

SAFETY DATA SHEET

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

Revision date: 01-Aug-2016

Print date: 13-Feb-2017

Version: 6.1

Page 1/9

PALUX

PALUX Auto LiquidClean

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

1.1. Product identifier

Trade name/designation:

PALUX Auto LiquidClean

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

Use of the substance/mixture:

Washing and cleaning products (including solvent based products)

1.3. Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor):

PALUX Aktiengesellschaft

Wilhelm-Frank-Straße 36

97980 Bad Mergentheim

Germany

Telephone: ++49(0)7931/55-0

Telefax: ++49(0)7931/55-88600

E-mail: info@palux.de

Website: www.palux.de

1.4. Emergency telephone number

No data available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]-:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Corrosive to metals (<i>Met. Corr. 1</i>)	H290: May be corrosive to metals.	
Skin corrosion/irritation (<i>Skin Corr. 1A</i>)	H314: Causes severe skin burns and eye damage.	

2.2. Label elements

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

Hazard pictograms:



GHS05

Corrosion

Signal word: Danger

Hazard components for labelling:

sodium hydroxide

hazard statements for physical hazards

H290 May be corrosive to metals.

hazard statements for health hazards

H314 Causes severe skin burns and eye damage.

Supplemental Hazard information (EU): -

SAFETY DATA SHEET

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

Revision date: 01-Aug-2016

Print date: 13-Feb-2017

Version: 6.1

Page 2/9

PALUX

PALUX Auto LiquidClean

Precautionary statements Prevention

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary statements Response

P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water-/or shower.
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/....


2.3. Other hazards

No data available

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Hazardous ingredients / Hazardous impurities / Stabilisers:

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 1310-73-2 EC No.: 215-185-5 INDEX No.: 011-002-00-6 REACH No.: 01-2119457892-27-0035	sodium hydroxide Skin Corr. 1A  Danger H314	5 - 25 Wt %

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious place in recovery position and seek medical advice. Do not leave affected person unattended. Warning First aider: Pay attention to self-protection!

Following inhalation:

Provide fresh air. In case of respiratory tract irritation, consult a physician.

In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing. Get immediate medical advice/attention.

After 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.

After ingestion:

Rinse mouth. Let water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell. Rinse mouth immediately and drink plenty of water-. Do NOT induce vomiting. Get immediate medical advice/attention.

Self-protection of the first aider:

Use personal protection equipment.

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

Skin corrosion/irritation

SAFETY DATA SHEET

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

Revision date: 01-Aug-2016

Print date: 13-Feb-2017

Version: 6.1



Page 3/9

PALUX Auto LiquidClean

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Co-ordinate fire-fighting measures to the fire surroundings.

Water

Carbon dioxide (CO₂)

Extinguishing powder

Unsuitable extinguishing media:

Strong water jet

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

Hazardous combustion products:

Nitrogen oxides (NO_x)

Carbon monoxide

Carbon dioxide (CO₂)

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water-.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Remove persons to safety.

Protective equipment:

Wear protective gloves/protective clothing/eye protection/face protection.

6.1.2. For emergency responders

Personal protection equipment:

Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment:

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up:

Water (with cleaning agent)

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

6.5. Additional information

Use appropriate container to avoid environmental contamination.

SAFETY DATA SHEET

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

Revision date: 01-Aug-2016

Print date: 13-Feb-2017

Version: 6.1

Page 4/9



PALUX Auto LiquidClean

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Wear personal protection equipment (refer to section 8).

Fire prevent measures:

No special measures are necessary.

Advices on general occupational hygiene

When using do not eat, drink or smoke. Avoid contact with eyes and skin.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place.

Storage class: 8B - Non-combustible corrosive substances

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	Substance name	① long-term occupational exposure limit value ② short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
WEL (GB)	sodium hydroxide CAS No.: 1310-73-2	② 2 mg/m ³

8.1.2. Biological limit values

No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
sodium hydroxide CAS No.: 1310-73-2	1 mg/m ³	① DNEL worker ② DNEL long-term inhalative (local)
2,2',2''-nitrilotriethanol CAS No.: 102-71-6	5 mg/m ³	① DNEL worker ② DNEL long-term inhalative (systemic)
2,2',2''-nitrilotriethanol CAS No.: 102-71-6	5 mg/m ³	① DNEL worker ② DNEL long-term inhalative (local)
2,2',2''-nitrilotriethanol CAS No.: 102-71-6	6.3 mg/kg bw/day	① DNEL worker ② DNEL long-term dermal (systemic)

SAFETY DATA SHEET

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

Revision date: 01-Aug-2016

Print date: 13-Feb-2017

Version: 6.1



Page 5/9

PALUX Auto LiquidClean

Substance name	PNEC Value	① PNEC type
2,2',2''-nitrioltriethanol CAS No.: 102-71-6	0.32 mg/l	① PNEC aquatic, freshwater
2,2',2''-nitrioltriethanol CAS No.: 102-71-6	0.032 mg/l	① PNEC aquatic, marine water
2,2',2''-nitrioltriethanol CAS No.: 102-71-6	10 mg/l	① PNEC sewage treatment plant (STP)
2,2',2''-nitrioltriethanol CAS No.: 102-71-6	1.7 mg/kg	① PNEC sediment, freshwater
2,2',2''-nitrioltriethanol CAS No.: 102-71-6	0.17 mg/kg	① PNEC sediment, marine water

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No data available

8.2.2. Personal protection equipment



Eye/face protection:

Eye glasses with side protection DIN EN 166

Skin protection:

Tested protective gloves must be worn DIN EN 374 Suitable material: NBR (Nitrile rubber) >0,3mm Breakthrough time (maximum wearing time) 480min In the case of wanting to use the gloves again, clean them before taking off and air them well. Breakthrough times and swelling properties of the material must be taken into consideration.

8.2.3. Environmental exposure controls

No data available

8.3. Additional information

No data available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: liquid

Colour: light yellow

Odour: Amines

Safety relevant basis data

parameter		at °C	Method	Remark
pH	14	20 °C		
Melting point	<i>not determined</i>			
Freezing point	<i>not determined</i>			
Initial boiling point and boiling range	> 90 °C			
Decomposition temperature (°C):	<i>not determined</i>			
Flash point	<i>not applicable</i>			

SAFETY DATA SHEET

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

Revision date: 01-Aug-2016

Print date: 13-Feb-2017

Version: 6.1



Page 6/9

PALUX Auto LiquidClean

parameter		at °C	Method	Remark
Evaporation rate	<i>not determined</i>			
Ignition temperature in °C	<i>not determined</i>			
Upper/lower flammability or explosive limits	<i>not determined</i>			
Vapour pressure	<i>not determined</i>			
Vapour density	<i>not determined</i>			
Relative density	= 1.15 g/cm ³	20 °C		
Bulk density	<i>not determined</i>			
Water solubility (g/L)	completely miscible	20 °C		
Partition coefficient: n-octanol/water	<i>not determined</i>			
Dynamic viscosity	<i>not determined</i>			
Kinematic viscosity	<i>not determined</i>	40 °C		

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

May be corrosive to metals.
The product itself does not burn.

10.2. Chemical stability

The mixture is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

Slowly corrodes aluminium and zinc under hydrogen evolution.
Exothermic reaction with: Acid

10.6. Hazardous decomposition products

Thermal decomposition can lead to the escape of irritating gases and vapours.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:

The classification criteria for this hazard class are not met by definition.

Acute dermal toxicity:

The classification criteria for this hazard class are not met by definition.

SAFETY DATA SHEET

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

Revision date: 01-Aug-2016

Print date: 13-Feb-2017

Version: 6.1



Page 7/9

PALUX Auto LiquidClean

Acute inhalation toxicity:

The classification criteria for this hazard class are not met by definition.

Skin corrosion/irritation:

Causes severe burns.

Eye damage/irritation:

Causes serious eye damage.

Respiratory or skin sensitisation:

The classification criteria for this hazard class are not met by definition.

Germ cell mutagenicity:

The classification criteria for this hazard class are not met by definition.

Carcinogenicity:

The classification criteria for this hazard class are not met by definition.

Reproductive toxicity:

The classification criteria for this hazard class are not met by definition.

STOT-single exposure:

The classification criteria for this hazard class are not met by definition.

STOT-repeated exposure:

The classification criteria for this hazard class are not met by definition.

Aspiration hazard:

The classification criteria for this hazard class are not met by definition.

Additional information:

No data available

SECTION 12: Ecological information

12.1. Toxicity

CAS No.	Substance name	Toxicological information
1310-73-2	sodium hydroxide	LC₅₀: >133 - <189 mg/l 2 d (Leuciscus idus (golden orfe)) EC₅₀: >100 mg/l 2 d (Daphnia magna (Big water flea))

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

CAS No.	Substance name	Log K _{OC}	Bioconcentration factor (BCF)
1310-73-2	sodium hydroxide	-3.88	

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

SAFETY DATA SHEET

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

Revision date: 01-Aug-2016

Print date: 13-Feb-2017

Version: 6.1

Page 8/9



PALUX Auto LiquidClean

Waste code product:

20 01 29 * Detergents containing hazardous substances

*: Evidence for disposal must be provided.

Waste code packaging:

15 01 10 packaging containing residues of or contaminated by dangerous substances

Waste treatment options

Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.





Appropriate disposal / Package:

Recycle sales packaging via DSD (Duales System Deutschland).

13.2. Additional information

No data available

SECTION 14: Transport information

Land transport (ADR/ RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO- TI / IATA-DGR)
14.1. UN-No.			
1824	1824	1824	1824
14.2. UN proper shipping name			
SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION	SODIUM HYDROXIDE SOLUTION
14.3. Transport hazard class(es)			
 8	 8	 8	 8
14.4. Packing group			
II	II	II	II
14.5. Environmental hazards			
No	No	No	No
14.6. Special precautions for user			
Special provisions: Limited quantity (LQ): Hazard identification number (Kemler No.): Classification code: - tunnel restriction co de: E Remark:	Special provisions: Limited quantity (LQ): Classification code: - Remark:	Special provisions: Limited quantity (LQ): EmS-No.: Remark:	Special provisions: Limited quantity (LQ): Remark:

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

No data available

SAFETY DATA SHEET

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

Revision date: 01-Aug-2016

Print date: 13-Feb-2017

Version: 6.1

Page 9/9



PALUX Auto LiquidClean

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Other regulations (EU):

Volatile organic compounds (VOC) content in percent by weight: 0%

15.1.2. National regulations

No data available

15.2. Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

15.3. Additional information

No data available

SECTION 16: Other information

16.1. Indication of changes

No data available

16.2. Abbreviations and acronyms

No data available

16.3. Key literature references and sources for data

No data available

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Classification according to Regulation (EC) No 1272/2008 [CLP]-:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Corrosive to metals (<i>Met. Corr. 1</i>)	H290: May be corrosive to metals.	
Skin corrosion/irritation (<i>Skin Corr. 1A</i>)	H314: Causes severe skin burns and eye damage.	

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H314	Causes severe skin burns and eye damage.

16.6. Training advice

No data available

16.7. Additional information

No data available