

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 16.01.2018

Version 8

Revision: 16.01.2018

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- **1.1 Product identifier**
- **Trade name: Unimatic-F Teil 1**

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- **Article number: 10094**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
To this day we do not have any information about the identified use at the moment. These data are available we will add these to the safety data sheet.
- **Application of the substance / the mixture**  
Photochemicals  
Fixing agent for X-ray films  
Reserved for industrial and professional use.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Calbe Chemie GmbH  
Stadtfeld 31  
D-39240 Calbe  
Tel.: +49 (0)39291 425-0  
Fax: +49 (0)39291 425-25  
e-mail: info@calbe-chemie.de  
www.calbe-chemie.de
- **Informing department:**  
Tel.: +49 (0)39291 42515  
E-Mail: kr@calbe-chemie.de
- **1.4 Emergency telephone number: Tel.: 0700-24112112 (CAL)**

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
The product is not classified according to the CLP regulation.

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- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **Additional information:**  
EUH210 Safety data sheet available on request.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

\* **SECTION 3: Composition/information on ingredients**

- **3.2 Mixtures**
- **Description:** Mixture of the substances listed below with harmless additions.

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• **Dangerous components:**

CAS: 64-19-7 EINECS: 200-580-7 Index number: 607-002-00-6 Reg.nr.: 01-2119475328-30-xxxx	acetic acid ----- ☠ Flam. Liq. 3, H226 ☞ Skin Corr. 1A, H314 ☠ Acute Tox. 4, H312	2-5%
CAS: 7783-18-8 EINECS: 231-982-0 Reg.nr.: 01-2119537325-41-xxxx	ammonium thiosulphate	50-75%
CAS: 7757-83-7 EINECS: 231-821-4 Reg.nr.: 01-2119537420-49-xxxx	sodium sulphite	2-5%
CAS: 10043-35-3 EINECS: 233-139-2 Index number: 005-007-00-2 Reg.nr.: 01-2119486683-25-xxxx	boric acid ----- ☞ Repr. 1B, H360FD	<0.5%

• **SVHC**

10043-35-3 | boric acid

• **Additional information** For the wording of the listed hazard phrases refer to section 16.

## SECTION 4: First aid measures

• **4.1 Description of first aid measures**

• **General information**

Personal protection for the First Aider.  
Instantly remove any clothing soiled by the product.

• **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. If symptoms persist, consult doctor.

• **After swallowing**

Rinse out mouth and then drink plenty of water.  
In case of persistent symptoms consult doctor.

• **4.2 Most important symptoms and effects, both acute and delayed**

No known symptoms to date.

• **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

## SECTION 5: Firefighting measures

• **5.1 Extinguishing media**

• **Suitable extinguishing agents**

CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.  
Use fire fighting measures that suit the environment.

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- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture**  
Can be released in case of fire  
sulphur dioxide (SO<sub>2</sub>)  
Nitrogen oxides (NO<sub>x</sub>)
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.  
At formation of toxic gases:  
Put on breathing apparatus.
- **Additional information** The product is not flammable

#### **SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** Do not allow to enter drainage system, surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **6.4 Reference to other sections**  
See Section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

#### **SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling**  
The lists that were valid during the compilation were used as basis.
- **Information about protection against explosions and fires:**  
No special measures required.  
The product is not flammable
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** No special requirements.
- **Information about storage in one common storage facility:**  
Keep away from foodstuffs, beverages and food.
- **Further information about storage conditions:** Store in a cool place.
- **Recommended storage temperature:** 5-25 °C
- **Storage class**  
LGK 12  
(German Technical Rule for Hazardous Substance – TRGS 510)
- **7.3 Specific end use(s)** No further relevant information available.

#### **SECTION 8: Exposure controls/personal protection**

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

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- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**
- **Additional information:** The lists that were valid during the compilation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**  
The usual precautionary measures should be adhered to general rules for handling chemicals.
- **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.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
Synthetic gloves  
Avoid natural rubber gloves.
- **Penetration time of glove material**  
Value for permeation: Level  $\leq 6$  (480 min)  
The determined penetration times according to EN 374 part III are not performed under practical conditions. Therefore a maximum wearing time, which corresponds to 50% of the penetration time, is recommended.
- **As protection from splashes gloves made of the following materials are suitable:**  
Synthetic gloves  
Value for permeation: Level:  
 $\geq 3$  (60 min)
- **Eye protection:** Not required.

**SECTION 9: Physical and chemical properties**

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Fluid
Colour:	Colourless
Odour:	Not characteristic
- **pH-value at 20 °C:** 5.2
- **Change in condition**

Melting point/freezing point:	< 5 °C
Initial boiling point and boiling range:	> 100 °C
- **Flash point:** Not applicable
- **Self-inflammability:** Product is not selfigniting.

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· <b>Explosive properties:</b>	Product is not explosive.
· <b>Vapour pressure at 20 °C:</b>	23 hPa
· <b>Density at 20 °C</b>	1.345 g/cm <sup>3</sup>
· <b>Solubility in / Miscibility with Water:</b>	miscible
· <b>Viscosity:</b>	
dynamic:	Not determined
kinematic:	Not determined
· <b>Solvent content:</b>	
Organic solvents:	3.2 %
Water:	~ 40 %
· <b>9.2 Other information</b>	No further relevant information available.

### SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**  
No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**  
Reacts with strong acids and alkali  
Reacts with acids releasing sulphur dioxide  
Reacts with alkalis releasing ammonia
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

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

<b>64-19-7 acetic acid</b>		
Oral	LD50	3310 mg/kg (rat)
Dermal	LD50	1060 mg/kg (rabbit)
<b>7783-18-8 ammonium thiosulphate</b>		
Oral	LD50	1098 mg/kg (gpg) 2890 mg/kg (rat)
<b>7757-83-7 sodium sulphite</b>		
Oral	LD50	2610 mg/kg (rat)

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Inhalative	LC50/4 h	> 5.5 mg/l (rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation**
- **Serious eye damage/irritation** mild irritant
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Subacute to chronic toxicity:** No known symptoms to date.
- **Additional toxicological information:**  
At present there are no animal experimental data.  
This statement was deduced from the properties of the single components.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

## SECTION 12: Ecological information

### · 12.1 Toxicity

#### · **Aquatic toxicity:**

##### **64-19-7 acetic acid**

LC50/96 h	75 mg/l (Lepomis macrochirus)
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##### **7757-83-7 sodium sulphite**

EC50/48 h (static)	59 mg/l (Daphnia magna)
LC50/96 h (static)	316 mg/l (fish)

- **12.2 Persistence and degradability** Not determined
- **12.3 Bioaccumulative potential** Not determined
- **Behaviour in environmental systems:** Not determined
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:** Not determined
- **Behaviour in sewage processing plants:** Not determined
- **Additional ecological information:**
- **General notes:**  
At present there are no ecotoxicological assessments.  
This statement was deduced from the properties of the single components.  
Water hazard class 1 (German Regulation) (Self-assessment): Weakly water-endangering.  
The product does not contain organically bounded halogens (AOX-free).
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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· **12.6 Other adverse effects** No further relevant information available.

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**SECTION 13: Disposal considerations**

· **13.1 Waste treatment methods**

· **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**

09 01 04*	fixer solutions
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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.

Packagings that cannot be cleaned are to be disposed of in the same manner as the product.

EAK-No. 15 01 10

· **Recommended cleaning agent:** Water, if necessary with cleaning agent.

**SECTION 14: Transport information**

· **14.1 UN-Number**

· **ADR/RID, ADN, IMDG, IATA** Void

· **14.2 UN proper shipping name**

· **ADR/RID** Void

· **ADN, IMDG, IATA** Void

· **14.3 Transport hazard class(es)**

· **ADR/RID, ADN, IMDG, IATA**

· **Class** Void

· **14.4 Packing group**

· **ADR/RID, IMDG, IATA** Void

· **14.5 Environmental hazards:**

Not applicable.

· **14.6 Special precautions for user**

Not applicable.

· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

· **Transport/Additional information:**

Not dangerous according to the above specifications.

· **UN "Model Regulation":**

Void

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**SECTION 15: Regulatory information**

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

- Directive 2012/18/EU
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 65

· **National regulations**

Class	Share in %
II	3.2

- **Water hazard class:** Water hazard class 1 (Self-assessment): weakly water-endangering.

· **Other regulations, limitations and prohibitive regulations**

· **Substances of very high concern (SVHC) according to REACH, Article 57**

10043-35-3	boric acid
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- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 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 phrases**

H226 Flammable liquid and vapour.  
 H312 Harmful in contact with skin.  
 H314 Causes severe skin burns and eye damage.  
 H360FD May damage fertility. May damage the unborn child.

- **Recommended restriction of use** No public product, only for commercial use

· **Department issuing data specification sheet:**

Laboratory  
 Tel.: +49 (0)39291 425-15

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)  
 IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
 ICAO: International Civil Aviation Organisation  
 ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)  
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)  
 IMDG: International Maritime Code for Dangerous Goods  
 IATA: International Air Transport Association  
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
 EINECS: European Inventory of Existing Commercial Chemical Substances  
 ELINCS: European List of Notified Chemical Substances  
 CAS: Chemical Abstracts Service (division of the American Chemical Society)  
 LC50: Lethal concentration, 50 percent  
 LD50: Lethal dose, 50 percent  
 PBT: Persistent, Bioaccumulative and Toxic  
 SVHC: Substances of Very High Concern  
 vPvB: very Persistent and very Bioaccumulative

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Flam. Liq. 3: Flammable liquids – Category 3  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Corr. 1A: Skin corrosion/irritation – Category 1A  
Repr. 1B: Reproductive toxicity – Category 1B

• **Sources**

applicable EEC directives:

- 1907/2006
- 1272/2008

Internal physical tests, MSDS of the ingredients,  
Information system on hazardous substances of the German Social Accident Insurance  
(GESTIS-database on hazardous substances), <http://www.dguv.de/ifa/en/gestis/stoffdb/index.jsp>

- \* **Data compared to the previous version altered.**

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

- **1.1 Product identifier**
- **Trade name: Unimatic-F Teil 2**


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- **Article number: 10094**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
To this day we do not have any information about the identified use at the moment. These data are available we will add these to the safety data sheet.
- **Application of the substance / the mixture**  
Photochemicals  
Fixing agent for X-ray films  
Reserved for industrial and professional use.
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Calbe Chemie GmbH  
Stadtfeld 31  
D-39240 Calbe  
Tel.: +49 (0)39291 425-0  
Fax: +49 (0)39291 425-25  
e-mail: info@calbe-chemie.de  
www.calbe-chemie.de
- **Informing department:**  
Tel.: +49 (0)39291 42515  
E-Mail: kr@calbe-chemie.de
- **1.4 Emergency telephone number: Tel.: 0700-24112112 (CAL)**

**SECTION 2: Hazards identification**

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**  
 GHS05 corrosion  
Eye Dam. 1 H318 Causes serious eye damage.

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- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**  
  
GHS05
- **Signal word** Danger
- **Hazard-determining components of labelling:**  
aluminium sulphate

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- **Hazard statements**  
H318 Causes serious eye damage.
- **Precautionary statements**  
P280 Wear eye protection / face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P390 Absorb spillage to prevent material damage.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Mixture of the substances listed below with harmless additions.

- **Dangerous components:**

CAS: 10043-01-3 EINECS: 233-135-0 Reg.nr.: 01-2119531538-36-xxxx	aluminium sulphate ☞ Eye Dam. 1, H318	15-20%
CAS: 7664-93-9 EINECS: 231-639-5 Index number: 016-020-00-8 Reg.nr.: 01-2119458838-20-xxxx 01-2119969649-13-xxxx	sulphuric acid ☞ Skin Corr. 1A, H314	≥2-<5%

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

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information**  
Personal protection for the First Aider.  
Instantly remove any clothing soiled by the product.
- **After inhalation** Supply fresh air.
- **After skin contact**  
Instantly wash with water and soap and rinse thoroughly.  
If skin irritation continues, consult a doctor.
- **After eye contact**  
Rinse opened eye for several minutes under running water (> 15 min). Then consult doctor.
- **After swallowing**  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting; instantly call for medical help.

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- **4.2 Most important symptoms and effects, both acute and delayed**  
No known symptoms to date.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.  
Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents** Water with a full water jet.
- **5.2 Special hazards arising from the substance or mixture**  
Can be released in case of fire  
Sulphur oxides (SO<sub>x</sub>)
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Do not inhale explosion gases or combustion gases.  
At formation of toxic gases:  
Put on breathing apparatus.
- **Additional information** The product is not flammable

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective clothing.
- **6.2 Environmental precautions:** Do not allow to enter drainage system, surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose of contaminated material as waste according to item 13.
- **6.4 Reference to other sections**  
See Section 8 for information on personal protection equipment.  
See Section 13 for information on disposal.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**  
Keep containers tightly sealed.  
Absorb spillage to prevent material damage.
- **Information about protection against explosions and fires:**  
No special measures required.  
The product is not flammable
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** Store only in the original container.

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- **Information about storage in one common storage facility:**  
 Do not store together with alkalis (caustic solutions).  
 Keep away from foodstuffs, beverages and food.
- **Further information about storage conditions:** Store in a cool place.
- **Recommended storage temperature:** 5-25°C
- **Storage class**  
 LGK 12  
 (German Technical Rule for Hazardous Substance – TRGS 510)
- **7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

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

· **8.1 Control parameters**

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

**10043-01-3 aluminium sulphate**

WEL | Long-term value: 2 mg/m<sup>3</sup>

- **Additional information:** The lists that were valid during the compilation were used as basis.
  - **8.2 Exposure controls**
  - **Personal protective equipment**
  - **General protective and hygienic measures**  
 The usual precautionary measures should be adhered to general rules for handling chemicals.  
 Keep away from foodstuffs, beverages and food.  
 Do not eat, drink or smoke while working.  
 Take off immediately all contaminated clothing.  
 Wash hands during breaks and at the end of the work.  
 Avoid contact with the eyes and skin.
  - **Breathing equipment:** Not required.
  - **Protection of hands:**  
 Protective gloves.  
 The protective gloves to be used must comply with the specifications of the EC directive 89/686/EEC and the resultant standard EN 374.  
 This recommendation applies only to the product stated in the Safety Data Sheet and supplied by us as well as to the purpose specified by us.  
 Only use chemical-protective gloves with CE-labelling of category III.  
 Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
  - **Material of gloves**
- | Thickness     | Breakthrough time |       |
|---------------|-------------------|-------|
|               | (mm)              | (min) |
| Nitril rubber | 0,38              | > 480 |
| Neoprene      | 0,65              | > 240 |
| Butyl rubber  | 0,36              | > 480 |
- Avoid natural rubber gloves.

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· **As protection from splashes gloves made of the following materials are suitable:**

Synthetic gloves

Value for permeation: Level:

≥ 3 (60 min)

· **Eye protection:** Safety glasses

· **Body protection:** Protective work clothing.

### SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

**Form:** Fluid

**Colour:** Colourless

· **Odour:** Odourless

· **pH-value at 25 °C:** < 1

· **Change in condition**

**Melting point/freezing point:** < 5 °C

**Initial boiling point and boiling range:** > 100 °C

· **Flash point:** Not applicable

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

· **Explosive properties:** Product is not explosive.

· **Vapour pressure at 20 °C:** 23 hPa

· **Density at 25 °C** 1.127 g/cm<sup>3</sup>

· **Solubility in / Miscibility with**

**Water:** miscible

· **Viscosity:**

**dynamic:** Not determined

**kinematic:** Not determined

· **9.2 Other information** No further relevant information available.

### SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

· **10.3 Possibility of hazardous reactions** Reacts with light alloys to form hydrogen

· **10.4 Conditions to avoid** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

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- **10.6 Hazardous decomposition products:** No dangerous decomposition products known

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation**
- **Serious eye damage/irritation**  
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Subacute to chronic toxicity:** No known symptoms to date.
- **Additional toxicological information:**  
This statement was deduced from the properties of the single components.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

**SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** Not determined
- **12.2 Persistence and degradability** Not determined
- **12.3 Bioaccumulative potential** Not determined
- **Behaviour in environmental systems:** Not determined
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:** Not determined
- **Behaviour in sewage processing plants:** Not determined
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): Weakly water-endangering.  
The product does not contain organically bounded halogens (AOX-free).  
At present there are no ecotoxicological assessments.  
This statement was deduced from the properties of the single components.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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- **12.6 Other adverse effects** No further relevant information available.

**SECTION 13: Disposal considerations**

• **13.1 Waste treatment methods**

• **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**

09 01 04*	fixer solutions
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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.

**SECTION 14: Transport information**

• **14.1 UN-Number**

• **ADR/RID, IMDG, IATA**

UN 3264

• **14.2 UN proper shipping name**

• **ADR/RID, IMDG, IATA**

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID)

• **14.3 Transport hazard class(es)**

• **ADR/RID, IMDG, IATA**



• **Class**

8 Corrosive substances.

• **Label**

8

• **14.4 Packing group**

• **ADR/RID, IMDG, IATA**

III

• **14.5 Environmental hazards:**

• **Marine pollutant:**

No

• **14.6 Special precautions for user**

Warning: Corrosive substances.

• **Kemler Number:**

80

• **EMS Number:**

F-A,S-B

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- |  |  |
|--|--|
| · <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b> | Not applicable.  |
| · <b>Transport/Additional information:</b>                                       |  |
| · <b>ADR/RID</b>   |  |
| · <b>Limited quantities (LQ)</b>   | 5 l  |
| · <b>Transport category</b>  | 3  |
| · <b>Tunnel restriction code</b>   | E  |
| · <b>Remarks:</b>  | "Limited quantity" according to chapter 3.4 ADR                              |
| · <b>IMDG</b>  |  |
| · <b>Limited quantities (LQ)</b>   | 5 l  |
| · <b>Remarks:</b>  | "Limited quantity" according to chapter 3.4 IMDG                             |
| · <b>IATA</b>  |  |
| · <b>Remarks:</b>  | Packing Instruction<br>PAX 852, CAO 856                                      |
| · <b>UN "Model Regulation":</b>  | UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID), 8, III |

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3
- **National regulations**
- **Water hazard class:** Water hazard class 1 (Self-assessment): weakly water-endangering.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 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 phrases**  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.
- **Recommended restriction of use** No public product, only for commercial use
- **Classification according to Regulation (EC) No 1272/2008**  
The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

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• **Department issuing data specification sheet:**

Laboratory

Tel.: +49 (0)39291 425-15

• **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

• **Sources**

applicable EEC directives:

- 1907/2006

- 1272/2008

Internal physical tests, MSDS of the ingredients,

Information system on hazardous substances of the German Social Accident Insurance

(GESTIS-database on hazardous substances), <http://www.dguv.de/ifa/en/gestis/stoffdb/index.jsp>

• **\* Data compared to the previous version altered.**