

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Alzofix® P9

Version 10.5 / REG_EU
Revision Date: 09.09.2020

Specification: 134919
Material no.:

Date of first issue: 09.09.2020
Print Date: 10.09.2020

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

1.1 Product identifier

Trade name : Alzofix® P9
Registration number : if available listed in Chapter. 3
Unique Formula Identifier (UFI) : AM00-Q0ND-2002-FCSY

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Sub-stance/Mixture : fixative and flocculant

1.3 Details of the supplier of the safety data sheet

Company : AlzChem Trostberg GmbH
Dr.-Albert-Frank-Str. 32
83308 Trostberg, Germany
Telephone : +49 8621 86-3351
E-mail address of person responsible for the SDS : alz-pst@alzchem.com

1.4 Emergency telephone number

Emergency telephone number : +49 8621 86-2776
AlzChem Trostberg GmbH, Fire Brigade

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Corrosive to metals, Category 1 H290: May be corrosive to metals.
Serious eye damage, Category 1 H318: Causes serious eye damage.
Long-term (chronic) aquatic hazard, Category 3 H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal word : Danger

Hazard statements : H290 May be corrosive to metals.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Alzofix® P9

Version 10.5 / REG_EU
Revision Date: 09.09.2020

Specification: 134919
Material no.:

Date of first issue: 09.09.2020
Print Date: 10.09.2020

H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements : **Prevention:**

P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response:

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.

Storage:

P406 Store in corrosive resistant e. g. polyethylene container with a resistant inner liner.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out
Observe product acidity.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : aluminum containing dicyandiamide - formaldehyde - polymer
Aqueous preparation of a cationic dicyandiamide derivative /
polyamine condensation product

Aluminium
min.
6,1 %

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Aluminum chloride, basic	1327-41-9 215-477-2 01-2119531563-43-XXXX	Met. Corr. 1; H290 Eye Dam. 1; H318	> 20
Guanidine, cyano-, polymer with ammonium chloride ((NH ₄)Cl) and formaldehyde	55295-98-2 686-887-0	Aquatic Chronic 2; H411	< 10

For explanation of abbreviations see section 16.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Alzofix® P9

Version 10.5 / REG_EU
Revision Date: 09.09.2020

Specification: 134919
Material no.:

Date of first issue: 09.09.2020
Print Date: 10.09.2020

SECTION 4: First aid measures

4.1 Description of first aid measures

- General advice : Seek medical advice in case of symptoms caused by eye or skin contact, inhalation or swallowing.
Remove contaminated or saturated clothing.
- If inhaled : Move to fresh air.
- In case of skin contact : Wash off with plenty of water and soap.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 10 minutes.
Remove contact lenses if this can be easily done.
Immediate further treatment in ophthalmic hospital/ ophthalmologist.
- If swallowed : Do NOT induce vomiting.
Rinse out mouth.
Drink 1 or 2 glasses of water.

4.2 Most important symptoms and effects, both acute and delayed

None known.

4.3 Indication of any immediate medical attention and special treatment needed

- Treatment : Treatment:
No specific antidote known.
Symptomatic treatment.
If necessary, administer activated charcoal (10-20g) and sodium sulfate (Glauber salt, 20g).

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media : Water spray, foam, CO₂, dry powder.
- Unsuitable extinguishing media : high volume water jet

5.2 Special hazards arising from the substance or mixture

- Hazardous combustion products : hydrogen chloride (HCl)

5.3 Advice for firefighters

- Special protective equipment for firefighters : In the case of fire, wear respiratory protective equipment independent of surrounding air and chemical protective suit.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Alzofix® P9

Version 10.5 / REG_EU
Revision Date: 09.09.2020

Specification: 134919
Material no.:

Date of first issue: 09.09.2020
Print Date: 10.09.2020

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear personal protective equipment; see section 8.
Ensure adequate ventilation.

6.2 Environmental precautions

Environmental precautions : Product or extinguishing water with product must not be allowed to enter soil, sewers or natural bodies of water.
Shut off source of leak if safe to do so.
Dike or contain spill.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Take up with liquid-binding material (e.g. sand, universal binder, diatomaceous earth). Store used liquid binder closed in stable, labelled containers.
Pick up and transfer to properly labelled containers.

6.4 Reference to other sections

For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Handle in accordance with good industrial hygiene and safety practice.
Use only in well-ventilated areas.
For professional use only.

Advice on protection against fire and explosion : No special precautions required.

Hygiene measures : Do not inhale vapours / aerosols. Contact with skin, eyes and clothes must be strictly avoided. Take off clothing and shoes contaminated with product. Clean before reuse. Do not eat, drink or smoke while working. Wash hands, and/or face before breaks and when workday is finished. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep containers tightly closed in a cool, well-ventilated place.

Advice on common storage : Do not store together with bases.

Storage class (TRGS 510) : 8B, Non-combustible, corrosive hazardous materials

Storage period : 12 Months

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Alzofix® P9

Version 10.5 / REG_EU
Revision Date: 09.09.2020

Specification: 134919
Material no.:

Date of first issue: 09.09.2020
Print Date: 10.09.2020

Recommended storage temperature : > 3 - 30 °C

Packaging material : Suitable material: polyethylene, Polypropylene, glass-fibre reinforced plastics (GRP)
Unsuitable material: Metal

7.3 Specific end use(s)

Specific use(s) : We are unaware of any specific end uses which go beyond the data reported in Section 1.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

8.2 Exposure controls

Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Eye protection : Tightly fitting safety goggles

Hand protection

Material : Nitrile rubber, Recommendation: Camatril 730

Break through time : 480 min

Glove thickness : 0,4 mm

Manufacturer : Kächele-Cama Latex GmbH (KCL), Germany

Material : Chloroprene, Recommendation: Camapren 722

Break through time : 480 min

Glove thickness : 0,6 mm

Manufacturer : Kächele-Cama Latex GmbH (KCL), Germany

Remarks : Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Skin and body protection : Protective clothing
If intensive contact with the hazardous material cannot be avoided with certainty, order (depending on the hazard involved) additional protective measures for example chemical protective suit.

Respiratory protection : Use suitable respiratory protection where aerosols/vapours are generated.
Suitable filter: B-P2, code colour grey-white

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : liquid

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Alzofix® P9

Version 10.5 / REG_EU
Revision Date: 09.09.2020

Specification: 134919
Material no.:

Date of first issue: 09.09.2020
Print Date: 10.09.2020

Colour	:	yellow
Odour	:	odourless
pH	:	2 - 3 (20 °C) Concentration: 100 %
Melting point/range	:	< -15 °C
Flash point	:	Not applicable
Density	:	1,26 - 1,33 g/cm ³ (20 °C)
Solubility(ies) Water solubility	:	completely miscible
Viscosity Viscosity, dynamic	:	ca. 15 - 30 mPa.s (20 °C) Method: Brookfield

9.2 Other information

Conductivity : 5 µS /cm

SECTION 10: Stability and reactivity

10.1 Reactivity

See section 10.3

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reactions known.

10.4 Conditions to avoid

Conditions to avoid : temperatures < 3 °C

10.5 Incompatible materials

Materials to avoid : Metals
alkalines

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions.
see section 5

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Alzofix® P9

Version 10.5 / REG_EU
Revision Date: 09.09.2020

Specification: 134919
Material no.:

Date of first issue: 09.09.2020
Print Date: 10.09.2020

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : LD50 (Rat): > 2000 mg/kg
Method: OECD Test Guideline 401
Test substance: Product
Remarks: Own test result.

Components:

Aluminum chloride, basic:

Acute oral toxicity : LD50 (rat, male/female): > 2000 mg/kg
Method: OECD Test Guideline 401

Guanidine, cyano-, polymer with ammonium chloride ((NH₄)Cl) and formaldehyde:

Acute oral toxicity : Assessment: Based on available data, the classification criteria are not met.
Acute inhalation toxicity : Assessment: Based on available data, the classification criteria are not met.
Acute dermal toxicity : Assessment: Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Product:

Species : Rabbit
Method : OECD Test Guideline 404
Result : No skin irritation
Test substance : Product
Remarks : Own test result.

Components:

Aluminum chloride, basic:

Species : Rabbit
Method : OECD Guide-line 404
Result : No skin irritation

Guanidine, cyano-, polymer with ammonium chloride ((NH₄)Cl) and formaldehyde:

Remarks : no data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Alzofix® P9

Version 10.5 / REG_EU
Revision Date: 09.09.2020

Specification: 134919
Material no.:

Date of first issue: 09.09.2020
Print Date: 10.09.2020

Serious eye damage/eye irritation

Product:

Assessment : Causes serious eye damage.

Components:

Aluminum chloride, basic:

Species : Rabbit
Assessment : Causes serious eye damage.
Method : OECD Guide-line 405

Guanidine, cyano-, polymer with ammonium chloride ((NH₄)Cl) and formaldehyde:

Remarks : no data available

Respiratory or skin sensitisation

Product:

Species : Rabbit
Result : not sensitizing
Test substance : comparable product

Components:

Aluminum chloride, basic:

Test Type : maximization test
Exposure routes : Skin contact
Species : Guinea pig
Method : OECD Test Guideline 406
Result : not sensitizing to the skin

Guanidine, cyano-, polymer with ammonium chloride ((NH₄)Cl) and formaldehyde:

Remarks : no data available

Germ cell mutagenicity

Components:

Aluminum chloride, basic:

Genotoxicity in vitro : Test Type: Genetic mutation in mammal cells
Test system: mouse lymphoma cells
Metabolic activation: with and without metabolic activation
Method: OECD TG 476
Result: negative

Guanidine, cyano-, polymer with ammonium chloride ((NH₄)Cl) and formaldehyde:

Germ cell mutagenicity- Assessment : no data available

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Alzofix® P9

Version 10.5 / REG_EU
Revision Date: 09.09.2020

Specification: 134919
Material no.:

Date of first issue: 09.09.2020
Print Date: 10.09.2020

Carcinogenicity

Components:

Guanidine, cyano-, polymer with ammonium chloride ((NH₄)Cl) and formaldehyde:

Carcinogenicity - Assessment : no data available

Reproductive toxicity

Components:

Aluminum chloride, basic:

Reproductive toxicity - Assessment : No toxicity to reproduction

Guanidine, cyano-, polymer with ammonium chloride ((NH₄)Cl) and formaldehyde:

Reproductive toxicity - Assessment : no data available

STOT - single exposure

Components:

Guanidine, cyano-, polymer with ammonium chloride ((NH₄)Cl) and formaldehyde:

Remarks : no data available

STOT - repeated exposure

Components:

Guanidine, cyano-, polymer with ammonium chloride ((NH₄)Cl) and formaldehyde:

Remarks : no data available

Aspiration toxicity

Components:

Guanidine, cyano-, polymer with ammonium chloride ((NH₄)Cl) and formaldehyde:

No data available

Further information

Product:

Remarks : No additional toxicological data are available.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Alzofix® P9

Version 10.5 / REG_EU
Revision Date: 09.09.2020

Specification: 134919
Material no.:

Date of first issue: 09.09.2020
Print Date: 10.09.2020

SECTION 12: Ecological information

12.1 Toxicity

Product:

Ecotoxicology Assessment

Chronic aquatic toxicity : Harmful to aquatic life with long lasting effects.

Components:

Aluminum chloride, basic:

Toxicity to fish : NOEC (Danio rerio (zebra fish)): > 1000 mg/l
Exposure time: 96 h
Test Type: semi-static test
Method: OECD TG 203

Toxicity to daphnia and other aquatic invertebrates : EC 10 (Daphnia magna (Water flea)): 21,1 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD TG 202

EC50 (Daphnia magna (Water flea)): 38 mg/l
Exposure time: 48 h
Test Type: static test
Method: OECD TG 202

Toxicity to algae/aquatic plants : ErC50 (Pseudokirchneriella subcapitata (green algae)): 14 mg/l
End point: growth rate
Exposure time: 72 h
Test Type: static test
Method: OECD TG 201

Guanidine, cyano-, polymer with ammonium chloride ((NH₄)Cl) and formaldehyde:

Toxicity to fish : Remarks: no data available

Toxicity to daphnia and other aquatic invertebrates : Remarks: no data available

Ecotoxicology Assessment

Chronic aquatic toxicity : Toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Components:

Aluminum chloride, basic:

Biodegradability : Remarks: The methods for determining biodegradability are not applicable to inorganic substances.

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Alzofix® P9

Version 10.5 / REG_EU
Revision Date: 09.09.2020

Specification: 134919
Material no.:

Date of first issue: 09.09.2020
Print Date: 10.09.2020

Guanidine, cyano-, polymer with ammonium chloride ((NH₄)Cl) and formaldehyde:

Biodegradability : Remarks: no data available

12.3 Bioaccumulative potential

Components:

Guanidine, cyano-, polymer with ammonium chloride ((NH₄)Cl) and formaldehyde:

Bioaccumulation : Remarks: no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out.

12.6 Other adverse effects

Product:

Additional ecological information : The product may be harmful to aquatic organisms by pH-shift. Prevent uncontrolled release in the environment. No further ecotoxicological data are available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Must be brought to an adequate waste treatment facility, in conformity with applicable waste disposal regulations.

Contaminated packaging : Packaging, that can not be reused after cleaning must be disposed or recycled in accordance with all federal, national and local regulations.

SECTION 14: Transport information

14.1 UN number

ADR : UN 3264

RID : UN 3264

IMDG : UN 3264

IATA (Cargo) : UN 3264

14.2 UN proper shipping name

ADR : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(Aqueous solutions of aluminium chloride)

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Alzofix® P9

Version 10.5 / REG_EU
Revision Date: 09.09.2020

Specification: 134919
Material no.:

Date of first issue: 09.09.2020
Print Date: 10.09.2020

RID : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(Aqueous solutions of aluminium chloride)

IMDG : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(Aqueous solutions of aluminium chloride)

IATA (Cargo) : Corrosive liquid, acidic, inorganic, n.o.s.
(Aqueous solutions of aluminium chloride)

14.3 Transport hazard class(es)

ADR : 8

RID : 8

IMDG : 8

IATA (Cargo) : 8

14.4 Packing group

ADR
Packing group : III
Classification Code : C1
Hazard Identification Number : 80
Labels : 8
Tunnel restriction code : (E)

RID
Packing group : III
Classification Code : C1
Hazard Identification Number : 80
Labels : 8

IMDG
Packing group : III
Labels : 8
EmS Code : F-A, S-B
Remarks : Clear of living quarters.

IATA (Cargo)
Packing instruction (cargo aircraft) : 856
Packing instruction (LQ) : Y841
Packing group : III
Labels : Corrosive
Remarks : ERG-Code 8L

IATA (Passenger)
Packing instruction (passenger aircraft) : 852
Packing instruction (LQ) : Y841
Packing group : III
Labels : Corrosive
Remarks : ERG-Code 8L

14.5 Environmental hazards

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Alzofix® P9

Version 10.5 / REG_EU
Revision Date: 09.09.2020

Specification: 134919
Material no.:

Date of first issue: 09.09.2020
Print Date: 10.09.2020

ADR

Environmentally hazardous : no

RID

Environmentally hazardous : no

IMDG

Marine pollutant : no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

Other regulations:

The product can be used as a slimicide, flocculant, precipitant and fixative in production of paper, cardboard and pasteboard for foodstuff packagings (as per German Recommendation XXXVI).

15.2 Chemical safety assessment

No substance safety assessment is required for this product.

SECTION 16: Other information

Full text of H-Statements

H290 : May be corrosive to metals.
H318 : Causes serious eye damage.
H411 : Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Chronic : Long-term (chronic) aquatic hazard
Eye Dam. : Serious eye damage
Met. Corr. : Corrosive to metals

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



Alzofix® P9

Version 10.5 / REG_EU
Revision Date: 09.09.2020

Specification: 134919
Material no.:

Date of first issue: 09.09.2020
Print Date: 10.09.2020

Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

REG_EU / EN