

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

Polyaluminium chloride hydroxide sulphate (PAC)

Version 5.0
Revision Date 2010/12/03

Print Date 2010/12/03
MSDS code: MPAC100

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

1.1. Product identifier

Trade name : Polyaluminium chloride hydroxide sulphate (PAC)
CAS-No. : 39290-78-3
EC-No. : 254-400-7

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

Use of the Substance/Mixture : At this time we do not yet have information on identified uses. They will be included in this safety data sheet when available.

Recommended restrictions on use : At that time we do not yet have information on use restrictions. They will be included in this safety data sheet when available.

1.3. Details of the supplier of the safety data sheet

Company : Brenntag UK & Ireland
Albion House, Rawdon Park
GB LS19 7XX Leeds Yeadon
Telephone : 0113 3879 200
Telefax : 0113 3879 280
E-mail address : msds@brenntag.co.uk

1.4. Emergency telephone number

Emergency telephone number : Emergency only telephone number (open 24 hours):
01865 407333 (N.C.E.C. Culham)

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

REGULATION (EC) No 1272/2008			
Hazard class	Hazard category	Target Organs	Hazard statements

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Hazard class	Hazard category	Target Organs	Hazard statements
Skin corrosion/irritation	Category 2		H315
Serious eye damage/eye irritation	Category 2		H319

For the full text of the H-Statements mentioned in this Section, see Section 16.

Classification according to EU Directives 67/548/EEC or 1999/45/EC

Directive 67/548/EEC or 1999/45/EC	
Hazard symbol / Category of danger	Risk phrases
Irritant (Xi)	R36/38

For the full text of the R-phrases mentioned in this Section, see Section 16.

Most important adverse effects

- Human Health : See section 11 for toxicological information.
No further information available.
- Physical and chemical hazards : See section 9 for physicochemical information.
No further information available.
- Potential environmental effects : See section 12 for environmental information.
No further information available.

2.2. Label elements**Labelling according to Regulation (EC) No 1272/2008**

Hazard symbols :



Signal word :

Warning

Hazard statements :

H315
H319

Causes skin irritation.
Causes serious eye irritation.

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Precautionary statements

General	:	P264	Wash hands thoroughly after handling.
		P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
		P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
		P332 + P313	If skin irritation occurs: Get medical advice/ attention.
		P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P337 + P313	If eye irritation persists: Get medical advice/ attention.

Additional Labelling:

EUH210 Safety data sheet available on request.

Hazardous components which must be listed on the label:

|| • Aluminum chloride hydroxide sulfate

2.3. Other hazards

No other information is available.

3. Composition/information on ingredients**3.1. Substances**

Chemical nature : Aqueous solution

Chemical Name	Identification Number	Amount [%]
Aluminum chloride hydroxide sulfate	CAS-No. : 39290-78-3	< 100
	EC-No. : 254-400-7	

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4. First aid measures

4.1 Description of first aid measures

- General advice : Take off all contaminated clothing immediately.
- In case of skin contact : Wash off immediately with soap and plenty of water. If skin irritation persists, call a physician.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

- Symptoms : No further information available.
- Effects : No further information available.

4.3 Indication of immediate medical attention and special treatment needed

- Treatment : Treat symptomatically.
No further information available.

5. Fire-fighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Unsuitable extinguishing media : No information available.

5.2. Special hazards arising from the substance or mixture

- Specific hazards during fire : The product itself does not burn.

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Advice on safe handling : Avoid contact with skin, eyes and clothing. Handle in accordance with good industrial hygiene and safety practice.
Hygiene measures : Wash hands before breaks and immediately after handling the product. Keep away from food, drink and animal feedingstuffs. When using do not eat or drink.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep in an area equipped with acid resistant flooring. Use acid resistant materials only. Use chloride resistant materials only. Keep container tightly closed.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on common storage : Store separate from acidic- and chloride sensitive materials.

German storage class : 8B: Non-combustible substances, corrosive

Storage temperature : 0 - 30 °C

7.3 Specific end uses

Specific use(s) : No information available.

8. Exposure controls/personal protection

8.1. Control parameters

Component: Aluminum chloride hydroxide sulfate

**CAS-No.
39290-78-3**

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Other OELs

Regulatory Basis	:	UK, EH40 Workplace Exposure Limits (WELs)
Regulatory List	:	EH40 WEL
Value type	:	Time Weighted Average (TWA):
Value	:	2 mg/m ³

8.2. Exposure controls

Engineering measures

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection

Advice : Breathing apparatus needed only when aerosol or mist is formed.

Hand protection

Advice : Neoprene gloves
Protective gloves should be replaced at first signs of wear.

Glove thickness : 0.75 mm

Eye protection

Advice : Tightly fitting safety goggles

Skin and body protection

Advice : Protective suit

Environmental exposure controls

General advice : No special precautions required.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

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Form	: liquid
Colour	: clear to slight cloudy
Odour	: odourless
Odour Threshold	: Currently we do not have any Information from our supplier about this.
pH	: 2 - 3 20 °C
Freezing point	: -12 °C
Boiling point	: > 100 °C
Flash point	: not applicable
Evaporation rate	: Currently we do not have any Information from our supplier about this.
Flammability (solid, gas)	: Currently we do not have any Information from our supplier about this.
Upper explosion limit	: Currently we do not have any Information from our supplier about this.
Lower explosion limit	: Currently we do not have any Information from our supplier about this.
Vapour pressure	: Currently we do not have any Information from our supplier about this.
Relative vapour density	: Currently we do not have any Information from our supplier about this.
Density	: ca. 1.192 - 1.3 g/cm ³ 20 °C
Water solubility	: completely soluble
Partition coefficient: n-octanol/water	: Currently we do not have any Information from our supplier about this.
Ignition temperature	: Currently we do not have any Information from our supplier about this.
Thermal decomposition	: Currently we do not have any Information from our supplier about this.

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Viscosity, kinematic : Currently we do not have any Information from our supplier about this.
Explosive properties : Currently we do not have any Information from our supplier about this.
Oxidizing properties : Currently we do not have any Information from our supplier about this.

9.2 Other information

No further information available.

10. Stability and reactivity**10.1. Reactivity**

Advice : No information available.

10.2. Chemical stability

Advice : No decomposition if stored and applied as directed.
No further information available.

10.3. Possibility of hazardous reactions

Hazardous reactions : No information available.

10.4. Conditions to avoid

Conditions to avoid : Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Materials to avoid : Oxidizing agents
Bases

10.6. Hazardous decomposition products

Hazardous decomposition products : Oxygen
hydrogen chloride

11. Toxicological information**11.1. Information on toxicological effects**

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Product:	CAS-No. 39290-78-3
Acute toxicity	
Oral	
Value type	: LD50
Value	: > 5,000 mg/kg
Species	: rat
Irritation	
Skin	
Remarks	: Irritating to skin.
Eyes	
Remarks	: Irritating to eyes.
Sensitisation	
Remarks	: No sensitizing effect known.

12. Ecological information

12.1. Toxicity

Component: Aluminum chloride hydroxide sulfate	CAS-No. 39290-78-3
Acute toxicity	
Fish	
Species	: Leuciscus idus (Golden orfe)
Exposure Time	: 48 h
Value type	: LC50

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||Value : ca. 1,500 mg/l

12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

Product:	CAS-No. 39290-78-3
Additional ecological information	

Remarks : Solutions with low pH-value must be neutralized before discharge.
Ecological injuries are not known or expected under normal use.

13. Disposal considerations

13.1. Waste treatment methods

Product : Can be disposed as waste water, when in compliance with local regulations.

Contaminated packaging : Empty remaining contents. Rinse with plenty of water. Store containers and offer for recycling of material when in accordance with the local regulations.

European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

14. Transport information

14.1. UN number

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14.2. UN proper shipping name

ADR : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(Aluminum chloride hydroxide sulfate)

RID : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(Aluminum chloride hydroxide sulfate)

IMDG : CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.
(Aluminum chloride hydroxide sulfate)

14.3. Transport hazard class(es)

ADR-Class : 8
(Labels; Classification Code; Hazard
identification No; Tunnel restriction code) 8; C1; 80; (E)

RID-Class : 8
(Labels; Classification Code; Hazard
identification No) 8; C1; 80

IMDG-Class : 8
(Labels; EmS) 8; F-A, S-B

14.4. Packaging group

ADR : III

RID : III

IMDG : III

14.5. Environmental hazards

Labeling according to 5.2.1.8 ADR : no

Labeling according to 5.2.1.8 RID : no

Labeling according to 5.2.1.6.3 IMDG : no

Classification as environmentally
hazardous according to 2.9.3 IMDG : no

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14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG : Not applicable.

15. Regulatory information

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

15.2. Chemical Safety Assessment

Currently we do not have any Information from our supplier about this.

16. Other information

Full text of R-phrases referred to under sections 2 and 3.

R36/38 Irritating to eyes and skin.

Full text of H-Statements referred to under sections 2 and 3.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Further information

Other information : The information provided in this Safety Data Sheet is correct to

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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. Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use.

|| Indicates updated section.