MATERIAL SAFETY DATA SHEET "POLISH PALLADIANA"

1) IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

Commercial name: POLISH PALLADIANA - Powder 5 Extra

COMPANY IDENTIFICATION:

HYPROS SA
Pont-du-Centenaire 144
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Emergency Number: 145

2) COMPOSITION / INFORMATION ON INGREDIENTS

Identification	Conc. %	Classification 67/548/CEE.	Classification 1272/2008 (CLP).
POTASSIUM HYDROGEN OXALATE CAS 127-95-7 CE 204-874-6 INDEX 607-007-00-3 Nr. Registration pre-registrated	60-80	Xn R21/22	Acute Tox. 4 H312, Acute Tox. 4 H302
OXALIC ACID CAS 6153-56-6 CE 205-634-3 INDEX 607-006-00-8 Nr. Registration 01-2119534576-xxxx	1 – 4,5	Xn R21/22, Xi R41	Acute Tox. 4 H312, Acute Tox. 4 H302, Eye Dam. 1 H318
SHELLAC CAS 9000-59-3	5-8		
CARNAUBA CAS 9000-59-3 EINECS 232-549-9	1-5		
TIN OXIDE CAS 18282-10-5 EINECS: 242-159-0	1-5		

T+ = Very Toxic(T+), T = Toxic(T), Xn = Harmful(Xn), C = Corrosive(C), Xi = Irritant(Xi), O = Oxidizing(O), E = Explosive(E), F+ = Extremely Flammable(F+), F = Highly Flammable(F)

The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

3) HAZARDS IDENTIFICATION

Classification of the substance or mixture.
The product is classified as hazardous pursuant to the provisions set forth in Directives 67/548/EEC and 1999/45/EC and/or EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulationn 1907/2006 and

subsequent amendments.
Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Regulation 1272/2008 (CLP) and following amendments and adjustments.
Hazard classification and indication:

Acute Tox. 4	H312
Acute Tox. 4	H302
Eye Dam. 1	H318

Directive 67/548/EEC and following amendments and adjustments.
Danger Symbols: Xn
R phrases: 21/22
The full wording of the Risk (R) and hazard (H) phrases is given in section 16 of the sheet.

Label elements.
Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Pictograms:

Warning: Danger

Hazard indication:

H312	Harmful in contact with skin.
H302	Harmful if swallowed.
H318	Causes serious eye damage.

Caution recommendations:

P264	Wash your face and hands thoroughly after handling
P280	Wear protective gloves / protective clothing / eye protection / face protection.
P301+p312	If swallowed: call a poison center or doctor / physician if you feel unwell.
P302+p352	If on skin: wash with plenty of soap and water.
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 or doctor / physician.
Contains::	Potassium hydrogen oxalate Oxalic acid

Other hazards.
Information not available.

4) FIRST AID MEASURES

Description of first aid measures.
EYES: Irrigate copiously with clean, fresh water for at least 15 minutes. Seek medical advice.
SKIN: Wash immediately with plenty of water. Remove contaminated clothing. If irritation persists, seek medical attention. Wash contaminated clothing before using them again.
INHALATION: Remove to open air. If breathing is irregular, seek medical advice.
INGESTION: Obtain immediate medical attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed.
For symptoms and effects caused by the contained substances see chap. 11.

Indication of any immediate medical attention and special treatment needed.
Follow doctor's orders.

5) FIRE-FIGHTING MEASURE

Extinguishing media.
SUITABLE EXTINGUISHING MEDIA
The extinction equipment should be of the conventional kind: carbon dioxide, foam, powder and nebulised water.
EXTINGUISHING MEDIA WHICH SHALL NOT BE USED FOR SAFETY REASONS
None in particular.

Special hazards arising from the substance or mixture.
HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Do not breathe combustion products (carbon oxide, toxic pyrolysis products, etc).
POTASSIUM HYDROGEN OXALATE: Combustion could cause the formation of caustic potassium oxide fumes.

Advice for firefighters.
GENERAL INFORMATION
Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS
Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and dielectric), a depressurised mask with facemask covering the whole of the operator`s face or a self-respirator (self-protector) in the event of large quantities of fume.

6) ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures.
Eliminate sources of ignition (cigarettes, flames, sparks, etc.) from the area in which the leak occurred. If there are no contraindications, spray powder with water to prevent the formation of dust. Use breathing equipment if powders are released into the air. Block the leakage if there is no hazard. Do not handle damaged containers or leaked product before donning appropriate protective gear. Send away individuals who are not suitably equipped. For information on risks for the environmental and health, respiratory tract protection, ventilation and personal protection equipment, see the other sections of this sheet.

Environmental precautions.
The product must not penetrate the sewer system, surface water, ground water and neighbouring areas.

Methods and material for containment and cleaning up.
Use spark proof mechanical tools to collect the leaked product and place in a plastic container. If there are no contraindications, use jets of water to eliminate product residues. Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

Reference to other sections.
Any information on personal protection and disposal is given in sections 8 and 13.

7) HANDLING AND STORAGE

Precautions for safe handling.
Do not smoke while handling and use.

Conditions for safe storage, including any incompatibilities.
Store in a well ventilated place, keep far away from sources of heat, bright flames and sparks and other sources of ignition.

Specific end use(s).
Information not available.

8) EXPOSURE CONTROLS/ PERSONAL PROTECTION

Control parameters.

Name	Type	Country	TWA/8h mg/m3	ppm	STEL/15min mg/m3	ppm
OXALIC ACID	TLV-ACGIH		1		2	
	OEL	EU	1			

Exposure controls.
As the use of adequate technical equipment must always take priority over personal protection equipment, make sure that the workplace is well aired through effective local aspiration or bad air vent. If such operations do not make it possible to keep the concentration of the product below the permitted workplace exposure thresholds a suitable respiratory tract protection must be used. See product label for hazard details during use. Ask your chemical substance suppliers for advice when choosing personal protection equipment. Personal protection equipment must comply with the rules in force indicated below.

HAND PROTECTION
Protect hands with category II (ref. Directive 89/686/EEC and standard EN 374) work gloves, such as those in PVC, neoprene, nitryl or equivalent. The following should be considered when choosing work glove material: degradation, breakage times and permeation. Work glove resistance to preparations should be checked before use, as it can be unpredictable. Gloves` limit depends on the duration of exposure.
EYE PROTECTION
Wear hood visor or protective visor together with airtight goggles (ref. standard EN 166).
SKIN PROTECTION
Wear category II professional long-sleeved overalls and safety footwear (ref. Directive 89/686/CEE and standard EN 344). Wash body with soap and water after removing overalls.
RESPIRATORY PROTECTION
If the threshold value for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the company`s prevention and protection service is exceeded, wear an FFP3 (ref. standard EN 141) type half mask.
The use of breathing protection equipment, such as masks with organic vapour and dust/mist cartridges, is necessary in the absence of technical measures limiting worker exposure. The protection provided by masks is in any case limited. If the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in the event of an emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% volume, wear self-contained, open-circuit compressed air breathing apparatus (ref. standard EN 137) or fresh air hose breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138).
An emergency eye washing and shower system must be provided. In the presence of risks of exposure to splashes or squirts during work, adequate mouth, nose and eye protection should be used to prevent accidental absorption.

9) PHISICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties.

Appearance	Not available.
Colour	Not available.
Odour	Not available.
Odour threshold	Not available.
pH	Not available.
Melting or freezing point.	Not available.
Boiling point.	Not available.
Distillation range.	Not available.
Flash point.	Not available.
Evaporation Rate	Not available.
Flammability of solids and gases	Not available.
Lower inflammability limit.	Not available.
Upper inflammability limit.	Not available.
Lower explosive limit.	Not available.
Upper explosive limit.	Not available.
Vapour pressure.	Not available.
Vapour density	Not available.
Specific gravity.	Not available.
Solubility	Not available.
Partition coefficient: n-octanol/water	Not available.
Ignition temperature.	Not available.
Decomposition temperature.	Not available.

Viscosity	Not available.
Reactive Properties	Not available.

10) STABILITY AND REACTVITY

Reactivity.
There are no particular risks of reaction with other substances in normal conditions of use.
OXALIC ACID: decomposes at temperatures above 157°C. Saturated aqueous solutions (15%) behave like medium-strong acids.

Chemical stability.
The product is stable in normal conditions of use and storage.

Possibility of hazardous reactions.
The powders are potentially explosive when mixed with air.
OXALIC ACID: generates explosive mixtures on reaction with various oxidising agents. reacts violently developing heat with alkaline metals, ammonia, mercury, furfurylic acid, chlorates and hypochlorites. Risk of explosion on contact with: silver and sodium chlorite.

Conditions to avoid.
Avoid environmental dust build-up.

Incompatible materials.
OXALIC ACID: strong oxidising agents. Metals and alkaline metals, furfurylic acid and some chlorine compounds.

Hazardous decomposition products.
OXALIC ACID: carbon oxides.

11) TOXICOLOGICAL INFORMATION

Information on toxicological effects.
Acute effects: cutaneous absorption and ingestion of this product are harmful. Upon contact with skin, this product may irritate it, causing an increase in skin temperature, swelling and itchiness. Ingestion of even small amounts of this product may cause serious health problems (stomach pain, nausea, sickness, diarrhoea). This product may slightly irritate mucosas, the upper respiratory tract, and eyes. Exposure symptoms may include: stinging and irritated eyes, mouth, nose, throat; cough, respiratory disorders, dizziness, headache, nausea and sickness.
This product may cause serious ocular lesions, cornea opacity, iris lesions, irreversible eye coloration.

POTASSIUM HYDROGEN OXALATE
Information not available

OXALIC ACID
LD50 (Oral): 375 mg/kg Rat
LD50 (Dermal): 20000 mg/kg Rabbit

12) ECOLOGICAL INFORMATION

Use this product according to good working practices. Avoid littering. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation.

Toxicity.
POTASSIUM HYDROGEN OXALATE
Information not available

OXALIC ACID
EC50 (48h): 162,2 mg/l Daphnia Magna

Persistence and degradability.
Information not available.

Bioaccumulative potential.
Information not available.

Mobility in soil.
Information not available.

Results of PBT and vPvB assessment.
Information not available.

Other adverse effects.
Information not available.

13) DISPOSAL CONSIDERATIONS

Waste treatment methods.
Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.
Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14) TRANSPORT INFORMATION

The product is not dangerous under current provisions of the Code of International Carriage of Dangerous Goods by Road (ADR) and by Rail (RID), of the International Maritime Dangerous Goods Code (IMDG), and of the International Air Transport Association (IATA) regulations.

15) REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture.
Seveso category. None.

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.
None.

Substances in Candidate List (Art. 59 REACH).
None.

Substances subject to authorisarion (Annex XIV REACH).
None.

Healthcare controls.
Workers exposed to this chemical agent must not undergo health checks, provided that available risk-ssessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

Chemical safety assessment.
No chemical safety assessment has been processed for the mixture and the substances it contains.

16) OTHER INFORMATION

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

Acute Tox. 4	Acute toxicity, category 4
Eye Dam. 1	Serious eye damage, category 1
H312	Harmful in contact with skin.
H302	Harmful if swallowed.
H318	Causes serious eye damage.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R21/22	HARMFUL IN CONTACT WITH SKIN AND IF SWALLOWED.
R41	RISK OF SERIOUS DAMAGE TO EYES.

GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC and following amendments
2. Directive 67/548/EEC and following amendments and adjustments
3. Regulation (EC) 1907/2006 (REACH) of the European Parliament
4. Regulation (EC) 1272/2008 (CLP) of the European Parliament
5. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
6. Regulation (EC) 453/2010 of the European Parliament
7. The Merck Index. - 10th Edition
8. Handling Chemical Safety
9. Niosh - Registry of Toxic Effects of Chemical Substances
10. INRS - Fiche Toxicologique (toxicological sheet)
11. Patty - Industrial Hygiene and Toxicology
12. N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property. The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.