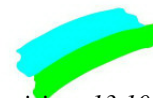


**Safety Data Sheet**  
according to 1907/2006/EC, Article 31



**1 Identification of substance**

- **Product details**
- **Trade name** *Battery fluid 1.23*
- **Application of the substance / the preparation** *Elektrolyt for accumulators*
- **Manufacturer/Supplier:**  
*Chemische Fabrik Wocklum  
Gebr. Hertin GmbH & Co. KG  
58802 Balve  
Telefon: 02375 925-0  
Telefax-Nummer: 02375 925-100  
E-Mailadresse: m.huckschlag@wocklum.de*
- **Informing department:** *Product safety department.*
- **Emergency information:**  
*LB-GIFT BERLIN  
Tel.: 030/19240*

**2 Hazards identification**

- **Hazard designation:**



C Corrosive

- **Information pertaining to particular dangers for man and environment**  
*R 35 Causes severe burns.*

**3 Composition/information on ingredients**

- **Description:**  
*Sulphuric acid H<sub>2</sub>SO<sub>4</sub> 31,4 %  
Index-Nr.: 016-020-00-8*

- **Dangerous components:**

CAS: 7664-93-9	sulphuric acid	C; R 35	31.4%
EINECS: 231-639-5			

**4 First aid measures**

- **General information** *Instantly remove any clothing soiled by the product.*
- **After inhalation**  
*Supply fresh air. If patient has difficulty in breathing, administer oxygen, keep him calm and protect him from loss of warmth. If there difficult in breathing, medical attention should be obtained.*
- **After skin contact**  
*Wash skin immediately with plenty of water and soap. If skin reaktionen occur, contact a physician.*
- **After eye contact**  
*Rinse opened eye for several minutes under running water.  
Consult an eye specialist immediately.*
- **After swallowing**  
*Rinse mouth out immediately and drink plenty of water. Do not induce vomiting. Pay attention to risk of aspiration after vomiting.  
Keep the respiratory tract free. In any case consult a physician.*

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- **Information for doctor**  
See Chapter 11 for information on toxicology.  
Therapeutic measures: Basic aid, decontamination, symptomatic treatment.

**5 Fire fighting measures**

- **Suitable extinguishing agents** No restriction with neighborhood fire
- **Protective equipment:** Wear self-contained breathing apparatus.
- **Additional information**  
Fight fire in early stages if safe to do so. Containers at risk from fire should be cooled with water and, if possible, removed from the danger area. When extinguishing with water pay attention to caustic burns. Do not let enter contaminated extinguishing water into the soil, groundwater or surface waters.

**6 Accidental release measures**

- **Person-related safety precautions:** Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection:** Do not allow product to reach sewage system or water bodies.
- **Measures for cleaning/collecting:**  
Dam up acids with sand, dilute with plenty of water, neutralize with lime or sodium carbonate. Rinse off small quantities with plenty of water. Fill into labelled, sealable containers.

**7 Handling and storage**

- **Handling**
- **Information for safe handling:**  
Provided good ventilation and/or local exhaust are available, the limit values cited under pt. 8 should not be exceeded. Vent waste air only via suitable separators or scrubbers.  
Keep receptacles dry and tightly
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **Requirements to be met by storerooms and containers:** Store only in the original container.
- **Information about storage in one common storage facility:**  
Do not store together with alkalis (caustic solutions).  
Store away from metals.
- **Further information about storage conditions:** None.
- **Storage class** VCI storage class: 8

**8 Exposure controls and personal protection**

- **Additional information about design of technical systems:** No further data; see item 7.

- **Components with critical values that require monitoring at the workplace:**

**7664-93-9 sulphuric acid**

MAK value	0.1 mg/m <sup>3</sup> , measured as the respirable aerosol content. (TRGS 900 (German Technical Regulations on Dangerous Substances)).
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- **Additional information:** The lists that were valid during the compilation were used as basis.

- **Personal protective equipment**
- **General protective and hygienic measures**  
Keep away from foodstuffs, beverages and food.

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*Instantly remove any soiled and impregnated garments.**Avoid contact with the eyes and skin.*· **Breathing equipment:** combination filter, DIN3181 ABEK, when mist/aerosols are formed.· **Protection of hands:** Acid resistant gloves· **Material of gloves***(Penetration time  $\geq$  8 hours)**chloroprene rubber - CR (0,5 mm)**nitrile rubber - NBR (0,35 mm)**butyl rubber - BR (0,5 mm)**polyvinyl chloride - PVC (0,5 mm)**fluorcarbon rubber (0,4 mm)*· **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:** Tightly sealed safety glasses.· **Body protection:** Acid resistant protective clothing**9 Physical and chemical properties:**· **General Information**

<b>Form:</b>	Fluid
<b>Colour:</b>	Colourless
<b>Smell:</b>	Odourless

· **Change in condition****Melting point/Melting range:**  $< -40^{\circ}\text{C}$ **Boiling point/Boiling range:** approx.  $108^{\circ}\text{C}$ · **Flash point:** Not applicable· **Self-inflammability:** Product is not selfigniting.· **Danger of explosion:** Product is not explosive.· **Density at  $20^{\circ}\text{C}$**  1.23 g/cm<sup>3</sup>· **Solubility in / Miscibility with****Water:** Fully miscible· **pH-value at  $20^{\circ}\text{C}$ :**  $< 1$ · **Solvent content:****Organic solvents:** 0.0 %**10 Stability and reactivity**· **Conditions to be avoided:** No decomposition if used according to specifications.· **Dangerous reactions***Exothermic reactions with alkaline/caustic solutions.**Development of hydrogen with metals.*· **Dangerous products of composition:** n/a

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### 11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

7664-93-9 sulphuric acid

Oral LD50 2140 mg/kg (rat)

- **Primary irritant effect:**

- **on the skin:** Strong caustic effect on skin and mucous membranes.

- **on the eye:** Strong caustic effect.

- **Sensitization:** No sensitizing effect known.

- **Experience with humans:**

According to the International Agency for Research on Cancer there is a risk of cancer to the respiratory tract in humans in the case of certain processes where mists of strong inorganic acids are generated which also contain sulfuric acid.

### 12 Ecological information:

- **Ecotoxicological effects:**

- **Acquatic toxicity:**

Harmful effect on fish and algae (50 mg/l)

Harmful effect on fish, plankton and attached organisms through pH-shift.

(L. Roth: Wassergefährliche Stoffe)

- **General notes:**

Water pollution class (WGK): 1 - slightly hazardous to water

WGK = Classification in accordance with the German Water Resources Act

### 13 Disposal considerations

- **Product:**

- **Recommendation** Contact manufacturer for recycling information.

- **European waste catalogue**

16 06 06	separately collected electrolyte from batteries and accumulators
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- **Uncleaned packagings:**

- **Recommendation:**

Product residues and uncleaned empty containers should be packaged, sealed, labelled, and disposed of or recycled according to relevant national and local regulations. When uncleaned empty containers are passed on, the recipient must be warned of any possible hazard that may be caused by residues.

### 14 Transport information

- **Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)**



- **ADR/RID-GGVS/E Class: 8 (C1) Corrosive substances.**

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- **Kemler Number:** 80
- **UN-Number:** 2796
- **Packaging group:** II
- **Label** 8
- **Designation of goods:** 2796 BATTERY FLUID, ACID

· **Maritime transport IMDG/GGVSea:**

- **IMDG/GGVSea Class:** 8
- **UN Number:** 2796
- **Label** 8
- **Packaging group:** II
- **EMS Number:** F-A,S-B
- **Correct technical name:** BATTERY FLUID, ACID

· **Air transport ICAO-TI and IATA-DGR:**

- **ICAO/IATA Class:** 8
- **UN/ID Number:** 2796
- **Label** 8
- **Packaging group:** II
- **Correct technical name:** BATTERY FLUID, ACID

### 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:**  
C Corrosive
- **Risk phrases:**  
35 Causes severe burns.
- **Safety phrases:**
  - 1/2 Keep locked up and out of the reach of children.
  - 20 When using do not eat or drink.
  - 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  - 30 Never add water to this product.
  - 36/37/39 Wear suitable protective clothing, gloves and eyeface protection.
  - 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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- **National regulations**
- **Water hazard class:**  
Water pollution class (WGK): - 1 slightly hazardous to water  
WGK = Classification in accordance with the German Water Resources Act
- **Other regulations, limitations and prohibitive regulations** VOC-value EU: =0

**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**  
35 Causes severe burns.
- **Department issuing data specification sheet:** Environment protection department.

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