



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.07.2012

Version 6

Revision: 11.07.2012

1 Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: **Unimat Fixer**

Article number: 0224, 07224

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 preparation

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:

ADEFO-CHEMIE GmbH

Justus-von-Liebig-Str. 24-26

D-63128 Dietzenbach

Tel.: +49 6074 84239-0

Fax: +49 6074 84239-63

E-Mail: service@adefo-chemie.de

www.adefo-chemie.de

Informing department:

Tel.: +49 6074 84239-0

Fax: +49 6074 84239-63

E-Mail: kr@calbe-chemie.de

1.4 Emergency telephone number: Tel.: 0700-24112112 (CAL)

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.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC Void

Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

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.

2.2 Label elements

Labelling according to EU guidelines:

The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EC" as issued in the last version.

Special labelling of certain preparations:

Safety data sheet available for professional user on request.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

GB

(Contd. on page 2)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.07.2012

Version 6

Revision: 11.07.2012

Trade name: Unimat Fixer

(Contd. of page 1)

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	acetic acid  C R35 R10  Flam. Liq. 3, H226  Skin Corr. 1A, H314	2.0-5.0%
CAS: 10043-35-3 EINECS: 233-139-2	boric acid  T Repr. Cat. 2 R60-61  Repr. 1B, H360	< 0.5%
CAS: 62-56-6 EINECS: 200-543-5	thiourea  Xn R22-40-63 N R51/53 Carc. Cat. 3, Repr. Cat. 3  Carc. 2, H351; Repr. 2, H361d  Aquatic Chronic 2, H411  Acute Tox. 4, H302	< 0.5%

SVHC

10043-35-3	boric acid
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Additional information

Main component: water

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

4 First aid measures

4.1 Description of first aid measures

General information No special measures required.

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 (> 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.

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents

CO₂, 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.

(Contd. on page 3)



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.07.2012

Version 6

Revision: 11.07.2012

Trade name: Unimat Fixer

(Contd. of page 2)

5.2 Special hazards arising from the substance or mixture

Can be released in case of fire

sulphur dioxide (SO₂)Nitrogen oxides (NO_x)**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

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.

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.

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:**

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.

(Contd. on page 4)



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.07.2012

Version 6

Revision: 11.07.2012

Trade name: Unimat Fixer

(Contd. of page 3)

- **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 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**
Synthetic gloves
Avoid natural rubber gloves.
- **Penetration time of glove material**
Value for permeation: Level ≥ 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:
 ≥ 3 (60 min)
- **Eye protection:** Safety glasses

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:** 4.9
- **Change in condition**

Melting point/Melting range:	< 5°C
Boiling point/Boiling range:	> 100°C
- **Flash point:** Not applicable
- **Self-inflammability:** Product is not selfigniting.
- **Danger of explosion:** Product is not explosive.
- **Vapour pressure at 20°C:** 23 hPa
- **Density at 20°C** 1.216 g/cm³
- **Solubility in / Miscibility with Water:** miscible

(Contd. on page 5)



Safety data sheet

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Printing date 11.07.2012

Version 6

Revision: 11.07.2012

Trade name: Unimat Fixer

(Contd. of page 4)

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|--------------------------------|--|
| · Viscosity: | |
| dynamic: | Not determined |
| kinematic: | Not determined |
| · Solvent content: | |
| Organic solvents: | 3.3 % |
| Water: | ~ 61 % |
| · 9.2 Other information | No further relevant information available. |

10 Stability and reactivity

- **10.1 Reactivity**
- **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

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** Irritant effect.
- **Sensitization:** No sensitizing effect known.
- **Subacute to chronic toxicity:** No known symptoms to date.
- **Additional toxicological information:**
This statement was deduced from the properties of the single components.
The product is not subject to classification according to the calculation method of the General EC Classification Guidelines for Preparations as issued in the latest version:
When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

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

(Contd. on page 6)

GB



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.07.2012

Version 6

Revision: 11.07.2012

Trade name: Unimat Fixer

(Contd. of page 5)

Additional ecological information:**General notes:**

At present there are no ecotoxicological assessments.

Water hazard class 1 (German Regulation) (Self-assessment): Weakly water-endangering.
According to the criteria of the EU-classification and labelling "dangerous for environment"(1999/45/EG) the substance/ the product has to be classified as non-hazardous for the environment.

The product does not contain organically bounded halogens (AOX-free).

12.5 Results of PBT and vPvB assessment

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

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

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.

14 Transport information

14.1 UN-Number

· **ADR, ADN, IMDG, IATA**

Void

14.2 UN proper shipping name

· **ADR**

Void

· **ADN, IMDG, IATA**

Void

14.3 Transport hazard class(es)

· **ADR, ADN, IMDG, IATA**

· **Class**

Void

14.4 Packing group

· **ADR, IMDG, IATA**

Void

14.5 Environmental hazards:

· **Marine pollutant:**

No

14.6 Special precautions for user

Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

(Contd. on page 7)



Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 11.07.2012

Version 6

Revision: 11.07.2012

Trade name: Unimat Fixer

(Contd. of page 6)

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|--|--|
| · Transport/Additional information: | Not dangerous according to the above specifications. |
| · UN "Model Regulation": | UN-, - |

15 Regulatory information

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

- **National regulations**

Class	Share in %
I	0.1
II	3.3

- **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.

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.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H351 Suspected of causing cancer.
H360 May damage fertility or the unborn child.
H361d Suspected of damaging the unborn child.
H411 Toxic to aquatic life with long lasting effects.

R10 Flammable.
R22 Harmful if swallowed.
R35 Causes severe burns.
R40 Limited evidence of a carcinogenic effect.
R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R60 May impair fertility.
R61 May cause harm to the unborn child.
R63 Possible risk of harm to the unborn child.

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

- **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 Organization
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (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 Harmonized System of Classification and Labelling of Chemicals

(Contd. on page 8)



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

Printing date 11.07.2012

Version 6

Revision: 11.07.2012

Trade name: Unimat Fixer

(Contd. of page 7)

· **Sources**

applicable EEC directives:

- 1999/45
- 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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