

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

Printing date 09.04.2019

Version 7

Revision: 09.04.2019

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

- **1.1 Product identifier**
- **Trade name:** GIRARDELLI X-3D Fixer
- **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:**  
 Ritter Concept GmbH  
 Freiburger Str. 45  
 88400 Biberach  
 Tel. (07351) 52 925-10  
 Fax (07351) 52 925-11  
 e-mail: info@ritterconcept.com
- **Informing department:**  
 Tel. (07351) 52 925-10  
 e-mail: info@ritterconcept.com
- **1.4 Emergency telephone number:**  
 During office hours:  
 Tel. (07351) 52 925-10

**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.

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

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**SECTION 4: First aid measures**

- **4.1 Description of first aid measures**
- **General information** 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.  
The product is not skin irritating.
- **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.  
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 spray 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 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.  
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).  
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** No special measures required.
- **Information about protection against explosions and fires:**  
No special measures required.

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- 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.

- **8.1 Control parameters**

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

#### 64-19-7 acetic acid

WEL	Short-term value: 50 mg/m <sup>3</sup> , 20 ppm Long-term value: 25 mg/m <sup>3</sup> , 10 ppm
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- **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  $\geq 6$  (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:** Safety glasses

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### 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 25 °C: 5.3

##### · 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 20 °C 1.36 g/cm<sup>3</sup>

##### · Solubility in / Miscibility with

Water: miscible

##### · Viscosity:

dynamic:	Not determined
kinematic:	Not determined

##### · Solvent content:

Organic solvents:	0 %
Water:	~ 50 %

· 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 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:

Sulphur dioxide  
Ammonia

### 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 Based on available data, the classification criteria are not met.

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- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **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.
- **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.  
Packagings that cannot be cleaned are to be disposed of in the same manner as the product.  
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- **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

**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 %
I	0.9
II	4.9

- **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**  
H226 Flammable liquid and vapour.  
H312 Harmful in contact with skin.  
H314 Causes severe skin burns and eye damage.
- **Recommended restriction of use** No public product, only for commercial use

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• **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.

• **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)  
 ICAO: International Civil Aviation Organisation  
 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  
 Flam. Liq. 3: Flammable liquids – Category 3  
 Acute Tox. 4: Acute toxicity – Category 4  
 Skin Corr. 1A: Skin corrosion/irritation – Category 1A

• **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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