

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

Printing date 21.06.2022

Version 4.2

Revision: 21.06.2022

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

• **1.1 Product identifier**

• **Trade name: AUTOMATIC X-RAY FILM FIXER CONCENTRATE PART B**

• **Article number: 10082**

• **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 (additive)

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: rs@calbe-chemie.de

• **1.4 Emergency telephone number:**

Tel.: +49 (0) 700-24112112 (CAL)

Tel.: +1 872 5888271(CAL)

SECTION 2: Hazards identification

• **2.1 Classification of the substance or mixture**

• **Classification according to Regulation (EC) No 1272/2008**



corrosion

Met. Corr.1 H290 May be corrosive to metals.

Eye Dam. 1 H318 Causes serious eye damage.



Skin Irrit. 2 H315 Causes skin irritation.

• **2.2 Label elements**

• **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

(Contd. on page 2)

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

Printing date 21.06.2022

Version 4.2

Revision: 21.06.2022

Trade name: AUTOMATIC X-RAY FILM FIXER CONCENTRATE PART B

(Contd. of page 1)

· Hazard pictograms



GHS05

· Signal word Danger

· Hazard-determining components of labelling:

aluminium sulphate
sulphuric acid

· Hazard statements

H290 May be corrosive to metals.
H315 Causes skin irritation.
H318 Causes serious eye damage.

· Precautionary statements

P280 Wear protective gloves / eye 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.
P310 Immediately call a POISON CENTER/doctor.
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	5-10%
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  Met. Corr.1, H290; Skin Corr. 1A, H314	5-10%

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

GB

(Contd. on page 3)

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

Printing date 21.06.2022

Version 4.2

Revision: 21.06.2022

Trade name: AUTOMATIC X-RAY FILM FIXER CONCENTRATE PART B

(Contd. of page 2)

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 (at least 15 minutes).
Remove contact lenses, if present and easy to do.
Use eye protection.
Call a doctor immediately.

• **After swallowing**

Rinse out mouth and then drink plenty of water.
Do not induce vomiting; instantly call for medical help.

• **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**

CO₂, 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 (SO₂)

• **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

GB

(Contd. on page 4)

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

Printing date 21.06.2022

Version 4.2

Revision: 21.06.2022

Trade name: AUTOMATIC X-RAY FILM FIXER CONCENTRATE PART B

(Contd. of page 3)

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**
Wear protective clothing.
Avoid contact with the eyes and skin.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** Keep container tightly sealed.
- **Information about storage in one common storage facility:**
Keep away from foodstuffs, beverages and food.
Do not store together with alkalis (caustic solutions).
- **Further information about storage conditions:**
Protect from heat and direct sunlight.
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

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

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

10043-01-3 aluminium sulphate

WEL	Long-term value: 2 mg/m ³
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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.

(Contd. on page 5)

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

Printing date 21.06.2022

Version 4.2

Revision: 21.06.2022

Trade name: AUTOMATIC X-RAY FILM FIXER CONCENTRATE PART B

(Contd. of page 4)

Keep away from foodstuffs, beverages and food.
Take off immediately all contaminated clothing.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Do not eat, drink or smoke while working.

• **Breathing equipment:** Not required.

• **Protection of hands:**

Protective gloves.

The protective gloves to be used must comply with the specifications of the (EU) 2016/425 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.

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

Synthetic gloves

Value for permeation: Level \geq 3 (60 min)

• **Eye protection:** Tightly sealed 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:	Not characteristic

• **pH-value at 20 °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.

(Contd. on page 6)

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

Printing date 21.06.2022

Version 4.2

Revision: 21.06.2022

Trade name: AUTOMATIC X-RAY FILM FIXER CONCENTRATE PART B

(Contd. of page 5)

· Vapour pressure at 20 °C:	23 hPa
· Density at 20 °C	1.166 g/cm ³
· Solubility in / Miscibility with Water:	miscible
· Viscosity: dynamic:	Not determined
kinematic:	Not determined
· Solvent content:	
Organic solvents:	0 %
Water:	~ 83 %
· 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
Reacts with alkali (lyes)
- **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:

10043-01-3 aluminium sulphate

Oral LD50 > 5000 mg/kg (rat)

7664-93-9 sulphuric acid

Oral LD50 2140 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation**
Causes skin irritation.
- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Additional toxicological information:**
This statement was deduced from the properties of the single components.

(Contd. on page 7)

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

Printing date 21.06.2022

Version 4.2

Revision: 21.06.2022

Trade name: AUTOMATIC X-RAY FILM FIXER CONCENTRATE PART B

(Contd. of page 6)

- **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:

No further relevant information available.
Not determined

10043-01-3 aluminium sulphate

LC50/48 h 38.2 mg/l (Daphnia magna)

LC50/96 h 2.98 mg/l (fish)

7664-93-9 sulphuric acid

LC50/48 h 42.5 mg/l (Daphnia magna)

• 12.2 Persistence and degradability Not determined

• Behaviour in environmental systems: Not determined

• 12.3 Bioaccumulative potential Not determined

• 12.4 Mobility in soil No further relevant information available.

• Ecotoxicological effects: No further relevant information available.

• 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 2 (German Regulation) (Self-assessment): Water-endangering.
Do not allow product to reach ground water, water bodies or sewage system.

• 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.

(Contd. on page 8)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.06.2022

Version 4.2


Revision: 21.06.2022

Trade name: AUTOMATIC X-RAY FILM FIXER CONCENTRATE PART B

(Contd. of page 7)

- **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, 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 |
| · Segregation groups | 1 - Acids |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · Transport/Additional information: | |
| · ADR/RID | |
| · Limited quantities (LQ) | 5 l |
| · Transport category | 3 |
| · Tunnel restriction code | E |
| · Remarks: | "Limited quantity" according to chapter 3.4 ADR |

(Contd. on page 9)

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.06.2022

Version 4.2

Revision: 21.06.2022

Trade name: AUTOMATIC X-RAY FILM FIXER CONCENTRATE PART B

(Contd. of page 8)

• IMDG	
• Remarks:	"Limited quantity" according to chapter 3.4 IMDG
• IATA	
• Remarks:	Packing Instruction PAX 852, CAO 856
• UN "Model Regulation":	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**
- **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
sulphuric acid
- **Hazard statements**
H290 May be corrosive to metals.
H315 Causes skin irritation.
H318 Causes serious eye damage.
- **Precautionary statements**
P280 Wear protective gloves / eye 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.
P310 Immediately call a POISON CENTER/doctor.
P390 Absorb spillage to prevent material damage.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **National regulations**
- **Water hazard class:** Water hazard class 2 (Self-assessment): water-endangering.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

GB

(Contd. on page 10)

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

Printing date 21.06.2022

Version 4.2

Revision: 21.06.2022

Trade name: AUTOMATIC X-RAY FILM FIXER CONCENTRATE PART B

(Contd. of page 9)

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**

H290 May be corrosive to metals.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

- **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)
ICAO: International Civil Aviation Organisation
ADR: Accord relatif au transport international 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
vPvB: very Persistent and very Bioaccumulative
Met. Corr. 1: Corrosive to metals – Category 1
Skin Corr. 1A: Skin corrosion/irritation – Category 1A
Skin Irrit. 2: Skin corrosion/irritation – Category 2
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>

GB