

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.09.2015

Version number 2

Revision: 29.09.2015

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

- **Date of compilation:** 07.05.2015
- **1.1 Product identifier**
- **Trade name:** Pelox® Cleaning and Maintenance Spray R 500
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the preparation:**
Spray for Cleaning and Maintenance of Stainless Steel Surfaces
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer / Supplier:**
Pelox BioChemie- und Umwelttechnik GmbH & Co. KG
Langer Acker 22
D-30900 Wedemark
Germany
mail: office@pelox.de
contact person : Mr. Peter Krämer
www.pelox.de
- phone: ++49 5130 58 89 0
fax: ++49 5130 58 89 58
- **E-mail address of the competent person responsible for the Safety Data Sheet:** office@pelox.de
- **Informing department:**
quality management department
phone.: ++49 5130 58 89 0
office hours: Monday-Thursday: 8.00 a.m. - 16.00 p.m / Friday: 8.00 a.m - 13.00 p.m.
- **1.4 Emergency telephone number:** As above or next toxicological information centre.

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
STOT SE 3	H336	May cause drowsiness or dizziness.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02



GHS07



GHS09

(Contd. on page 2)

GB

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.09.2015

Version number 2

Revision: 29.09.2015

Trade name: Pelox[®] Cleaning and Maintenance Spray R 500

(Contd. of page 1)

- **Signal word** Danger
- **Hazard-determining components of labelling:**
D-Limonene
Propan-2-ol
- **Hazard statements**
H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.
- **Precautionary statements**
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P273 Avoid release to the environment.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P312 Call a POISON CENTER/doctor if you feel unwell.
- **Additional information:**
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0	Propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	25 - <50%
CAS: 5989-27-5 EINECS: 227-813-5 Index number: 601-029-00-7	D-Limonene ⚠ Flam. Liq. 3, H226; ⚠ Aquatic Acute 1, H400; Aquatic Chronic 1, H410; ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	10 - <25%
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0	Butane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	10 - <25%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5	Propane ⚠ Flam. Gas 1, H220; Press. Gas C, H280	10 - <25%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

· **Ingredients according to Regulation (EC) No 648/2004:**

aliphatic hydrocarbons	≥ 30%
perfumes (D-LIMONENE)	

GB

(Contd. on page 3)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.09.2015

Version number 2

Revision: 29.09.2015

Trade name: Pelox[®] Cleaning and Maintenance Spray R 500

(Contd. of page 2)

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:**
Immediately remove any clothing contaminated by the product.
In case of irregular breathing or respiratory arrest provide artificial respiration.
- **After inhalation:**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness bring patient into stable side position for transport.
- **After skin contact:**
Instantly wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
In cases of freeze burns, rinse with plenty of water. Do not remove clothing.
Consult doctor in case of frost bites.
- **After eye contact:**
Rinse opened eye for several minutes under running water. Then consult doctor.
Remove contact lenses, if present and easy to do.
- **After swallowing:**
Rinse out mouth and then drink plenty of water.
Do not induce vomiting; instantly call for medical help.
- **4.2 Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **4.3 Indication of any immediate medical attention and special treatment needed**
May cause drowsiness or dizziness.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.
- **For safety reasons unsuitable extinguishing agents** *Water with a full water jet.*
- **5.2 Special hazards arising from the substance or mixture**
Can be released in case of fire:
Carbon monoxide (CO) and Carbon dioxide (CO₂)
Can form explosive vapour-air mixtures.
Danger of bursting
- **5.3 Advice for firefighters**
- **Protective equipment:** *Wear self-contained breathing apparatus.*
- **Additional information**
Cool endangered containers with water spray jet.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
If without risk possible, move drums with material away from dangerous area.
Eliminate all ignition sources if safe to do so.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation.
Remove all ignition sources.
Avoid contact with skin and eyes.
Do not breathe dust/fume/gas/mist/vapours/spray.
- **6.2 Environmental precautions:**
Do not allow to enter drainage system, surface or ground water.
Inform respective authorities in case product reaches water or sewage system.

(Contd. on page 4)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.09.2015

Version number 2

Revision: 29.09.2015

Trade name: Pelox[®] Cleaning and Maintenance Spray R 500

(Contd. of page 3)

- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Send for recovery or disposal in suitable containers.
Dispose of the material collected according to regulations.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good interior ventilation, especially at floor level (fumes are heavier than air).
Use only in well ventilated areas.
Keep away from heat and direct sunlight.
Avoid contact with skin and eyes.
Do not breathe vapour/spray.
Use solvent-proof equipment.
Avoid splashes or spray in enclosed areas.
Make sure that all applicable workplace limits are observed.
- **Information about protection against explosions and fires:**
Fumes can combine with air to form an explosive mixture.
Flammable fume/air mixtures may be formed in empty containers.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
Beware: Container is pressurized. Keep away from direct sun exposure and temperatures over 50 °C. Do not open by force or throw into fire even after use.
Do not spray on flames or red-hot objects.
Use explosion-proof apparatus / fittings and spark-proof tools.
Use only in explosion-proof area.
Protect from heat.
Highly volatile, flammable constituents are released during processing.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:**
Store in cool location.
The regulations for the storage of aerosols and compressed gas cartridges must be observed.
Observe all local and national regulations for storage of water polluting products.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Store container in a well ventilated position.
Store in cool, dry conditions in well sealed containers.
Protect from heat and direct sunlight.
Store only outside or in explosion proof rooms.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

(Contd. on page 5)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.09.2015

Version number 2

Revision: 29.09.2015

Trade name: Pelox® Cleaning and Maintenance Spray R 500

(Contd. of page 4)

· 8.1 Control parameters
· Components with critical values that require monitoring at the workplace:
67-63-0 Propan-2-ol

WEL (Great Britain)	Short-term value: 1250 mg/m ³ , 500 ppm Long-term value: 999 mg/m ³ , 400 ppm
---------------------	--

106-97-8 Butane

WEL (Great Britain)	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
---------------------	---

· DNELs
67-63-0 Propan-2-ol

Oral	DNEL long-term exposure - systemic effects	26 mg/kg bw/d (general population)
Dermal	DNEL long-term exposure - systemic effects	319 mg/kg bw/d (general population) 888 mg/kg bw/d (worker)
Inhalative	DNEL long-term exposure - systemic effects	89 mg/m ³ (general population) 500 mg/m ³ (worker)

· PNECs
67-63-0 Propan-2-ol

PNEC	140.9 mg/l (aqua (freshwater)) (Assessment factor 1)
	140.9 mg/l (aqua (intermittent releases)) (Assessment factor 1)
	140.9 mg/l (aqua (marine water)) (Assessment factor 1)
	552 mg/kg (sediment (freshwater))
	552 mg/kg (sediment (marine water))
	28 mg/kg (soil)
	2251 mg/l (STP (sewage treatment plant)) (Assessment factor 1)

· 8.2 Exposure controls
· Personal protective equipment
· General protective and hygienic measures

Keep away from foodstuffs, beverages and food.

Instantly remove any contaminated garments.

Wash hands during breaks and at the end of the work.

Use skin protection cream for preventive skin protection.

Avoid contact with the eyes and skin.

Do not eat, drink or smoke while working.

Store protective clothing separately.

Dispose of or clean any contaminated garments thoroughly.

Contaminated work clothing should not be allowed out of the workplace.

Do not carry cleaning cloths impregnated with the product in trouser pockets.

· Breathing equipment:

Use breathing protection in case of insufficient ventilation.

Self-contained breathing apparatus.

· Protection of hands: Solvent resistant gloves.
· Material of gloves

Nitrile rubber - NBR

Recommended thickness of the material: ≥ 0.45 mm

· Penetration time of glove material

Penetration time: ≥ 4 hours

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Tightly sealed safety glasses

(Contd. on page 6)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.09.2015

Version number 2

Revision: 29.09.2015

Trade name: Pelox® Cleaning and Maintenance Spray R 500

(Contd. of page 5)

- **Body protection:**
Solvent resistant protective clothing
Antistatic protective clothing
Body protection must be chosen depending on activity and possible exposure.
- **Limitation and supervision of exposure into the environment**
Do not allow to enter drainage system, surface or ground water.

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form:	Aerosol
Colour:	colourless
Smell:	of citrus fruits
Odour threshold:	not determined

· **pH-value:** not determined

· Change in condition

Melting point/Melting range:	not determined
Boiling point/Boiling range:	-44 °C

· **Flash point:** -97 °C

· **Inflammability (solid, gaseous)** not applicable

· **Ignition temperature:** not determined

· **Decomposition temperature:** Not determined.

· **Self-inflammability:** Product is not selfigniting.

· **Danger of explosion:** In use, may form flammable/explosive vapour-air mixture.

· Critical values for explosion:

Lower:	Not determined.
Upper:	Not determined.

· **Oxidising properties** not determined

· **Vapor pressure:** Not determined.

· **Density at 20 °C:** 0.68 g/cm³

· **Bulk density:** not applicable

· **Relative density** Not determined.

· **Vapour density (AIR = 1):** Not determined.

· **Evaporation rate** Not applicable.

· Solubility in / Miscibility with

Water: not determined

· **Partition coefficient (n-octanol/water):** Not determined.

· Viscosity:

dynamic: not determined

kinematic: not determined

Organic solvents: 98.8 %

· **9.2 Other information** No further relevant information available.

GB

(Contd. on page 7)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.09.2015

Version number 2

Revision: 29.09.2015

Trade name: Pelox® Cleaning and Maintenance Spray R 500

(Contd. of page 6)

SECTION 10: Stability and reactivity

- **10.1 Reactivity** see 10.3
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- **10.3 Possibility of hazardous reactions**
Develops readily flammable gases / fumes
Used empty containers may contain product gases which form explosive mixtures with air.
Danger of bursting
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Strong oxidizing agents
- **10.6 Hazardous decomposition products:** Carbon monoxide (CO) and Carbon dioxide (CO₂)

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**

· **LD/LC50 values that are relevant for classification:****67-63-0 Propan-2-ol**

Oral	LD50	3600 mg/kg (mouse)
		5045 mg/kg (rat)
		6410 mg/kg (rabbit)
	LDLo	3570 mg/kg (human)
Dermal	LD50	12800 - 13400 mg/kg (rabbit)
Inhalative	LC50/4 h	30 - 46.5 mg/l (rat)

5989-27-5 D-Limonene

Oral	LD50	> 4800 mg/kg (rat)
Dermal	LD50	> 2000 mg/kg (rabbit)

106-97-8 Butane

Inhalative	LC50/4 h	658 mg/l (rat)
------------	----------	----------------

- **Primary irritant effect:**
- **Skin corrosion/irritation**
liquified gas may cause frostbite
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye irritation.
- **Respiratory or skin sensitisation**
May cause an allergic skin reaction.
- **Additional toxicological information:**
Inhalation of concentrated vapours may lead to anaesthesia-like conditions and headache, dizziness, etc.
Sensitising
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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.
- **STOT-single exposure**
May cause drowsiness or dizziness.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.

(Contd. on page 8)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.09.2015

Version number 2

Revision: 29.09.2015

Trade name: Pelox® Cleaning and Maintenance Spray R 500

(Contd. of page 7)

· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

67-63-0 Propan-2-ol

EC50/24 h	> 1000 mg/l (water flea (daphnia magna))
EC50/48 h	13299 mg/l (water flea (daphnia magna))
IC50/72 h	> 1000 mg/l (algae (Scenedesmus subspicatus))
LC50/48 h	8970 mg/l (leuciscus idus)
LC50/96 h	9640 mg/l (fathead minnow (pimephales promelas)) (OECD Guideline 203)

5989-27-5 D-Limonene

EC50/48 h	0.48 mg/l (water flea (daphnia magna))
LC50/96 h	0.70 mg/l (fathead minnow (pimephales promelas))

· **12.2 Persistence and degradability** No further relevant information available.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:**

· **Remark:** Toxic for fish.

· **Additional ecological information:**

· **General notes:**

Do not allow product to reach ground water, water bodies or sewage system.

Danger to drinking water if even small quantities leak into soil.

Toxic to aquatic life with long lasting effects.

Water hazard class 2 (Self-assessment): hazardous for water

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Disposal must be made according to official regulations.

· **European waste catalogue:**

Waste disposal key numbers from EWC have to be assigned depending on origin and processing.

· **Uncleaned packagings:**

· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR, IMDG, IATA** UN1950

· **14.2 UN proper shipping name**

· **ADR** UN1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS

· **IMDG** AEROSOLS (DIPENTENE), MARINE POLLUTANT

(Contd. on page 9)

Safety data sheet according to 1907/2006/EC, Article 31

Printing date 29.09.2015

Version number 2

Revision: 29.09.2015

Trade name: Pelox® Cleaning and Maintenance Spray R 500

(Contd. of page 8)

· IATA AEROSOLS, flammable

· 14.3 Transport hazard class(es)

· ADR



· Class 2 5F Gases.
· Label 2.1

· IMDG



· Class 2.1
· Label 2.1

· IATA



· Class 2.1
· Label 2.1

· 14.4 Packing group
· ADR, IMDG, IATA Void

· 14.5 Environmental hazards: Product contains environmentally hazardous substances:
D-Limonene

· Marine pollutant: YES
Symbol (fish and tree)

· Special marking (ADR): Symbol (fish and tree)

· 14.6 Special precautions for user Warning: Gases.

· Kemler Number: -

· EMS Number: F-D,S-U

· 14.7 Transport in bulk according to Annex II of
Marpol and the IBC Code Not applicable.

· Transport/Additional information:

· ADR

· Limited quantities (LQ): 1L
· Excepted quantities (EQ) Code: E0
Not permitted as Excepted Quantity

· Transport category: 2

· Tunnel restriction code: D

· IMDG

· Limited quantities (LQ) 1L
· Excepted quantities (EQ) Code: E0
Not permitted as Excepted Quantity

(Contd. on page 10)

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 29.09.2015

Version number 2

Revision: 29.09.2015

Trade name: Pelox® Cleaning and Maintenance Spray R 500

(Contd. of page 9)

· **UN "Model Regulation":** UN1950, AEROSOLS, 2.1
ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Information about limitation of use:** Employment restrictions concerning young persons must be observed.
- **Decree to be applied in case of technical fault:** Directive 2012/18/EU does not apply.
- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water
- **VOC (EU):** 671,8 g/l
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**
The(se) H-phrases are those of the ingredient(s) and do(es) not necessarily represent the classification of the product.
H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
- **Department issuing MSDS:**
C.S.B. GmbH Phone: +49 - 2151 - 652086-0
Düsseldorfer Str. 113 Fax: +49 - 2151 - 652086-9
47809 Krefeld / Germany
- **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Gas 1: Flammable gases, Hazard Category 1
Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
Press. Gas C: Gases under pressure: Compressed gas
Flam. Liq. 2: Flammable liquids, Hazard Category 2
Flam. Liq. 3: Flammable liquids, Hazard Category 3

(Contd. on page 11)

**Safety data sheet
according to 1907/2006/EC, Article 31**

Printing date 29.09.2015

Version number 2

Revision: 29.09.2015

Trade name: Pelox[®] Cleaning and Maintenance Spray R 500

(Contd. of page 10)

*Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2**Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2**Skin Sens. 1: Sensitisation - Skin, Hazard Category 1**STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3**Aquatic Acute 1: Hazardous to the aquatic environment - Acute Hazard, Category 1**Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1**Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2*

· **Sources:** These data are based on information submitted by pre-suppliers.

· *** Data compared to the previous version altered.**

GB