



Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

(This safety data sheet is for information only and does not comply with the official language requirements of article 31 (5) of REACH.)

PLIWA San

Version number: 2.0
Replaces version of: 22.03.2023 (1)

Revision: 01.07.2024
First version: 22.03.2023

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

1.1 Product identifier

Trade name PLIWA San

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

Relevant identified uses Washlotion

1.3 Details of the supplier of the safety data sheet

PLIWA Hygiene GmbH
Pliwa-Straße 2
34323 Malsfeld-Ostheim
Germany

Telephone: +495661 / 7317 0
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e-mail: info@pliwa.de
Website: www.pliwa.de

e-mail (competent person) sdb@csb-compliance.com

Please do not use this e-mail address to ask for the latest safety data sheet. For this purpose contact PLIWA Hygiene GmbH.

1.4 Emergency telephone number

Emergency information

PLIWA Hygiene GmbH
+49 5661 / 7317 0

This number is only available during the following office hours:

Mon - Thu 09:00 - 15:00
Fri 09:00 - 12:00

As above or nearest toxicological information centre.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

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Classification				
Section	Hazard class	Category	Hazard class and category	Hazard statement
3.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
4.1C	hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Signal word danger

Pictograms

GHS05



Hazard statements

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.

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.

P310 Immediately call a POISON CENTER/doctor.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazardous ingredients for labelling

amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl) alcohols, C12-14, ethoxylated, sulfates, sodium salts

Additional labelling requirements

see section 15 of the safety data sheet

2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture).

3.2 Mixtures

Description of the mixture

Aqueous solution, containing surfactants.

Detergent.

Hazardous ingredients					
Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
alcohols, C12-14, ethoxylated, sulfates, sodium salts	CAS No 68891-38-3 EC No 500-234-8 REACH Reg. No 01-2119488639-16-xxxx	5 - < 10	Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Aquatic Chronic 3 / H412		-
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	EC No 931-329-6 REACH Reg. No 01-2119490100-53-xxxx	3 - < 5	Skin Irrit. 2 / H315 Eye Dam. 1 / H318 Aquatic Chronic 2 / H411		-

Name of substance	Specific Conc. Limits	M-Factors	ATE	Exposure route
alcohols, C12-14, ethoxylated, sulfates, sodium salts	Eye Dam. 1; H318: $C \geq 10\%$ Eye Irrit. 2; H319: $5\% \leq C < 10\%$	-	-	-

Remarks

For full text of H-phrases: see SECTION 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes

Self-protection of the first aider.

Remove affected person from the danger area and lay down.

Do not leave affected person unattended.

Take off immediately all contaminated clothing.

In all cases of doubt, or when symptoms persist, seek medical advice.

Following inhalation

Provide fresh air.

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

Following skin contact

Rinse skin with water/shower.

Following eye contact

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a doctor.

Following ingestion

Rinse mouth. Do not induce vomiting.

Get medical advice/attention if you feel unwell.

Notes for the doctor

None.

4.2 Most important symptoms and effects, both acute and delayed

This information is not available.

4.3 Indication of any immediate medical attention and special treatment needed

None.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Non-combustible. Co-ordinate firefighting measures to the fire surroundings.

water spray, alcohol resistant foam, fire extinguishing powder, carbon dioxide (CO₂)

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Section 10.

Hazardous combustion products

nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂)

5.3 Advice for firefighters

Non-combustible.

Keep containers cool with water spray.

In case of fire and/or explosion do not breathe fumes.

Co-ordinate firefighting measures to the fire surroundings.

Do not allow firefighting water to enter drains or water courses.

Collect contaminated firefighting water separately.

Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

self-contained breathing apparatus (EN 133)

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

Ventilate affected area.

Avoid contact with eyes.

Special danger of slipping by leaking/spilling product.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water.

Retain contaminated washing water and dispose of it.

6.3 Methods and material for containment and cleaning up

Advice on how to clean up a spill

Collect spillage.

Absorbent material (e.g. sand, diatomaceous earth, acid binder, universal binder, sawdust, etc.).

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal.

Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5.

Personal protective equipment: see section 8.

Incompatible materials: see section 10.

Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes.

Do not breathe vapour/spray.

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation.

Measures to protect the environment

Avoid release to the environment.

Advice on general occupational hygiene

Do not eat, drink and smoke in work areas.

Wash hands after use.

Preventive skin protection (barrier creams/ointments) is recommended.

Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Flammability hazards

None.

Incompatible substances or mixtures

Incompatible materials: see section 10.

Protect against external exposure, such as

frost

Consideration of other advice

Keep away from food, drink and animal feeding stuffs.

Ventilation requirements

Provision of sufficient ventilation.

Specific designs for storage rooms or vessels

Keep container tightly closed and in a well-ventilated place.

Packaging compatibilities

Keep only in original container.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

This information is not available

Human health values

Relevant DNELs of components						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	DNEL	175 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	DNEL	2.750 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	DNEL	132 µg/cm ²	human, dermal	worker (industry)	chronic - local effects
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	DNEL	73,4 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	DNEL	4,16 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

Environmental values

Relevant PNECs of components				
Name of substance	CAS No	Endpoint	Threshold level	Environmental compartment
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	PNEC	0,24 mg/l	freshwater
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	PNEC	0,024 mg/l	marine water
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	PNEC	10 ⁹ /l	sewage treatment plant (STP)

Relevant PNECs of components				
Name of substance	CAS No	Endpoint	Threshold level	Environmental compartment
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	PNEC	0,917 mg/kg	freshwater sediment
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	PNEC	0,092 mg/kg	marine sediment
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	PNEC	7,5 mg/kg	soil
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	PNEC	0,007 mg/l	freshwater
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	PNEC	0,001 mg/l	marine water
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	PNEC	830 mg/l	sewage treatment plant (STP)
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	PNEC	0,195 mg/kg	freshwater sediment
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	PNEC	0,019 mg/kg	marine sediment
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	PNEC	0,035 mg/kg	soil

8.2 Exposure controls

Appropriate engineering controls

Use local and general ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection. (EN 166)

Hand protection

Protective gloves		
Material	Material thickness	Breakthrough times of the glove material
CR: chloroprene (chlorobutadiene) rubber	≥ 0,11 mm	>10 minutes (permeation: level 1)
NBR: acrylonitrile-butadiene rubber	≥ 0,11 mm	>10 minutes (permeation: level 1)
PVC: polyvinyl chloride	≥ 0,11 mm	>10 minutes (permeation: level 1)

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Body protection

Protective clothing against liquid chemicals.
(EN 13832, EN 340, EN 14605).

Respiratory protection

In case of inadequate ventilation wear respiratory protection.
(EN 136, EN 140, EN 14387, EN 143, EN 149).

Environmental exposure controls

Use appropriate container to avoid environmental contamination.
Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	clear - colourless
Odour	characteristic
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Flammability	non-combustible
Lower and upper explosion limit	not determined
Flash point	not determined
Auto-ignition temperature	not determined
Decomposition temperature	not relevant

pH (value)	5 – 6 (20 °C)
Kinematic viscosity	not determined
Dynamic viscosity	not determined
Solubility(ies)	
Water solubility	miscible in any proportion
Partition coefficient n-octanol/water (log value)	not determined
Vapour pressure	not determined
Density and/or relative density	
Density	1,01 – 1,03 g/cm ³ at 20 °C
Relative vapour density	information on this property is not available
Particle characteristics	not relevant (liquid)

9.2 Other information

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics	there is no additional information

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.

Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

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

Classification procedure

If not otherwise specified the classification is based on:
Ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity of components							
Name of substance	CAS No	Exposure route	End-point	Value	Species	Method	Source
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	oral	LD50	4.100 mg/kg	rat	-	ECHA
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	dermal	LD50	>2.000 mg/kg	rat	-	ECHA
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	oral	LD50	>2.000 mg/kg	rat	OECD Guideline 401	ECHA
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	dermal	LD50	>2.000 mg/kg	rabbit	-	ECHA

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Skin sensitisation

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Respiratory sensitisation

Skin sensitisation

Based on available data, the classification criteria are not met.

Respiratory 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.

Specific target organ toxicity - single exposure

Based on available data, the classification criteria are not met.

Specific target organ toxicity - repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of $\geq 0,1\%$.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity (acute)

Based on available data, the classification criteria are not met.

Aquatic toxicity (acute) of components

Name of substance	CAS No	Endpoint	Exposure time	Value	Species	Method	Source
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	EC50	48 h	7,4 mg/l	daphnia magna	OECD Guideline 202	ECHA

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Name of substance	CAS No	Endpoint	Exposure time	Value	Species	Method	Source
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	LC50	96 h	7,1 mg/l	zebra fish (Danio rerio)	OECD Guideline 203	ECHA
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	ErC50	72 h	27,7 mg/l	algae (Desmodesmus subspicatus)	OECD Guideline 201	ECHA
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	LC50	96 h	2,4 mg/l	rainbow trout (Oncorhynchus mykiss)	OECD Guideline 203	ECHA
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	EC50	48 h	3,2 mg/l	daphnia magna	OECD Guideline 202	ECHA
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	EC50	72 h	6.000 mg/l	activated sludge (Pseudomonas putida)	DIN 38412-8	ECHA
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	EbC50	72 h	23,4 mg/l	algae (Desmodesmus subspicatus)	EU method C.3	ECHA
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	ErC50	24 h	18,6 mg/l	algae (Desmodesmus subspicatus)	EU method C.3	ECHA

Aquatic toxicity (chronic)

Harmful to aquatic life with long lasting effects.

Aquatic toxicity (chronic) of components

Name of substance	CAS No	Endpoint	Exposure time	Value	Species	Method	Source
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	LC50	21 d	0,74 mg/l	daphnia magna	OECD Guideline 211	ECHA
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	EC50	21 d	0,37 mg/l	daphnia magna	OECD Guideline 211	ECHA
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	EC50	16 h	>10 g/l	activated sludge (Pseudomonas putida)	DIN 38412-8	ECHA
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	NOEC	28 d	0,14 – 0,2 mg/l	rainbow trout (Oncorhynchus mykiss)	OECD Guideline 204	ECHA
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	NOEC	21 d	0,27 mg/l	daphnia magna	OECD Guideline 211	ECHA
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	NOEC	72 h	0,95 mg/l	algae (Desmodesmus subspicatus)	OECD Guideline 201	ECHA
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	growth (Eb-Cx) 10%	16 h	>10 g/l	activated sludge (Pseudomonas putida)	DIN 38412-8	ECHA
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	growth rate (ErCx) 10%	72 h	4,4 mg/l	algae (Desmodesmus subspicatus)	OECD Guideline 201	ECHA

Name of substance	CAS No	Endpoint	Exposure time	Value	Species	Method	Source
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	NOEC	21 d	0,07 mg/l	daphnia magna	OECD Guideline 211	ECHA
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	NOEC	28 d	0,32 mg/l	rainbow trout (Oncorhynchus mykiss)	OECD Guideline 204	ECHA
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	NOEC	3 d	2 mg/l	algae (Desmodesmus subspicatus)	EU method C.3	ECHA
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	LOEC	21 d	0,24 mg/l	daphnia magna	OECD Guideline 211	ECHA
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	LOEC	28 d	1 mg/l	rainbow trout (Oncorhynchus mykiss)	OECD Guideline 204	ECHA
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	growth rate (ErCx) 10%	72 h	0,83 g/l	activated sludge (Pseudomonas putida)	DIN 38412-8	ECHA

12.2 Persistence and degradability

Biodegradation

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No 648/2004 on detergents.

Degradability of components

Name of substance	CAS No	Process	Degradation rate	Time	Method	Source
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	DOC removal	100 %	28 d	EU method C.4-A	ECHA
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	oxygen depletion	≥77 %	28 d	OECD Guideline 301 D	ECHA
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	carbon dioxide generation	92,5 %	28 d	OECD 301B	ECHA

Persistence

No data available.

12.3 Bioaccumulative potential

Bioaccumulative potential of components

Name of substance	CAS No	BCF	Log KOW
alcohols, C12-14, ethoxylated, sulfates, sodium salts	68891-38-3	-	0,3 (pH value: 6,1, 23 °C)
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	-	65,36	1,35 – 4,84 (pH value: 5,5, 20 °C)

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance at a concentration of ≥ 0,1%.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0,1%.

12.7 Other adverse effects

Data are not available.

Remarks

Wassergefährdungsklasse, WGK (water hazard class): 1.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

This material and its container must be disposed of as hazardous waste.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

Completely emptied packages can be recycled.

Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions.

SECTION 14: Transport information

14.1 UN number or ID number

ADN ID9006

ADR/RID -

IMDG-Code -

ICAO-TI -

14.2 UN proper shipping name

ADN ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

ADR/RID -

IMDG-Code -

ICAO-TI -

14.3 Transport hazard class(es)

ADN 9

ADR/RID -

IMDG-Code -

ICAO-TI -

14.4 Packing group

-

14.5 Environmental hazards

environmentally hazardous (ADN)

14.6 Special precautions for user -

14.7 Maritime transport in bulk according to IMO instruments -

14.8 Information for each of the UN Model Regulations

**Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)
Additional information**

Not subject to ADR.

Not subject to RID.

Is subject to the regulations of the ADN. (Dangerous only when carried in tanker vessels)

European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN) Additional information

Number of cones/blue lights 0

International Maritime Dangerous Goods Code (IMDG) Additional information

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) Additional information

Not subject to ICAO-IATA.

SECTION 15: Regulatory information

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

Relevant provisions of the European Union (EU)

Restrictions according to REACH, Annex XVII

Name	Name acc. to inventory	CAS No	Restriction
PLIWA San	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	-	R3
alcohols, C12-14, ethoxylated, sulfates, sodium salts	substances in tattoo inks and permanent make-up	-	R75
amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)	substances in tattoo inks and permanent make-up	-	R75

Legend

- R3 1. Shall not be used in:
- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
 - tricks and jokes,
 - games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
2. Articles not complying with paragraph 1 shall not be placed on the market.
3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or per-

Legend

fume, or both, if they:

- can be used as fuel in decorative oil lamps for supply to the general public, and
- present an aspiration hazard and are labelled with H304.

4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).

5. Without prejudice to the implementation of other Union provisions relating to the classification, labelling and packaging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:

- (a) lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil – or even sucking the wick of lamps – may lead to life-threatening lung damage";
- (b) grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: 'Just a sip of grill lighter fluid may lead to life threatening lung damage';
- (c) lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.;

Legend

- R75 1. Shall not be placed on the market in mixtures for use for tattooing purposes, and mixtures containing any such substances shall not be used for tattooing purposes, after 4 January 2022 if the substance or substances in question is or are present in the following circumstances:
- (a) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
 - (b) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as reproductive toxicant category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
 - (c) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin sensitiser category 1, 1A or 1B, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;
 - (d) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the substance is present in the mixture in a concentration equal to or greater than:
 - (i) 0,1 % by weight, if the substance is used solely as a pH regulator;
 - (ii) 0,01 % by weight, in all other cases;
 - (e) in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (*1), the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;
 - (f) in the case of a substance for which a condition of one or more of the following kinds is specified in column g (Product type, Body parts) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight:
 - (i) "Rinse-off products";
 - (ii) "Not to be used in products applied on mucous membranes";
 - (iii) "Not to be used in eye products";
 - (g) in the case of a substance for which a condition is specified in column h (Maximum concentration in ready for use preparation) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration, or in some other way, that does not accord with the condition specified in that column;
 - (h) in the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a concentration equal to or greater than the concentration limit specified for that substance in that Appendix.
2. For the purposes of this entry use of a mixture "for tattooing purposes" means injection or introduction of the mixture into a person's skin, mucous membrane or eyeball, by any process or procedure (including procedures commonly referred to as permanent make-up, cosmetic tattooing, micro-blading and micro-pigmentation), with the aim of making a mark or design on his or her body.
3. If a substance not listed in Appendix 13 falls within more than one of points (a) to (g) of paragraph 1, the strictest concentration limit laid down in the points in question shall apply to that substance. If a substance listed in Appendix 13 also falls within one or more of points (a) to (g) of paragraph 1, the concentration limit laid down in point (h) of paragraph 1 shall apply to that substance.
4. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:
- (a) Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);
 - (b) Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).
5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a substance such that the substance then becomes caught by point (a), (b), (c) or (d) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the date of application of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect on the date of application of that new or revised classification.
6. If Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 to list or change the listing of a substance such that the substance then becomes caught by point (e), (f) or (g) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the amendment takes effect after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect from the date falling 18 months after entry into force of the act by which that amendment was made.
7. Suppliers placing a mixture on the market for use for tattooing purposes shall ensure that, after 4 January 2022, the mixture is marked with the following information:

Legend

- (a) the statement "Mixture for use in tattoos or permanent make-up";
- (b) a reference number to uniquely identify the batch;
- (c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient names pursuant to Article 33 of Regulation (EC) No 1223/2009, or in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC name, the CAS and EC number. Ingredients shall be listed in descending order by weight or volume of the ingredients at the time of formulation. "Ingredient" means any substance added during the process of formulation and present in the mixture for use for tattooing purposes. Impurities shall not be regarded as ingredients. If the name of a substance, used as ingredient within the meaning of this entry, is already required to be stated on the label in accordance with Regulation (EC) No 1272/2008, that ingredient does not need to be marked in accordance with this Regulation;
- (d) the additional statement "pH regulator" for substances falling under point (d)(i) of paragraph 1;
- (e) the statement "Contains nickel. Can cause allergic reactions." if the mixture contains nickel below the concentration limit specified in Appendix 13;
- (f) the statement "Contains chromium (VI). Can cause allergic reactions." if the mixture contains chromium (VI) below the concentration limit specified in Appendix 13;
- (g) safety instructions for use insofar as they are not already required to be stated on the label by Regulation (EC) No 1272/2008.

The information shall be clearly visible, easily legible and marked in a way that is indelible.

The information shall be written in the official language(s) of the Member State(s) where the mixture is placed on the market, unless the Member State(s) concerned provide(s) otherwise.

Where necessary because of the size of the package, the information listed in the first subparagraph, except for point (a), shall be included instead in the instructions for use.

Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing the procedure with the information marked on the package or included in the instructions for use pursuant to this paragraph.

8. Mixtures that do not contain the statement "Mixture for use in tattoos or permanent make-up" shall not be used for tattooing purposes.

9. This entry does not apply to substances that are gases at temperature of 20 °C and pressure of 101,3 kPa, or generate a vapour pressure of more than 300 kPa at temperature of 50 °C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).

10. This entry does not apply to the placing on the market of a mixture for use for tattooing purposes, or to the use of a mixture for tattooing purposes, when placed on the market exclusively as a medical device or an accessory to a medical device, within the meaning of Regulation (EU) 2017/745, or when used exclusively as a medical device or an accessory to a medical device, within the same meaning. Where the placing on the market or use may not be exclusively as a medical device or an accessory to a medical device, the requirements of Regulation (EU) 2017/745 and of this Regulation shall apply cumulatively.

List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

None of the ingredients are listed.

Seveso Directive

Not assigned.

Regulation 648/2004/EC on detergents

Labelling of contents	
Wt%	Constituents
≥5% - <15%	anionic surfactants
< 5 %	non-ionic surfactants
-	preservation agents (PHENOXYETHANOL, BENZOIC ACID, DEHYDROACETIC ACID, SORBIC ACID)

Regulation on the marketing and use of explosives precursors

None of the ingredients are listed.

Regulation on drug precursors

None of the ingredients are listed.

Regulation on substances that deplete the ozone layer (ODS)

None of the ingredients are listed.

Regulation concerning the export and import of hazardous chemicals (PIC)

None of the ingredients are listed.

Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

National regulations (Germany)

Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV)

Wassergefährdungsklasse, WGK 1
 (water hazard class) - classification acc. to annex 1 (AwSV)

Technical instructions on air quality control (Germany)

Number	Group of substances	Class	Conc.	Mass flow	Mass concentration	Notation
5.2.5	organic substances	-	5 - < 10 wt%	0,5 kg/h	50 mg/m ³	3)

Notation

3) a total mass flow of 0.50 kg/h or a total mass concentration of 50 mg/m³, each of which to be indicated as total carbon, shall not be exceeded (except organic particulate matter)

Storage of hazardous substances in non-stationary containers (TRGS 510) (Germany)

Storage class (LGK) 12
 (non-combustible liquids)

Other information

Observe employment restrictions for young people according to § 22 JArbSchG.

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

Indication of changes (revised safety data sheet)

Section	Former entry (text/value)	Actual entry (text/value)
1.1	Registration number (REACH): Not relevant (mixture)	-
1.1	CAS number: Not relevant (mixture)	-
2.3	Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance in a concentration of $\geq 0,1\%$.	Results of PBT and vPvB assessment: Does not contain a PBT-/vPvB-substance at a concentration of $\geq 0,1\%$.
3.2	-	Hazardous ingredients: change in the listing (table)
8.1	-	Human health values Relevant DNELs of components of the mixture
8.1	-	Environmental values Relevant PNECs of components of the mixture
8.2	-	Body protection: Protective clothing against liquid chemicals. (EN 13832, EN 340, EN 14605).
14.1	ADN: UN9006	ADN: ID9006
14.2	ADN: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	-
14.2	-	ADN: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
14.3	ADN: 9	-
14.3	-	ADN: 9
14.5	Environmental hazards: -	Environmental hazards: environmentally hazardous (ADN)
14.8	Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) Additional information: Not subject to ADR. Not subject to RID. Is subject to the regulations of the ADN. (Dangerous only when carried in tank vessels)	Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) Additional information: Not subject to ADR. Not subject to RID. Is subject to the regulations of the ADN. (Dangerous only when carried in tanker vessels)
15.1	-	Restrictions according to REACH, Annex XVII: change in the listing (table)

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EbC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code

Abbr.	Descriptions of used abbreviations
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LGK	Lagerklasse (storage class according to TRGS 510, Germany)
LOEC	Lowest Observed Effect Concentration
log KOW	n-Octanol/water
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
SVHC	Substance of Very High Concern
TRGS	Technische Regeln für Gefahrstoffe (technical rules for hazardous substances, Germany)
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures.

Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).

International Maritime Dangerous Goods Code (IMDG).

Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties.

Health hazards.

Environmental hazards.

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H315	Causes skin irritation.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Responsible for the safety data sheet

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Disclaimer

This information is based upon the present state of our knowledge.
This SDS has been compiled and is solely intended for this product.