

PML Remover
February 12, 2025

Safety Data Sheet

(According to EU Commission Regulation No. 453/2010, amending Regulation (EC) No. 1907/2006 (REACH) and Regulation (EC) No. 1272/2008 (CLP))

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

1.1 Product Identifier

Product Name: **PML Remover**

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

Solution for removing permanent makeup and tattoos.

1.3 Details of the supplier of the safety data sheet

Address: ul. Kilińskiego 18/20, 42-200 Częstochowa

Tel.: +48 882-169-228

Email: biuro@pml.com.pl

Person responsible for preparing the Safety Data Sheet: **Janusz Wolnicki**, Email: biuro@pml.com.pl

1.4 Emergency telephone number

Toxicological Information in Poland: (42) 631 47 24 (7:00 AM - 3:00 PM) or 112 (24/7 emergency number)

SECTION 2: HAZARDS IDENTIFICATION

PML Remover is not classified as a hazardous substance under current law.

2.1 Classification of the substance or mixture

According to Regulation (EC) No. 1272/2008 (CLP):

- **Health hazards:** Not classified.

According to Council Directive 67/548/EEC:

- **Health hazards:** Not classified.

Health risks:

- PML Remover has mild oxidizing properties.
- It may be harmful if swallowed.

- Causes eye irritation.

Environmental hazards:

- PML Remover does not pose a harmful effect on the natural environment.

Physical and chemical hazards:

- PML Remover is a non-flammable substance and does not pose a fire hazard.

2.2 Label elements

- **Hazard pictograms:** None
- **Signal word:** None
- **Hazard statements:** Causes eye irritation.

Precautionary statements:

- Read and understand safety precautions before use.
- Keep out of reach of children.
- If medical advice is needed, have the product container or label at hand.
- Store in a tightly closed container.

2.3 Other hazards

No information available regarding PTB or vPvB criteria according to Annex XIII.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name	Identifiers	%	Regulation 67/548/EEC	Regulation (EC) No. 1272/2008 (CLP)
Distilled Water	EC No.: 231-791-2, CAS No.: 7732-18-5	-	-	-
L-Lactic Acid	EC No.: 201-196-2, CAS No.: 79-33-4	8.0%	-	-
Phytic Acid	CAS No.: 83-86-3	4.0%	-	-
Hydrogen Peroxide	EC No.: 231-765-0, CAS No.: 7722-84-1	3.8%	-	-
Herbal Extracts	-	2.5%	-	-
Retinol	EC No.: 564-87-4, CAS No.: 116-31-4	0.4%	-	-
Silver	EC No.: 231-131-3, CAS No.: 7440-22-4	0.003%	-	-
Phosphoric Acid	EC No.: 231-633-2, CAS No.: 7664-38-2	0.00005%	-	-

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation:

- No specific measures required. If discomfort occurs, seek medical advice.

Skin contact:

- Remove contaminated clothing.
- Wash affected skin with plenty of water and soap.
- If irritation occurs, consult a dermatologist.

Eye contact:

- Rinse eyes immediately with plenty of water while keeping eyelids open.
- Ensure thorough rinsing.
- If necessary, seek advice from an ophthalmologist.

Ingestion:

- Rinse mouth and drink plenty of water.
- Do not induce vomiting.
- If large quantities are swallowed, seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

- **Inhalation:** No known adverse effects.
- **Skin contact:** No known adverse effects.
- **Eye contact:** May cause irritation and redness.
- **Ingestion:** May cause irritation and burns in the mouth and throat.

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically.
 - If large amounts are swallowed or inhaled, immediately contact a poison control center.
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SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

- Use suitable extinguishing methods for surrounding materials.

5.2 Special hazards arising from the substance or mixture

- The preparation is non-flammable.

- Weak oxidizer.
- Decomposes in contact with organic materials, releasing oxygen and heat.
- Fire or heat may cause pressure buildup, leading to an explosion.

5.3 Advice for firefighters

- Do not remain in the danger zone without appropriate protective clothing and self-contained breathing apparatus.
 - Cool endangered containers with sprayed water.
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SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency procedures

- Wear protective clothing, sealed goggles, and gloves in case of leaks or splashes.

6.2 Environmental precautions

- Prevent the substance from entering surface and groundwater.

6.3 Methods and material for containment and cleaning up

- Collect mechanically or absorb with materials such as straw, sawdust, cloth, peat, or sand.
- Dispose of in designated waste containers.

6.4 Reference to other sections

- Dispose of in accordance with Section 13 recommendations.
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SECTION 7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Do not ingest. Avoid contact with eyes. Wear appropriate protective measures. Work in accordance with safety and hygiene principles: do not eat or drink, do not smoke in the workplace, wash hands after use, and remove contaminated clothing and protective equipment before entering areas designated for meals.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

Store in a sealed container at a temperature below 25°C. Protect from light. Keep out of reach and sight of children.

7.3 Specific End Use(s)

No available data.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters

Recommendations regarding monitoring procedures for hazardous component levels in the air:

- Regulation of the Minister of Health of April 20, 2005, on testing and measuring harmful factors in the work environment (Journal of Laws No. 73, item 645)
- PN-89/Z-01001/06. Air purity protection. Names, definitions, and units. Terminology regarding air quality testing in workplaces.
- PN Z-04008-7:2002. Air purity protection. Sampling principles. Rules for air sample collection in the work environment and result interpretation.
- PN-EN-689:2002. Workplace air – Guidelines for the assessment of inhalation exposure to chemical agents by comparison with allowable values and measurement strategy.

When exposure concentration is established and known, the selection of personal protective equipment should consider the concentration of the substance at the workplace, exposure time, and the tasks performed by the worker. In emergency situations where the concentration is unknown, use personal protective equipment of the highest recommended protection class. The employer must ensure that protective equipment and work clothing meet protective and functional requirements and ensure their washing, maintenance, repair, and disinfection.

8.2 Exposure Controls

Personal protective equipment should comply with the requirements of the Regulation of the Minister of Economy of December 21, 2005, on essential requirements for personal protective equipment (Journal of Laws No. 259, item 2173).

Respiratory Protection

Use protective masks when maximum air exposure limits are exceeded.

Eye Protection

Goggles/safety glasses.

Hand Protection

Protective gloves made of nitrile material.

Skin Protection

Protective clothing made of dense fabric. Protective aprons.

General Recommendations

General industrial hygiene regulations apply. Do not eat, drink, or take medication during work. Avoid direct skin and eye contact with the preparation. Change contaminated clothing. Wash hands after handling the substance.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on Basic Physical and Chemical Properties

Appearance: semi-transparent, yellow liquid

Odor: characteristic

Odor threshold: not applicable

pH: acidic

Melting/freezing point [°C]: -26

Initial boiling point and boiling range [°C]: approx. 106

Flashpoint [°C]: not applicable

Evaporation rate: 299 Pa at 25 °C

Flammability (solid, gas): non-flammable

Upper explosive limit [% v/v]: not applicable

Lower explosive limit [% v/v]: not applicable

Vapor pressure relative to air: 1.17

Relative density at 20°C [g/cm³]: 1.11

Solubility: easily soluble in water, alcohols, and ethyl ether

Partition coefficient n-octanol/water: Log K_{ow} = -1.57

Auto-ignition temperature [°C]: not applicable

Decomposition temperature [°C]: no data available

Viscosity at 20°C, [mPa s]: 1.248

Explosive properties: none

Oxidizing properties: weak oxidizer

9.2 Other Information

Molecular weight [g/mol]: 39.02

SECTION 10. STABILITY AND REACTIVITY

10.1 Reactivity

PML Remover has oxidizing and corrosive properties. It decomposes into water and oxygen. The decomposition reaction releases heat.

10.2 Chemical Stability

The product is stable under proper storage conditions.

10.3 Possibility of Hazardous Reactions

Decomposition in sealed containers may proceed explosively.

10.4 Conditions to Avoid

Elevated temperature, light, contact with alkaline substances, dirt, and rust.

10.5 Incompatible Materials

Decomposition catalysts for PML Remover: organic materials, reducing agents, metal oxides, metal salts, metal ions (e.g., Mn, Fe, Cu, Ni, Cr, Zn), bases, contaminants, rust, dirt.

10.6 Hazardous Decomposition Products

At high temperatures, oxygen and heat are released.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

Acute Toxicity:

- LD50 (oral, rat) = 1200 mg/kg (for 30% hydrogen peroxide)
- LD50 (skin, rabbit): >2000 mg/kg (for 30% hydrogen peroxide)
- LD50 (inhalation, rat) >170 mg/m³ (30 min.) (for 30% hydrogen peroxide)

Irritant Effect: May cause eye irritation.

Corrosive Effect: Not classified.

Sensitization: Not classified.

Mutagenicity: Not classified.

Carcinogenicity: Not classified.

Reproductive Toxicity: Not classified.

Possible Routes of Exposure:

- **Skin Contact:** No adverse effects when applied to intact skin. However, it may cause stinging pain and irritation when in contact with burned or open skin.
- **Eye Contact:** Causes irritation and redness.
- **Inhalation:** Under normal environmental temperatures, there is no risk of harmful effects on the respiratory system due to the low volatility of the preparation.
- **Ingestion of Large Amounts:** May cause irritation and burns in the mouth and throat. Additionally, symptoms may include abdominal pain, vomiting, and diarrhea.

Adverse Effects:

- If it enters blood vessels, it may cause methemoglobinemia and gas embolism.
- When introduced into body cavities with no drainage, it may cause localized emphysema.
- When used for flushing periodontal pockets, it may cause localized subgingival emphysema.

PML Remover is an unstable compound that decomposes under the influence of catalases present in tissues, releasing atomic oxygen. This reaction occurs rapidly in the presence of exudates and necrotic tissues. The released oxygen has bactericidal and bleaching properties, mechanically cleans dried wounds, and softens scabs. A 3% solution stimulates granulation tissue formation.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

No specific environmental impact studies have been conducted. The substance is not classified as hazardous to the environment, but lowering pH levels can have negative effects on aquatic organisms. It should not be allowed to enter groundwater, sewage systems, or water bodies.

Ecotoxicity Data:

- **Acute Toxicity:**
 - *Daphnia magna* (water flea) - EC50: 2320 µg/L/48h
 - *Oncorhynchus mykiss* (rainbow trout) - LC50: 22 ppm/96h
 - Freshwater fish - LC50: 16.4 mg/L/24h
 - Aquatic invertebrates - EC50: 2.4 mg/L/48h
- **Chronic Toxicity:**
 - Aquatic invertebrates - NOEC: 0.63 mg/L (for 30% hydrogen peroxide)
 - Algae - NOEC: 0.63 mg/L (for 30% hydrogen peroxide)
- **Toxicity to Microorganisms:**
 - Microorganisms - EC50: 466 mg/L (for 30% hydrogen peroxide)

12.2 Persistence and Degradability

PML Remover undergoes complete biodegradation in the environment. In the air, it undergoes photodegradation, with a half-life of approximately 24 hours for hydrogen peroxide.

12.3 Bioaccumulation Potential

Does not bioaccumulate.

12.4 Mobility in Soil

Due to its high water solubility, the product is expected to exhibit high mobility in soil.

12.5 PBT and vPvB Assessment

The substance does not meet the criteria for PBT (Persistent, Bioaccumulative, and Toxic) or vPvB (Very Persistent and Very Bioaccumulative) according to Annex XIII.

12.6 Other Adverse Effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Treatment Methods

Spilled PML Remover should be diluted with a large amount of water until the visible decomposition reaction (intense gas bubbling) ceases.

The packaging should be completely used according to the instructions. Empty single-use containers should be disposed of by an authorized waste disposal service. Waste should be destroyed in compliance with applicable regulations.

Relevant Regulations:

- Act of April 27, 2001, on waste (Journal of Laws No. 62, item 628) with amendments.
 - Act of May 11, 2001, on packaging and packaging waste (Journal of Laws No. 63, item 638) with amendments.
 - Regulation of the Minister of the Environment of September 27, 2001, on the waste catalog (Journal of Laws No. 112, item 1206).
 - Directive 75/442/EEC.
 - Directive 91/689/EEC.
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SECTION 14: TRANSPORT INFORMATION

14.1 UN Number

Not applicable.

14.2 Proper Shipping Name

Not applicable.

14.3 Transport Hazard Class

No data available.

14.4 Packing Group

Not applicable.

14.5 Environmental Hazards

The substance is not classified as hazardous to the environment according to UN model regulations.

14.6 Special Precautions for Users

No data available.

14.7 Bulk Transport According to Annex II of MARPOL 73/78 and the IBC Code

No data available.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health, and Environmental Regulations Specific to the Substance or Mixture

- Act of January 11, 2001, on chemical substances and preparations (Journal of Laws No. 11, item 84) with amendments.
- Regulation of the Minister of Health of September 2, 2003, on the classification of chemical substances and preparations (Journal of Laws No. 171, item 1666) with amendments.
- Regulation of the Minister of Health of September 28, 2005, on the list of hazardous substances along with their classification and labeling (Journal of Laws No. 201, item 1674).

- Regulation of the Minister of Health of November 13, 2007, on the safety data sheet of hazardous substances and preparations (Journal of Laws No. 215, items 1587 and 1588).
- Act of April 27, 2002, on waste (Journal of Laws No. 87, item 798).
- Act of May 11, 2001, on the obligations of entrepreneurs in waste management (Journal of Laws No. 63, item 639).
- Regulation of the Minister of Environment of September 27, 2001, on the waste catalog (Journal of Laws No. 112, item 1206).
- Regulation (EC) No 1272/2008 of December 16, 2008, on classification, labeling, and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC.
- Regulation (EC) No 1907/2006 of December 18, 2006, concerning REACH.
- Regulation (EC) No 453/2010 of May 20, 2010, amending Regulation (EC) No 1907/2006 (REACH).

15.2 Chemical Safety Assessment

A chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Changes from the previous version: General update.

List of R phrases: Not classified.

Full text of classification [DSD/DPD]: Not classified.

List of H and EUH phrases: Not classified.

List of precautionary statements:

- S25: Avoid contact with eyes.
- S2: Keep out of reach of children.

This Safety Data Sheet (SDS) is provided directly to the user of PML Remover without any assurances or guarantees regarding the completeness or level of detail of the information or recommendations contained herein.

This document does not constitute a basis for any liability of any kind on the part of the supplier of PML Remover. The manufacturer shall not be held responsible for any fatality, illness, or health damage of any nature resulting from the use or misuse of the Safety Data Sheet or the material to which it pertains.

The employer is responsible for informing all employees who come into contact with the substance about the hazards and personal protective measures outlined in the Safety Data Sheet.

This Safety Data Sheet has been developed based on the SDS provided by the manufacturer and/or online databases, as well as applicable regulations concerning hazardous substances and chemical preparations.

The information contained in this document reflects the current state of our knowledge and experience regarding the safe use of the product.

Individuals involved in handling the substance should be trained in procedures, safety, and hygiene practices.