

Material Safety Data Sheet

According to 91/155 EC

Printing date 05.02.2004

Reviewed on 05.02.2004

1 Identification of substance:

- **Product details:**
- **Trade name:** LP-SELENIA
- **Application of the substance / the preparation** Solution for photographic processing
- **Manufacturer/Supplier:**
HANS O. MAHN & CO. KG
Brookstieg 4
D 22145 Stapelfeld
- **Informing department:** Tel: +49 (0)40 23700888
- **Emergency information:** Tel: +49 (0)40 23700888

2 Composition/Data on components:

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with harmless additions.

- **Dangerous components:**

CAS: 10196-04-0 EINECS: 233-484-9	ammonium sulphite	Xi; R 31-36/38	5.0-10%
CAS: 10102-18-8 EINECS: 233-267-9	sodium selenite	T, N; R 23/25-33-50/53	0.5-2.0%

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

3 Hazards identification

- **Information pertaining to particular dangers for man and environment**
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.
R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **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

- **After inhalation** Supply fresh air.
- **After skin contact** The product is not skin irritating.
- **After eye contact**
Rinse opened eye for several minutes under running water. Then consult doctor.
- **After swallowing** In case of persistent symptoms consult doctor.
- **Information for doctor** None

5 Fire fighting measures

- **Suitable extinguishing agents** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents** None
- **Special hazards caused by the material, its products of combustion or resulting gases:**
Can be released in case of fire
Sulphur dioxide (SO₂)
Nitrogen oxides (NO_x)
- **Protective equipment:** No special measures required.

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6 Accidental release measures

- **Person-related safety precautions:** Light weight protective clothing
- **Measures for environmental protection:**
Inform respective authorities in case product reaches water or sewage system.
Do not allow to enter drainage system, surface or ground water.
- **Measures for cleaning/collecting:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

7 Handling and storage

- **Handling**
- **Information for safe handling:** No special precautions necessary if used correctly.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in a cool place.
(5 -30°C)
- **Storage class** LGK 12 (VCI-Concept)

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures should be adhered to general rules for handling chemicals.
Wash hands during breaks and at the end of the work.
- **Breathing equipment:** Not required.
- **Protection of hands:**
Protective gloves.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
- **Material of gloves**
Natural rubber, NR
Nitrile rubber, NBR
PVC gloves
- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses
- **Body protection:** Light weight protective clothing

9 Physical and chemical properties:

· General Information

Form:	Fluid
Colour:	Colourless
	Clear
Odour:	Ammonia-like

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- **Change in condition**
Melting point/Melting range: Not determined
Boiling point/Boiling range: > 100°C

- **Flash point:** Not applicable

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

- **Danger of explosion:** Product is not explosive.

- **Critical values for explosion:**
Oxidizing properties None

- **Vapour pressure at 20°C:** 23 hPa

- **Density at 20°C** 1.28 g/cm³

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

- **pH-value at 20°C:** 8.7

- **Viscosity:**
dynamic: Not determined
kinematic: Not determined

- **Solvent content:**
Organic solvents: 0.0 %
Water: 53.3 %

- **Solids content:** 46.7 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
 No decomposition if used according to specifications.
- **Dangerous reactions**
 Reacts with acids releasing sulphur dioxide
 Reacts with alkalis releasing ammonia
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritant effect.
- **Sensitization:** No sensitizing effect known.

12 Ecological information:

- **Information about elimination (persistence and degradability):** Not determined
- **Behaviour in environmental systems:** Not determined
- **Mobility and bioaccumulation potential:** Not determined
- **Ecotoxicological effects:** Not determined
- **Acquatic toxicity:** Not determined
- **Remark:** Harmful to fish
- **General notes:**
 Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water.
 Do not allow product to reach ground water, water bodies or sewage system.

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Harmful to aquatic organisms

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13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Must be specially treated under adherence to official regulations.

- **European waste catalogue**

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- **Uncleaned packagings:**
- **Recommendation:**
Non contaminated packagings can be used for recycling.
Empty contaminated packagings thoroughly. They can be recycled after thorough and proper cleaning.
- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

14 Transport information

- **Land transport ADR/RID (cross-border)**
- **ADR/RID-GGVS/E Class:** -

- **Maritime transport IMDG:**
- **IMDG Class:** -

- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

- **Transport/Additional information:** Not dangerous according to the above specifications.

15 Regulatory information

- **Designation according to EC guidelines:**
The product has been classified and labelled in accordance with EC Directives / Ordinance on Hazardous Materials (GefStoffV)
- **Risk phrases:**
52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- **Safety phrases:**
61 Avoid release to the environment. Refer to special instructions/safety data sheets.
- **National regulations**
- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

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 R-phrases**
23/25 Toxic by inhalation and if swallowed.
31 Contact with acids liberates toxic gas.
33 Danger of cumulative effects.
36/38 Irritating to eyes and skin.
50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.