

HANS O. MAHN & CO.

Safety data sheet
according to 91/155/EEC

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LP-Geladur

1. IDENTIFICATION OF SUBSTANCE

Product name/ LP-Black Magic Hardener/ LP-Geladur
Trade name
Use for Photographic bath
Manufacturer/Supplier HANS O. MAHN & Co, MACO PHOTO PRODUCTS
Brookstieg 4
D-22145 Stapelfeld/Hamburg
Telephone number + 49 40 237 00888

2. COMPOSITION/DATA ON COMPONENTS

Mixture of substances listed below with harmless additions.

Description Solution with inorganic and organic substances

Hazardous ingredients:

Name	%	CAS-No.	EINECS	EG-Index	Symbol; Risk Phrases (see chapter 16)
Acetic acid	1- 2	64-19-7	200-580-7	607-002-00-6	C; R 10, 35
Glutaraldehyde	2- 5	111-30-8	203-856-5	605-022-00-X	T, N; R23/25, 34, 42/43, 50
Sodium disulphite	5-10	7681-57-4	231-673-0		Xn; R22, 31, 37, 41

Additional informations: Main component: Water

3. HAZARDS IDENTIFICATION

Hazard designation: Harmful: Harmful by inhalation and if swallowed.
Irritant: Risk of serious damage to eyes.
Irritating to respiratory system and skin. May cause sensitization by inhalation and skin contact.

Information pertaining to particular dangers for man and environment: Avoid contact with skin. Do not breathe vapour/aerosol.

Classification system : The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

4. FIRST AID MEASURES

general information: Change out of contaminated, saturated clothing.
Seek medical advice.

on inhalation: Move to fresh air. Get medical attention if symptoms occur.

on contact with skin: On contact with the skin, wash off immediately with soap and water.
Remove and wash contaminated clothing before reuse.

on contact with eyes: On contact with the eyes, rinse thoroughly with plenty of water and seek medical advice.
If irritation of the eyes occurs, seek ophthalmological advice.

if swallowed: Rinse out mouth and then drink plenty of water.
Do not induce vomiting. Seek medical advice.

Information for the doctor:

symptoms: No known symptoms to date.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media: Co-ordinate fire-fighting measures to the fire surroundings.

Extinguishing media which must not be used for safety reasons: Unknown.

Special exposure hazards arising from the substance or preparation Substances potentially set free in case of fire:
carbon mono oxide, carbon dioxide, sulphur dioxide.

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itself, combustion products,
resulting gases:

**Special protective equipment
for firefighting:** No special measures required.

Additional information: Product itself does not burn.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Use personal protective clothing.

Environmental precautions: Do not allow to enter drains/surface waters/groundwater.

**Methods for cleaning up/
taking up:** Pick up with absorbent material (e.g. sand, kieselguhr, sawdust,
general-purpose binder).

Additional informations: Treat recovered material as prescribed in: Disposal considerations.

7. HANDLING AND STORAGE

Hints for safe handling: No special precautions required if used correctly.

**Hints for protection against fire
and explosion:** Product is not combustible.

**Requirements for storage rooms
and vessels:** No special measures required.
Keep container tightly closed

Hints on storage assembly: No special precautions required.

Additional informations: Storage temperature: from 5 to 25 °C.

Storage class German regulation: LGK 12

8. EXPOSURE LIMITATION AND PERSONAL PROTECTIVE EQUIPMENT

**Additional information
on plant design:** See section 7; no additional measures necessary.

**Constituents with occupational
exposure limits requiring
monitoring:** UK Occupational Exposure Limits:
TWA (8 hours): Glutaraldehyde: 0,05 mg/m³
STEL (15 min): Glutaraldehyde: 0,05 mg/m³

Personal protective equipment:

Respiratory protection: Respiratory protection necessary at: unsufficient ventilation.

Hand protection: Gloves. Necessary properties: Moisture-proof.

Eye protection: Safety glasses.

Protective clothing: Personal protective clothing.

**General health and
safety measures:** Do not eat, drink, smoke or take snuff while working.

Wash hands before breaks and on finishing work.
Preventive skin protection using barrier ointment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form Liquid.

Colour Colourless, clear.

Odour Pungent.

pH-value at 20°C 3,1

Boiling point/boiling range > 100 °C

Melting point/melting range < 0 °C

Flash point Not applicable

Self-inflammability Not selfigniting.

Danger of explosion Not explosive.

Vapour pressure Remark: Corresponding to vapor pressure of water.

Density at 20°C 1,058 g/cm³

**Solubility in / Miscibility with
Water** Fully miscible

Solvent content No dates available.

Additional informations: No additional dates

10. STABILITY AND REACTIVITY

Stability No decomposition if used according to specifications.

Conditions to avoid Contact with strong alkali.

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Materials to avoid	Strong alkali.
Hazardous decomposition products:	None.
Further informations	No hazardous decomposition products if stored and handled as prescribed.

11. TOXICOLOGICAL INFORMATION

Acute toxicity	Information concern to the main component. Glutaraldehyde (50 % water) oral LD 50 320 mg/kg (rat) dermal rabbit > 2000 mg/kg
Specific symptoms in animal studies:	
Irritant-/corrosive effects:	
to skin	Irritant.
to eye	Strong irritant and risk of serious damage to eyes.
Sensitization	Sensitising effect by skin contact and to the respiratory system.
Subacute to chronic toxicity:	Unknown.
Carcinogenic, mutagenic and reproductive toxic effects:	Unknown
Additional information	No additional dates.
Experiences made in practice:	No dates available.
General remarks:	The product was classified on the basis of the calculation procedure
	of the preparation directive (1999/45/EEC).

12 ECOLOGICAL INFORMATION

Other hints:	No dates available. The product was not tested. According to the criteria of the European classification and labelling system (1999/45/EEC), the substance/the product has not to be labelled as „dangerous for the environment“. Remarks: Do not allow product to reach ground water, water bodies or sewage system.
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13. DISPOSAL CONSIDERATIONS

Product: household	Recommendation: Must not be disposed of together with garbage. Do not allow product to reach sewage system. Must be specially treated under adherence to official regulations.
European Waste Catalogue EWC	09 01 01 Water based developer and activator solutions
Uncleaned packaging	Recommendation: Non contaminated packaging can be used for recycling. Empty contaminated thoroughly: They can be recycled after thorough and proper cleaning.
Recommended cleaning agent:	Water, if necessary with cleaning agent.

14. TRANSPORT INFORMATION

Transport/additional remarks:	No hazardous material as defined by the transport regulations (ADR/RID, IMDG-Code, ICAO-TI/IATA-DGR)
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15. REGULATORY INFORMATION

Labelling EC	The product has been classified and labelled in accordance with Directives / Ordinance on Hazardous Materials (GefStoffV).
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LP-Geladur

**Hazard(ous) symbol(s) and indication(s) of danger
for dangerous substances and preparations:**

Xn



Harmfull

Hazardous component (s) to be indicated on label:

Glutaraldehyde

R-Phrases:

R20/22

R37/38

R41

R42/43

Harmful by inhalation and if swallowed.

Irritating to respiratory system and skin.

Risk of serious damage to eyes.

May cause sensitization by inhalation and skin contact.

S-Phrases:

S23

S26

Do not breathe vapour.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/38

Wear suitable protective clothing, gloves and eye/face protection.

S45

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Remark:

The classification carried out according to calculation procedure of the preparation directive (1999/45/EEC).

**Special provisions concerning
the labelling of certain
preparations:**

Not applicable.

National regulations:**Water hazard class**3 (Self-assessment): extremely water hazardous
(German regulation: Classification according VwVwS, Annex 4)**Other regulations, restrictions and prohibition
regulations:**

Unkwnon.

16. OTHER INFORMATION**Intended use:**

Photographic bath

**Wording of R-Phrases:
(see chapter 2)**

R23/25

R34

R36

R42/43

R50

Toxic by inhalation and if swallowed.

Causes burns.

Irritating to eyes.

May cause sensitization by inhalation and skin contact.

Very toxic to aquatic organisms.

Additional 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.

Documentation**Sources of documentation:** physical examinations, Material safety data sheets of the components,**Amendment**EC-Directives,
First issue.