

2.2 Label elements

Hazard pictograms	Not applicable
Signal word	Not applicable

Hazard statements

Hazard statements	Not applicable
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Precautionary statements

◆ Prevention

Prevention	Not applicable
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◆ Response

Response	Not applicable
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◆ Storage

Storage	Not applicable
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◆ Disposal

Disposal	Not applicable
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2.3 Other hazards

◆ Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006]
distilled water	No information available
Benzalkonium bromide	No information available
tree peony bark extract	No information available
COCAMIDOPROPYL BETAINE	Not PBT/vPvB

◆ Results of endocrine disrupting properties assessment

Component	Results of endocrine disrupting properties assessment [according to (EU) No 2017/2100 or (EU) No 2018/605]
distilled water	No information available
Benzalkonium bromide	No information available
tree peony bark extract	No information available
COCAMIDOPROPYL BETAINE	No information available

◆ Other

	Not applicable.
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3 Composition/information on ingredients

3.1 Substance/mixture

	Mixture
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Component	Weight % content(or range)	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific Conc. Limits, M-factors
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distilled water CAS : 7732-18-5 EC : 231-791-2 Index No. : -	Commercial secrets	Not Classified	-
Benzalkonium bromide CAS : 7281-04-1 EC : 230-698-4 Index No. : -	Commercial secrets	Acute Toxicity – Oral , Category 3 , H301 ; Skin Corrosion/Irritation , Category 2 , H315 ; Serious eye damage/irritation , Category 2 , H319 ; Specific target organ toxicity— single exposure; respiratory tract irritation , Category 3 , H335	-
tree peony bark extract CAS : 552-41-0 EC : 209-012-2 Index No. : -	Commercial secrets	Acute Toxicity – Oral , Category 4 , H302 ; Acute Toxicity – Dermal , Category 4 , H312 ; Skin Corrosion/Irritation , Category 2 , H315 ; Serious eye damage/irritation , Category 2 , H319 ; Acute Toxicity – Inhalation , Category 4 , H332 ; Specific target organ toxicity— single exposure; respiratory tract irritation , Category 3 , H335	-
COCAMIDOPROPYL BETAINE CAS : 61789-40-0 EC : 263-058-8 Index No. : -	Commercial secrets	Skin Corrosion/Irritation , Category 2 , H315 ; Sensitization – Skin , Category 1 , H317 ; Serious eye damage/irritation , Category 2 , H319 ; Hazardous To The Aquatic Environment – Long-Term (Chronic) Hazard , Category 3 , H412	-

4 First-aid measures

4.1 Description of first aid measures

General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician if feel uncomfortable.
Skin contact	No harm in general situation. First aid is not needed.
Ingestion	Never give anything by mouth to an unconscious person. Call a physician immediately.
Inhalation	Move victim into fresh air. If breathing is difficult, give oxygen and consult a physician immediately.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

4.2 Most important symptoms/effects, acute and delayed

1	Please see section 11.
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4.3 Indication of any immediate medical attention and special treatment needed

1	Treat symptomatically.
2	Symptoms may be delayed.

5 Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	Use extinguishing media suitable for surrounding area.
Unsuitable extinguishing media	There is no restriction on the type of extinguisher which may be used.

5.2 Specific hazards arising from the substance or mixture

- | | |
|---|---|
| 1 | Development of hazardous combustion gases or vapor possible in the event of fire. |
| 2 | Not considered a significant fire risk, however containers may burn. |

5.3 Advice for firefighters

- | | |
|---|--|
| 1 | As in any fire, wear self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear. |
| 2 | Fight fire from a safe distance, with adequate cover. |
| 3 | Prevent fire extinguishing water from contaminating surface water or the ground water system. |

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- | | |
|---|---|
| 1 | Use personal protective equipment,do not breathe gas/mist/vapour/spray. |
| 2 | Ensure adequate ventilation. Remove all sources of ignition. Take precautionary measures against static discharges. |
| 3 | Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak. |

6.2 Environmental precautions

- | | |
|---|---|
| 1 | Prevent further leakage or spillage if safe to do so. |
| 2 | Discharge into the environment must be avoided. |

6.3 Methods and materials for containment and cleaning up

- | | |
|---|---|
| 1 | Cut off the source of the leak as much as possible. |
| 2 | Keep leaks in a ventilated place. |
| 3 | Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding. |
| 4 | Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. |
| 5 | Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container. |

6.4 Reference to other sections

- | | |
|---|--|
| 1 | Personal Protective Equipment advice is contained in Section 8 of the SDS. |
| 2 | Disposal considerations advice is contained in Section 13 of the SDS. |

7 Handling and storage

7.1 Precautions for safe handling

◆ Protective measures

- | | |
|---|---|
| 1 | Handling is performed in a well ventilated place. |
| 2 | Wear suitable protective equipment. |
| 3 | Avoid contact with skin and eyes. |

◆ Measures to prevent fire

- | | |
|---|---|
| 1 | Keep away from heat/sparks/open flames/ hot surfaces. |
|---|---|

◆ Measures to prevent aerosol and dust generation

- | | |
|---|-----------------|
| 1 | Not applicable. |
|---|-----------------|

◆ Advice on general occupational hygiene

- | | |
|---|--|
| 1 | Wash hands and face after using of the substances. |
| 2 | Replace the contaminated clothing immediately. |

7.2 Conditions for safe storage, including any incompatibilities

1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/hot surfaces.
4	Store away from incompatible materials and foodstuff containers.

7.3 Specific end use(s)

1	In addition to use mentioned in the Section 1.2, unforeseen other specific end uses.
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8 Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure limit values	No relevant regulations
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◆ Biological limit values

Biological limit values	No relevant regulations
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◆ Monitoring methods

1	EN 14042 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.
2	GBZ/T 300 series standard Determination of toxic substances in workplace air.

◆ Derived No effect level (DNEL)

Component	Route of exposure	DNEL for Workers			
		Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
distilled water	Inhalation	No information available	No information available	No information available	No information available
	Oral	No information available	No information available	No information available	No information available
	Dermal	No information available	No information available	No information available	No information available
Benzalkonium bromide	Inhalation	No information available	No information available	No information available	No information available
	Oral	No information available	No information available	No information available	No information available
	Dermal	No information available	No information available	No information available	No information available
tree peony bark extract	Inhalation	No information available	No information available	No information available	No information available
	Oral	No information available	No information available	No information available	No information available
	Dermal	No information available	No information available	No information available	No information available
COCAMIDOPROPYL BETAINE	Inhalation	No information available	No information available	No information available	8.22 mg/m3
	Oral	No information available	No information available	No information available	No information available
	Dermal	No information available	No information available	No information available	No information available

◆ Predicted No Effect Concentration (PNEC)

Predicted No Effect Concentration (PNEC)	No information available
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8.2 Exposure controls

8.2.1 Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Set up emergency exit and necessary risk-elimination area.
4	Handle in accordance with good industrial hygiene and safety practice.

8.2.2 Personal protection equipment

General requirement	No special requirements, please see the description below.
Eye protection	In general situation, eye protection is not needed. In the production process, when contacting with vapour or dust, tightly fitting safety goggles.
Hand protection	In general situation, hand protection is not needed.
Respiratory protection	In general situation, respiratory protection is not needed. If exposure limits are exceeded or if irritation or other symptoms are experienced, wear dust proof mask or gas defence mask.
Skin and body protection	In general situation, skin and body protection are not needed.

8.2.3 Environmental exposure controls

Environmental exposure controls	No information available
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9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Colour	Colorless transparent
Odor	Odorless
Odor threshold	No information available
pH	5~8
Melting point/freezing point(°C)	No information available
Initial boiling point and boiling range(°C)	No information available
Flash point(Closed cup, °C)	No information available
Evaporation rate	No information available
Flammability	Not flammable
Upper/lower explosive limits[%(v/v)]	Upper limit : No information available ; Lower limit : No information available
Vapor pressure	No information available
Vapor density(Air = 1)	No information available
Relative density(Water=1)	No information available
Solubility	Soluble in water
n-octanol/water partition coefficient	No information available
Auto-ignition temperature(°C)	No information available
Decomposition temperature(°C)	No information available

Kinematic viscosity(mm ² /s)	No information available
Explosive properties	Not explosive
Oxidizing properties	Not oxidizing
Particle characteristics	Not applicable

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Information with regard to physical hazard classes	No information available
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9.2.2 Other safety characteristics

Other safety characteristics	No information available
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10 Stability and reactivity

Stability and reactivity

10.1 Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
10.2 Chemical stability	Stable under proper operation and storage conditions.
10.3 Possibility of hazardous reactions	In contact with active metals (alkali metals, Na, Ca etc.) causes a reaction and release hydrogen.
10.4 Conditions to avoid	Incompatible materials, heat, flame and spark.
10.5 Incompatible materials	Alkali, sodium, calcium, and other active metal, halogen, metal oxide, nonmetal oxide, acyl halide and metal phosphide.
10.6 Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11 Toxicological information

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

Lens Cleaner	
Skin corrosion/irritation	Based on available data, the classification criteria are not met
Serious eye damage/irritation	Based on available data, the classification criteria are not met
Skin sensitization	Based on available data, the classification criteria are not met
Respiratory sensitization	Based on available data, the classification criteria are not met
Reproductive toxicity	Based on available data, the classification criteria are not met
STOT-single exposure	Based on available data, the classification criteria are not met
STOT-repeated exposure	Based on available data, the classification criteria are not met
Aspiration hazard	Based on available data, the classification criteria are not met
Germ cell mutagenicity	Based on available data, the classification criteria are not met

Acute toxicity

Component	LD ₅₀ (oral)	LD ₅₀ (dermal)	LC ₅₀ (inhalation,4h)
tree peony bark extract	490mg/kg(Mouse)	No information available	No information available
Benzalkonium bromide	230mg/kg(Rat)	No information available	No information available

Carcinogenicity

Component	List of carcinogens by the IARC	Report on Carcinogens by NTP
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	Monographs	
distilled water	Not Listed	Not Listed
Benzalkonium bromide	Not Listed	Not Listed
tree peony bark extract	Not Listed	Not Listed
COCAMIDOPROPYL BETAINE	Not Listed	Not Listed

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Component	Endocrine disrupting properties
distilled water	No information available
Benzalkonium bromide	No information available
tree peony bark extract	No information available
COCAMIDOPROPYL BETAINE	No information available

11.2.2 Other Information

Other Information	See Section 11.1
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12 Ecological information

12.1 Toxicity

Acute aquatic toxicity

Component	Fish	Crustaceans	Algae
COCAMIDOPROPYL BETAINE	LC ₅₀ : 2mg/L (96h)(Fish)	EC ₅₀ : 6.4mg/L (48h)(Daphnia magna)	No information available

Chronic aquatic toxicity

Component	Fish	Crustaceans	Algae
COCAMIDOPROPYL BETAINE	NOEC : 0.16mg/L(Fish)	No information available	No information available

12.2 Persistence and degradability

Persistence and degradability	No information available
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12.3 Bioaccumulative potential

Bioaccumulative potential	No information available
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12.4 Mobility in soil

Mobility in soil	No information available
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12.5 Results of PBT and vPvB assessment

Component	Results of PBT and vPvB assessment [according to (EC) No 1907/2006]
distilled water	No information available

Benzalkonium bromide	No information available
tree peony bark extract	No information available
COCAMIDOPROPYL BETAINE	Not PBT/vPvB

12.6 Endocrine disrupting properties

Component	Endocrine disrupting properties
distilled water	No information available
Benzalkonium bromide	No information available
tree peony bark extract	No information available
COCAMIDOPROPYL BETAINE	No information available

12.7 Other adverse effects

No information available

13 Disposal considerations

13.1 Waste treatment methods

Waste chemicals	Before disposal should refer to the relevant national and local laws and regulation. Recommend the use of incineration disposal.
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.
Disposal recommendations	Refer to section waste chemicals and contaminated packaging.

14 Transport information

Label

Transporting Label	Not applicable
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IMDG-CODE

IMDG-CODE	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
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ICAO/IATA-DGR

IATA-DGR	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
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UN-ADR

UN-ADR	NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS
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Maritime transport in bulk according to IMO instruments

- ◆ Transport in bulk according to Annex II of MARPOL and the IBC code

No information available

- ◆ Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

No information available

- ◆ Transport in bulk in accordance with the IGC Code

No information available

15 Regulatory information

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

International chemical inventory

Component	EC inventory	TSCA	DSL	IECSC	NZIoC	PICCS	KECI	AIICS	ENCS
distilled water	√	√	√	√	√	√	√	√	√
Benzalkonium bromide	√	√	√	√	×	×	×	√	√
tree peony bark extract	√	×	×	×	×	×	×	×	√
COCAMIDOPROPYL BETAINE	√	√	√	√	√	√	√	√	√

[EC inventory]	European Inventory of Existing Commercial Chemical Substances
[TSCA]	United States Toxic Substances Control Act Inventory
[DSL]	Canadian Domestic Substances List
[IECSC]	China Inventory of Existing Chemical Substances
[NZIoC]	New Zealand Inventory of Chemicals
[PICCS]	Philippines Inventory of Chemicals and Chemical Substances
[KECI]	Korea Existing Chemicals Inventory
[AIICS]	Australian. Inventory of Industrial Chemical (AIICS)
[ENCS]	Japan Inventory of Existing & New Chemical Substances

European chemical inventory

Component	A	B	C	D	E	F	G	H	I
distilled water	×	×	×	√	×	×	×	×	×
Benzalkonium bromide	×	×	×	√	×	×	×	×	×
tree peony bark extract	×	×	×	√	×	×	×	×	×
COCAMIDOPROPYL BETAINE	×	×	×	√	√	×	×	×	×

[A]	Candidate list of Substances of Very High Concern for authorization under EU REACH regulation
[B]	Substances requiring authorisation under EU REACH regulation
[C]	Substances restricted under EU REACH
[D]	Pre-registered substances under EU REACH
[E]	Registered substances under EU REACH
[F]	Substance Evaluation – CoRAP under EU REACH
[G]	List of priority substances under EU water policy (Directive 2455/2001/EC)
[H]	Substances subject to POPs Regulation
[I]	Substances proposed as POPs

Note:

- "√" Indicates that the substance included in the regulations.
- "×" No data or not included in the regulations.

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

16 Other information

Information on revision

Creation Date | 2025/02/14

Revision Date	2025/02/18
Reason for revision	-

Reference

- [1] IPCS: The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>.
- [2] IARC, website: <http://www.iarc.fr/>.
- [3] OECD: The Global Portal to Information on Chemical Substances, website: <https://www.echemportal.org/echemportal/>.
- [4] CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>.
- [5] NLM: ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>.
- [6] EPA: Integrated Risk Information System, website: <http://cfpub.epa.gov/iris/>.
- [7] U.S. Department of Transportation: ERG, website: <http://www.phmsa.dot.gov/hazmat/library/erg>.
- [8] Germany GESTIS-database on hazard substance, website: <http://gestis-en.itrust.de/>.

Abbreviations and acronyms

CAS	Chemical Abstracts Service	UN	The United Nations
PC-STEL	Short term exposure limit	OECD	Organization for Economic Co-operation and Development
PC-TWA	Time Weighted Average	IMDG-CODE	International Maritime Dangerous Goods CODE
MAC	Maximum Allowable Concentration	IARC	International Agency for Research on Cancer
DNEL	Derived No Effect Level	ICAO	International Civil Aviation Organization
PNEC	Predicted No Effect Concentration	IATA	International Air Transportation Association
NOEC	No Observed Effect Concentration	ACGIH	American Conference of Governmental Industrial Hygienists
LC ₅₀	Lethal Concentration 50%	NFPA	National Fire Protection Association
LD ₅₀	Lethal Dose 50%	NTP	National Toxicology Program
EC ₅₀	Effective Concentration 50%	PBT	Persistent, Bioaccumulative, Toxic
EC _x	Effective Concentration X%	vPvB	very Persistent, very Bioaccumulative
P _{OW}	Partition coefficient Octanol: Water	CMR	Carcinogens, mutagens or substances toxic to reproduction
BCF	Bioconcentration factor	RPE	Respiratory Protective Equipment
ED	Endocrine disruptor	G1	Carcinogenic to humans
G2A	Probably carcinogenic to humans	G2B	Possibly carcinogenic to humans
G3	Not yet classified as carcinogenic to humans	G4	Probably not carcinogenic to humans

Disclaimer

This Safety Data Sheet (SDS) was prepared according to REACH Regulation. The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.