

MATERIAL SAFETY DATA SHEET

acc. to 91/155/EEC - ISO 11014-1:1994(E)



Trade Name: LIQHUMUS 18

Printing date 08/08/2003

Reviewed on 05/08/2003

1. IDENTIFICATION OF SUBSTANCE

- **Product details**
- **Trade name:** LIQHUMUS 18
- **Article number:** 4 036964 003036
- **Application of the substance / the preparation:** Intermediate
- **Manufacturer/Supplier:**
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- **Information:** see: Section 16 (Contact)
- **Emergency information:** see: Manufacturer/Supplier

2. COMPOSITION/ DATA ON COMPONENTS

- **Chemical characterization:** Potassium salt of humic acids
- **Chemical state:** Liquid
- **CAS No. Designation:** 68514-28-3
- **Identification number(s):**
- **EINECS number:** 271-030-1

• Dangerous components:

CAS: 1310-58-2	Potassium hydroxide	C ; R 35	< 2%
EINECS : 215-181-3			

• Additional information

For the wording of the listed risk phrases refer to section 16.

3. HAZARDS IDENTIFICATION

• Hazard designation:



Xi Irritant

• Information pertaining to particular dangers for man and environment

R 36/38 Irritating to eyes and skin

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4. FIRST AID MEASURES

- **General information:**
No special measures required.
- **After inhalation:**
Seek medical treatment in case of complaints.
- **After skin contact:**
Instantly wash with water and soap and rinse thoroughly.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
- **After swallowing:**
Rinse out mouth and then drink plenty of water. In case of persistent symptoms consult doctor.

5. FIRE FIGHTING MEASURES

- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- **Special hazards caused by the material, its products of combustion or resulting gases:**
Can be released in case of fire. Carbon monoxide (CO).
- **Protective equipment:**
Put on breathing apparatus. Wear full protective suit.

6. ACCIDENTAL RELEASE MEASURES

- **Person-related safety precautions:**
Ensure adequate ventilation. Avoid causing dust.
- **Measures for environmental protection.**
Do not allow to enter drainage system, surface or ground water.
- **Measures for cleaning/ collecting:**
Collect mechanically.

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7. HANDLING AND STORAGE

• **Handling**

- **Information for safe handling:**

Ensure good ventilation/ exhaustion at the workplace.

- **Information about protection against explosions and fires:**

Keep ignition sources away – Do not smoke.

• **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 cool, dry conditions in well sealed containers.

- **Storage class:**

11 (flammable solids)

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:**

1310-58-3 Potassium hydroxide

OEL	2 mg/m ³
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• **Personal protective equipment**

• **General protective and hygienic measures:**

Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.

• **Breathing equipment:**

Not necessary if room is well-ventilated.

• **Protection of hands:**

Protective gloves.

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8. EXPOSURE CONTROLS AND PERSONAL PROTECTION (continued)

- **Material of gloves:**
Synthetic gloves
- **Penetration time of glove material:**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:**
Safety glasses

9. PHYSICAL AND CHEMICAL PROPERTIES

- **General information:**

Form:	Dispersion
Colour:	Dark brown
Odour:	Not distinguishable
- **pH-value (10 g/l) at 20°C:** 9.0 – 10.0 (ISO 8975)
- **Change in physical state:** above 250°C destroyed to CO₂, H₂O and soot

Melting point/ Melting range:	Not determined
Boiling point/ Boiling range:	Not applicable
- **Flash point:** 300°C
- **Inflammability:** Product is not inflammable.
- **Danger of explosion:**
- **Ignition temperature:**
- **Decomposition temperature:** > 100°C (DIN 53171)
- **Density at 20°C:** 1.1 g/cm³ (ISO 2811)
- **Solubility in water at 20°C:** approx. 200 g/l
- **Solubility in other solvents:** ethanol 200 g/l

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10. STABILITY AND REACTIVITY

- **Thermal decomposition/ Conditions to be avoided:**
No decomposition if used according to specifications.
Avoid mixing with acidic materials - this ruins product.
- **Dangerous reactions:**
No dangerous reactions known.
- **Dangerous products of decomposition:**
No dangerous decomposition products known.

11. TOXICOLOGICAL INFORMATION

- **Acute toxicity:**
LD50/ Oral/ rat: mg/kg
LC50/ Inhal/ rat: mg/l
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritant effect.

12. ECOLOGICAL INFORMATION

- **General notes:**
Do not allow product to reach underground or surface water or sewage system.
- **Behavior and environmental fate:**
Spontaneous coupling by biochemical reaction in soil.

13. DISPOSAL CONSIDERATIONS

- **Product:**
- **Recommendation**
Remove according to local authority recommendations, e.g. convey to a suitable incinerator. Can be deposited with household garbage after consulting with the operator of the waste disposal facility and the pertinent authorities and under adherence to the necessary technical regulations.
- **European waste catalogue**
The waste code classification is to be carried out according to the European Waste Catalogue (EWC) specifically for each branch of industry and each type of process.

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13. DISPOSAL CONSIDERATIONS (continued)

- **Uncleaned packagings:**
- **Recommendation:**
Disposal must be made according to official regulations.

14. TRANSPORT INFORMATION

- **Land transport ADR/ RID a GGVS/ GGVE**
- **ADR/ RID:** is not a dangerous matter
- **GGVS/ GGVE:** is not a dangerous matter
- **Inland waterway transport (AND/ ADR):** is not a dangerous matter
- **AND/ ADR:** is not a dangerous matter

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)
- **Code letter and hazard designation of product:**
Xi Irritant
- **Risk phrases:**
36/38 Irritating to eyes and skin.
- **Safety phrases:**
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
37/39 Wear suitable gloves and eye/face protection
60 This material and its container must be disposed of as hazardous waste.

16. OTHER INFORMATION

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

- **Relevant R-phrases**
These R-phrases refer to section 2: «Dangerous Components».
35 Causes severe burns.

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16. OTHER INFORMATION (continued)

- **Department issuing data specification sheet :**
Product Safety Department

- **Contact:**

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