

Trade name: KocFloc**Product no.:** 74034**Current version :** 1.0.0, issued: 23.10.2020**Replaced version: -**, issued: -**Region:** GB**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier****Trade name****KocFloc****1.2 Relevant identified uses of the substance or mixture and uses advised against****Relevant identified uses of the substance or mixture**Flocculant
waste water treatment**Uses advised against**

No data available.

1.3 Details of the supplier of the safety data sheet**Address**Koch-Chemie GmbH
Einsteinstr. 42
D-59423 Unna

Telephone no. +49-2303-9 86 70-0

Fax no. +49-2303-9 86 70-26

Advice on Safety Data Sheet

sdb_info@umco.de

1.4 Emergency telephone number

For medical advice (in German and English):

+49 (0)551 192 40 (Giftinformationszentrum Nord)

For information in the event of an emergency during transport:

+44 1865 407333

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification in accordance with Regulation (EC) No 1272/2008 (CLP)**

Eye Dam. 1; H318

Met. Corr. 1; H290

Classification information

This product is assessed and classified using the methods and criteria below referred to in Article 9 of Regulation (EC) n° 1272/2008:

Physical hazards: determined through assessment data based on the methods or standards referred to in part 2 of Annex I to CLP

Health hazards and environmental hazards: determined through toxicological and ecotoxicological assessment data based on the methods or standards referred to in Part 3, 4 and 5 of Annex I to CLP.

2.2 Label elements**Labelling according to Regulation (EC) No 1272/2008 (CLP Regulation)****Hazard pictograms**

GHS05

Signal word

Danger

Hazardous component(s) to be indicated on label:

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Aluminum chloride, basic

Hazard statement(s)H290 May be corrosive to metals.
H318 Causes serious eye damage.**Precautionary statement(s)**P280 Wear eye protection/face 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.**2.3 Other hazards**

PBT assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.

vPvB assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

SECTION 3: Composition/information on ingredients**3.1 Substances**

Not applicable. The product is not a substance.

3.2 Mixtures**Hazardous ingredients**

No	Substance name		Additional information	
	CAS / EC / Index / REACH no	Classification (EC) 1272/2008 (CLP)	Concentration	%
1	Aluminum chloride, basic			
	1327-41-9 215-477-2 - 01-2119531563-43	Eye Dam. 1; H318 Met. Corr. 1; H290	>= 25.00 - < 50.00	wt%

Full Text for all H-phrases and EUH-phrases: pls. see section 16

SECTION 4: First aid measures**4.1 Description of first aid measures****General information**

Remove contaminated clothing and shoes immediately, and launder thoroughly before reusing. In case of persisting adverse effects, consult a physician.

After inhalation

Remove affected persons from dangerous area by observing suitable respiratory protection measures. Ensure supply of fresh air.

After skin contact

Wash off immediately with soap and water.

After eye contact

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Get immediate ophthalmic treatment.

After ingestion

Rinse out mouth and give plenty of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor immediately.

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No data available.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Firefighting measures**5.1 Extinguishing media****Suitable extinguishing media**

Product itself is non-combustible; adapt fire extinguishing measures to surrounding areas.

Unsuitable extinguishing media

High power water jet

5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Aluminium oxide; Hydrogen chloride (HCl)

5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear full protective suit.

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures****For non-emergency personnel**

Refer to protective measures listed in sections 7 and 8. Use personal protective clothing.

For emergency responders

Personal protective equipment (PPE) - see section 8.

6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

6.3 Methods and material for containment and cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

Information regarding safe handling, see section 7. Information regarding personal protective measures, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage**7.1 Precautions for safe handling****Advice on safe handling**

Risks inherent to handling the product must be minimised by applying the appropriate protective and preventive measures. Working processes should - so far as possible, according to the state of the art - be designed to rule out bodily contact or the release of hazardous substances.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Do not inhale vapours. Avoid contact with eyes and skin. Wash hands before breaks and after work. Remove contaminated clothing and shoes and launder thoroughly before reusing. Provide eye wash fountain in work area.

7.2 Conditions for safe storage, including any incompatibilities**Technical measures and storage conditions**

Keep container tightly closed and dry in a cool, well-ventilated place.

Recommended storage temperature

Value 0 - 30 °C

Requirements for storage rooms and vessels

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Containers which are opened must be carefully closed and kept upright to prevent leakage. Always keep in containers of same material as the original.

Incompatible products

Substances to be avoided, see section 10.

7.3 Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters****DNEL, DMEL and PNEC values****DNEL values (worker)**

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	Aluminum chloride, basic			1327-41-9 215-477-2	
	dermal	Long term (chronic)	systemic	4.6	mg/kg/day
	inhalative	Long term (chronic)	systemic	16.4	mg/m ³

DNEL value (consumer)

No	Substance name			CAS / EC no	
	Route of exposure	Exposure time	Effect	Value	
1	Aluminum chloride, basic			1327-41-9 215-477-2	
	oral	Long term (chronic)	systemic	2.3	mg/kg/day
	dermal	Long term (chronic)	systemic	2.32	mg/kg/day
	inhalative	Long term (chronic)	systemic	4	mg/m ³

PNEC values

No	Substance name		CAS / EC no	
	ecological compartment	Type	Value	
1	Aluminum chloride, basic		1327-41-9 215-477-2	
	water	fresh water	0.3	µg/L
	water	marine water	0.03	µg/L
	sewage treatment plant	-	20	mg/L

8.2 Exposure controls**Appropriate engineering controls**

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL (=Occupational Exposure Limit), suitable respiratory protection must be worn.

Personal protective equipment**Respiratory protection**

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Tightly fitting safety glasses (EN 166).

Hand protection

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific workstation suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid

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permanent use of protective gloves.

Appropriate Material	chloroprene		
Material thickness	>=	0.65	mm
Appropriate Material	NBR		
Material thickness	>=	0.65	mm
Breakthrough time	>	480	min

Other

Chemical-resistant work clothes.

Environmental exposure controls

No data available.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Form/Colour			
liquid			
yellow			
Odour			
irritant			
Odour threshold			
No data available			
pH value			
Value	~	1	
Reference temperature		20	°C
Boiling point / boiling range			
Value		105 - 115	°C
Melting point / melting range			
Value		-10	°C
Decomposition point / decomposition range			
No data available			
Flash point			
Not applicable			
Auto-ignition temperature			
No data available			
Oxidising properties			
not oxidizing			
Explosive properties			
Product does not present an explosion hazard.			
Flammability (solid, gas)			
No data available			
Lower flammability or explosive limits			
No data available			
Upper flammability or explosive limits			
No data available			
Vapour pressure			
Value		23	hPa
Vapour density			
No data available			

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Evaporation rate	
No data available	
Relative density	
No data available	
Density	
No data available	
Solubility in water	
Comments	Completely miscible
Solubility(ies)	
No data available	
Partition coefficient: n-octanol/water	
No data available	
Viscosity	
Value	30 - 40 mPa*s
Reference temperature	23 °C
Type	dynamic

9.2 Other information

Other information
No data available.

SECTION 10: Stability and reactivity**10.1 Reactivity**

No data available.

10.2 Chemical stability

Stable under recommended storage and handling conditions (See section 7).

10.3 Possibility of hazardous reactions

Formation of hydrogen gas possible on contact with certain metals (f.e. aluminium)

10.4 Conditions to avoid

None known

10.5 Incompatible materials

Bases; Oxidizing agents; Metals

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Acute oral toxicity			
No data available			
Acute dermal toxicity			
No	Substance name	CAS no.	EC no.
1	Aluminum chloride, basic	1327-41-9	215-477-2
LD50	>	2000	mg/kg bodyweight
Species	rabbit		
Method	OECD 402		
Source	ECHA		
Acute inhalational toxicity			

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No	Substance name	CAS no.	EC no.
1	Aluminum chloride, basic	1327-41-9	215-477-2
LC50	>	5.0	mg/l
Duration of exposure		4	h
State of aggregation	Dust/mist		
Species	rat		
Method	OECD 403		
Source	ECHA		

Skin corrosion/irritation

No	Substance name	CAS no.	EC no.
1	Aluminum chloride, basic	1327-41-9	215-477-2
Species	rabbit		
Method	OECD 404		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are met.		

Serious eye damage/irritation

No	Substance name	CAS no.	EC no.
1	Aluminum chloride, basic	1327-41-9	215-477-2
Species	rabbit		
Method	OECD 405		
Source	ECHA		
Evaluation	Irreversible effects on the eye		

Respiratory or skin sensitisation

No	Substance name	CAS no.	EC no.
1	Aluminum chloride, basic	1327-41-9	215-477-2
Route of exposure	Skin		
Species	guinea pig		
Method	OECD 406		
Evaluation	non-sensitizing		

Germ cell mutagenicity

No	Substance name	CAS no.	EC no.
1	Aluminum chloride, basic	1327-41-9	215-477-2
Type of examination	Bacterial Reverse Mutation Test		
Species	S. typhimurium TA 1535, TA 1537, TA 98 and TA 100		
Method	OECD 471		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Reproduction toxicity

No	Substance name	CAS no.	EC no.
1	Aluminum chloride, basic	1327-41-9	215-477-2
Route of exposure	oral		
Species	rat		
Method	OECD 422		
Source	ECHA		
Evaluation/classification	Based on available data, the classification criteria are not met.		

Carcinogenicity

No data available

STOT - single exposure

No data available

STOT - repeated exposure

No data available

Aspiration hazard

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No data available

SECTION 12: Ecological information**12.1 Toxicity****Toxicity to fish (acute)**

No data available

Toxicity to fish (chronic)

No data available

Toxicity to Daphnia (acute)

No data available

Toxicity to Daphnia (chronic)

No data available

Toxicity to algae (acute)

No data available

Toxicity to algae (chronic)

No data available

Bacteria toxicity

No data available

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment**Results of PBT and vPvB assessment**

PBT assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be PBT.

vPvB assessment

According to the information provided in the supply chain, the mixture does not contain > 0.1% of a substance that is considered to be vPvB.

12.6 Other adverse effects

No data available.

12.7 Other information**Other information**

Do not discharge product unmonitored into the environment.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Product**

Disposal of the product should be carried out in accordance with all applicable regulations following consultation with the responsible local authority and the disposal company in an authorised and suitable disposal facility.

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement

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with the regional waste disposal company.

Packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

SECTION 14: Transport information**14.1 Transport ADR/RID/ADN**

Class	8
Classification code	C9
Packing group	III
Hazard identification no.	80
UN number	UN1760
Proper shipping name	CORROSIVE LIQUID, N.O.S.
Technical name	Aluminum chloride, basic
Tunnel restriction code	E
Label	8

14.2 Transport IMDG

Class	8
Packing group	III
UN number	UN1760
Proper shipping name	CORROSIVE LIQUID, N.O.S.
Technical name	Aluminum chloride, basic
EmS	F-A, S-B
Label	8

14.3 Transport ICAO-TI / IATA

Class	8
Packing group	III
UN number	UN1760
Proper shipping name	Corrosive liquid, n.o.s.
Technical name	Aluminum chloride, basic
Label	8

14.4 Other information

No data available.

14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

14.6 Special precautions for user

No data available.

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

Not relevant

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

REACH candidate list of substances of very high concern (SVHC) for authorisation

According to available data and the information provided by preliminary suppliers, the product does not contain

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substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.
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Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES	
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The product is considered being subject to REACH regulation (EC) 1907/2006 annex XVII.	No 3
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Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

This product is not subject to Part 1 or 2 of Annex I.
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Other regulations

Adhere to the national sanitary and occupational safety regulations when using this product. Employment restrictions, according to the regulations for protection of expectant and nursing mothers and the youth health and safety regulations, serving to protect against hazardous materials, should be observed.
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15.2 Chemical safety assessment

A chemical safety assessment has not been carried out for this mixture.

SECTION 16: Other information**Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.

Creation of the safety data sheet

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This information is based on our present knowledge and experience.

The safety data sheet describes products with a view to safety requirements.

It does not however, constitute a guarantee for any specific product properties and shall not establish a legally valid contractual relationship.

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