sodium p-cumenesulphonate, CAS: 15763-76-5
OECD 453.
dermal, Rat:
negative.
Fatty alcohol alkoxylated, CAS: 27252-75-1
No information available.:
negative.

Aspiration hazard Based on the available information, the classification criteria are not fulfilled.

General remarks

Toxicological data of complete product are not available.
The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 12: Ecological information

12.1 Toxicity

Substance
3,5,5-Trimethylhexanoic acid, CAS: 3302-10-1
LC50, (96h), Oncorhynchus mykiss: 160 mg/l OECD 203.
EC50, (48h), Daphnia magna: 68 mg/l OECD 202.
IC50, (72h), Pseudokirchneriella subcapitata: 81 mg/l OECD 201.
Sodium p-cumenesulphonate, CAS: 15763-76-5
LC50, (96h), Cyprinus carpio: > 100 mg/l OECD 203.
EC50, (72h), Desmodesmus subspicatus: > 100 mg/l OECD 201.
EC50, (48h), Daphnia magna: > 100 mg/l OECD 202.
NOEC, (96h), Algae: 31 mg/l EPA OPPTS.
ErC50, (3h), Bacteria: > 1000 mg/l OECD 209.
Fatty alcohol alkoxylated, CAS: 27252-75-1
LC50, fish: > 10 - 100 mg/l (DIN EN ISO 7346-2).
EC50, (24h), Daphnia magna: > 10 - < 100 mg/L (OECD 202).

12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	No information available.
Biological degradability	The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

12.3 Bioaccumulative potential

Accumulation in organisms is not expected.

12.4 Mobility in soil

Spillages may penetrate the soil causing ground water contamination.

12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

Ecological data of complete product are not available.
The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.
Coordinate disposal with the authorities if necessary.

Waste no. (recommended) 200129*

Contaminated packaging

Uncontaminated packaging may be reused.

Waste no. (recommended) 150110* packaging containing residues of or contaminated by hazardous substances
150102

SECTION 14: Transport information

14.1 UN number

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.2 UN proper shipping name

Transport by land according to ADR/RID	NO DANGEROUS GOODS
Inland navigation (ADN)	NO DANGEROUS GOODS
Marine transport in accordance with IMDG	NOT CLASSIFIED AS "DANGEROUS GOODS"
Air transport in accordance with IATA	NOT CLASSIFIED AS "DANGEROUS GOODS"

14.3 Transport hazard class(es)

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.4 Packing group

Transport by land according to ADR/RID	not applicable
Inland navigation (ADN)	not applicable
Marine transport in accordance with IMDG	not applicable
Air transport in accordance with IATA	not applicable

14.5 Environmental hazards

Transport by land according to ADR/RID	no
Inland navigation (ADN)	no
Marine transport in accordance with IMDG	no
Air transport in accordance with IATA	no

14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

not applicable

SECTION 15: Regulatory information

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

EEC-REGULATIONS	2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014
TRANSPORT-REGULATIONS	ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2020)
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
- Observe employment restrictions for people	Observe employment restrictions for mothers-to-be and nursing mothers. Observe employment restrictions for young people.
- VOC (2010/75/CE)	0 %

15.2 Chemical safety assessment

not applicable

SECTION 16: Other information

16.1 Hazard statements (SECTION 3)

H318 Causes serious eye damage.
H315 Causes skin irritation.
H302 Harmful if swallowed.
H319 Causes serious eye irritation.

16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)

Modified position none