

according to Regulation (EC) No 1907/2006

## Eisen(III)-chlorid/Kupfer(II)-chlorid-Lösung gemäß ASTM G-28 Practice B

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

### 1.1. Product identifier

Eisen(III)-chlorid/Kupfer(II)-chlorid-Lösung gemäß ASTM G-28 Practice B

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

#### Use of the substance/mixture

Laboratory chemicals

Industrial uses: Uses of substances as such or in preparations at industrial sites

Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

### Uses advised against

Do not use for private purposes (household).

### 1.3. Details of the supplier of the safety data sheet

Company name: AnalytiChem GmbH

ACD

Street: Stempelstraße 6
Place: D-47167 Duisburg

Telephone: 0203/5194-0 Telefax: 0203/5194-290

E-mail: info@analytichem.de

Contact person: Abteilung Produktsicherheit Telephone: 0203/5194-107/117

E-mail: produktsicherheit@analytichem.de

Internet: www.analytichem.de

Responsible Department: Abteilung Produktsicherheit

**1.4. Emergency telephone** For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire,

<u>number:</u> Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada:

1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls

accepted)

#### **Further Information**

This product is a mixture. REACH Registration Number see section 3.

## **SECTION 2: Hazards identification**

# 2.1. Classification of the substance or mixture

## Regulation (EC) No 1272/2008

Met. Corr. 1; H290 Skin Corr. 1A; H314 Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

#### Regulation (EC) No 1272/2008

# Hazard components for labelling

sulphuric acid Hydrochloric acid

Kupfer-II-chlorid-2-hydrat

Signal word: Danger

Pictograms:





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**Hazard statements** 

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

**Precautionary statements** 

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing

protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water or shower.

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.

Special labelling of certain mixtures

EUH208 Contains iron trichloride. May produce an allergic reaction.

2.3. Other hazards

No data available

## **SECTION 3: Composition/information on ingredients**

## 3.2. Mixtures

#### Chemical characterization

Mixtures in aqueous solution

## Relevant ingredients

Chemical name				
EC No	Index No	REACH No		
Classification (Regulation (EC) No	1272/2008)	•		
sulphuric acid			20 - < 25 %	
231-639-5	016-020-00-8	01-2119458838-20		
Met. Corr. 1, Skin Corr. 1A, Eye Da	am. 1; H290 H314 H318	•		
Hydrochloric acid	1 - < 5 %			
231-595-7	017-002-01-X	01-2119484862-27		
Skin Corr. 1B, STOT SE 3; H314 F	1335	•		
Kupfer-II-chlorid-2-hydrat	1 - < 5 %			
		01-2119970306-36		
Acute Tox. 4, Acute Tox. 4, Skin Iri H302 H315 H318 H400 H411	rit. 2, Eye Dam. 1, Aquatic Acute 1	, Aquatic Chronic 2; H312		
iron trichloride			< 1 %	
231-729-4		01-2119497998-05		
Met. Corr. 1, Acute Tox. 4, Skin Irri	t. 2, Eye Dam. 1, Skin Sens. 1; H2	290 H302 H315 H318 H317		
	EC No Classification (Regulation (EC) No sulphuric acid 231-639-5 Met. Corr. 1, Skin Corr. 1A, Eye Da Hydrochloric acid 231-595-7 Skin Corr. 1B, STOT SE 3; H314 F Kupfer-Il-chlorid-2-hydrat  Acute Tox. 4, Acute Tox. 4, Skin In H302 H315 H318 H400 H411 iron trichloride 231-729-4	EC No	EC No Index No REACH No  Classification (Regulation (EC) No 1272/2008)  sulphuric acid  231-639-5 016-020-00-8 01-2119458838-20  Met. Corr. 1, Skin Corr. 1A, Eye Dam. 1; H290 H314 H318  Hydrochloric acid  231-595-7 017-002-01-X 01-2119484862-27  Skin Corr. 1B, STOT SE 3; H314 H335  Kupfer-II-chlorid-2-hydrat  01-2119970306-36  Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Aquatic Acute 1, Aquatic Chronic 2; H312  H302 H315 H318 H400 H411  iron trichloride	

Full text of H and EUH statements: see section 16.



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Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity			
	Specific Conc.	Limits, M-factors and ATE				
7664-93-9	231-639-5	231-639-5 sulphuric acid				
	oral: LD50 = 2 Eye Irrit. 2; H31	140 mg/kg Skin Corr. 1A; H314: >= 15 - 100 Skin Irrit. 2; H315: >= 5 - < 15				
7647-01-0	231-595-7	Hydrochloric acid	1 - < 5 %			
		H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 3; H335: >= 10 - 100				
10125-13-0		Kupfer-II-chlorid-2-hydrat	1 - < 5 %			
	dermal: LD50	= > 2000 mg/kg; oral: LD50 = 584 mg/kg				
7705-08-0	231-729-4	iron trichloride	< 1 %			
	oral: ATE = 50	0 mg/kg				

#### **Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

### **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

#### General information

First aider: Pay attention to self-protection!

#### After inhalation

Provide fresh air.

Call a physician immediately.

## After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.

## After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing. Protect uninjured eye.

## After ingestion

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk

### 4.2. Most important symptoms and effects, both acute and delayed

Risk of serious damage to eyes.

Causes burns.

Irritant

Cough

Dyspnoea

Vomitina

Gastric perforation

Nausea

Abdominal pain

Allergic reactions

#### 4.3. Indication of any immediate medical attention and special treatment needed

No data available

## **SECTION 5: Firefighting measures**



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### 5.1. Extinguishing media

## Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

#### Unsuitable extinguishing media

no restriction

### 5.2. Special hazards arising from the substance or mixture

Non-combustible liquids

Hazardous combustion products

In case of fire may be liberated:

Sulphur oxides

Hydrogen chloride (HCI)

Metal oxide smoke, toxic

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Avoid contact with skin, eyes and clothes.

#### Additional information

Use water spray jet to protect personnel and to cool endangered containers.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

#### General advice

Corrosive to metals.

## For non-emergency personnel

Provide adequate ventilation.

Use personal protection equipment.

Avoid contact with skin, eyes and clothes.

Remove persons to safety.

**Emergency procedures** 

Consult an expert

Do not breathe dust/fume/gas/mist/vapours/spray.

#### For emergency responders

Precautionary statements For emergency responders: Personal protection equipment: see section 8

## 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

### 6.3. Methods and material for containment and cleaning up

### For containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

## For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

### Other information

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8



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Disposal: see section 13

## **SECTION 7: Handling and storage**

### 7.1. Precautions for safe handling

### Advice on safe handling

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff.

Use personal protection equipment. Use extractor hood (laboratory).

Provide adequate ventilation.

Avoid contact with skin, eyes and clothes.

### Advice on protection against fire and explosion

No special fire protection measures are necessary.

## Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Avoid: aerosol or mist formation Do not breathe vapour/aerosol.

# Further information on handling

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

Take off immediately all contaminated clothing and wash it before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

## Requirements for storage rooms and vessels

Keep container tightly closed.

Unsuitable container/equipment material: Metal

### Further information on storage conditions

Corrosive to metals.

The product develops hydrogen in an aqueous solution in contact with metals.

# 7.3. Specific end use(s)

Laboratory chemicals

## **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

## Occupational exposure limits

CAS No	Substance	ppm	mg/m³	fib/cm³	Category	Origin
7647-01-0	Hydrogen chloride	5	8		TWA (8 h)	
		10	15		STEL (15 min)	
7664-93-9	Sulphuric acid	-	0.05		TWA (8 h)	



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#### **DNEL/DMEL values**

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
7664-93-9	sulphuric acid			
Worker DNEL,	long-term	inhalation	local	0,05 mg/m³
Worker DNEL,	acute	inhalation	local	0,1 mg/m³
7647-01-0	Hydrochloric acid			
Worker DNEL,	long-term	inhalation	local	8 mg/m³
Worker DNEL,	acute	inhalation	local	15 mg/m³
Consumer DNE	EL, long-term	inhalation	local	8 mg/m³
Consumer DNEL, acute		inhalation	local	15 mg/m³

#### **PNEC values**

CAS No	Substance			
Environmental	Environmental compartment			
7664-93-9	sulphuric acid			
Freshwater		0,003 mg/l		
Marine water		0 mg/l		
Freshwater see	Freshwater sediment			
Marine sediment		0,002 mg/kg		
Micro-organisms in sewage treatment plants (STP)		8,8 mg/l		
10125-13-0	10125-13-0 Kupfer-II-chlorid-2-hydrat			
Freshwater		0,0078 mg/l		
Marine water		0,0052 mg/l		
Freshwater sediment		87 mg/kg		
Marine sediment		676 mg/kg		
Micro-organisms in sewage treatment plants (STP)		0,23 mg/l		
Soil 68				

## 8.2. Exposure controls

## Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

## Individual protection measures, such as personal protective equipment

### Eye/face protection

Suitable eye protection:

goggles

Face protection shield

### Hand protection

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: vertrieb@kcl.de With specification (test according to EN374):

By long-term hand contact

Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11 mm Wearing time with permanent contact: > 480 min



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By short-term hand contact

Recommended glove articles: KCL 741 Dermatril® L Recommended material: NBR (Nitrile rubber) 0,11mm Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet<(>,<)> supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet; www.kcl.de).

#### Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

### Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

The entrepeneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

### **Environmental exposure controls**

Do not allow to enter into surface water or drains.

#### **SECTION 9: Physical and chemical properties**

### 9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: clear
Odour: odourless

Odour threshold: No data available

Melting point/freezing point:

No data available
Boiling point or initial boiling point and

No data available

boiling range:

Flammability: No data available Lower explosion limits: No data available Upper explosion limits: No data available Flash point: Auto-ignition temperature: No data available Decomposition temperature: No data available pH-Value: acidic Viscosity / kinematic: No data available Water solubility: very soluble (Heat)

Solubility in other solvents

No data available

Partition coefficient n-octanol/water:

Vapour pressure:

Vapour pressure:

No data available

Vapour pressure:

No data available

Density:

1,19 g/cm³

Bulk density:

No data available

Relative vapour density:

No data available

## 9.2. Other information

#### Information with regard to physical hazard classes

Explosive properties

No data available



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Sustaining combustion: No data available

Self-ignition temperature

Solid: No data available
Gas: No data available

Oxidizing properties

No data available

Other safety characteristics

Evaporation rate:

Solvent separation test:

No data available

Solvent content:

Solid content:

Sublimation point:

Softening point:

No data available

No data available

No data available

No data available

No data available:

Viscosity / dynamic:

Flow time:

No data available

No data available

Further Information
No data available

## **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Corrosive to metals.

### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

## 10.3. Possibility of hazardous reactions

Violent reaction with:

Water, Alkali metals, Ammonia

aldehydes, Alkaline earth metal, Acids

Alkali (lye), Metal,

Phosphorus oxides, Combustible substance

Solvent, Aniline, permanganates, e.g. potassium permanganate

Peroxides, Amines, Carbide

peroxides, for example hydrogen peroxide, Nitriles

### 10.4. Conditions to avoid

No data available

## 10.5. Incompatible materials

Metal

The product develops hydrogen in an aqueous solution in contact with metals.

Cellulose

### 10.6. Hazardous decomposition products

In case of fire may be liberated: SECTION 5: Firefighting measures

#### **Further information**

No data available

## **SECTION 11: Toxicological information**

# 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008



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#### Toxicocinetics, metabolism and distribution

There are no data available on the mixture itself.

#### **Acute toxicity**

Based on available data, the classification criteria are not met.

If swallowed danger of perforation of the esophagus and the stomach (strong corrosive effects).

Irritation to respiratory tract (Cough, Dyspnoea)

### **ATEmix calculated**

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name					
	Exposure route	Dose		Species	Source	Method
7664-93-9	sulphuric acid					
	oral	LD50 mg/kg	2140	Rat	1969 Sep-Oct; 30(5):	The study was performed as part of a ser
10125-13-0	Kupfer-II-chlorid-2-hydrat					
	oral	LD50 mg/kg	584	Rat	Publication (1991)	The test material was administered to gr
	dermal	LD50 mg/kg	> 2000	Rat	Study report (2003)	OECD Guideline 402
7705-08-0	iron trichloride					
	oral	ATE mg/kg	500			

## Irritation and corrosivity

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eve damage/eve irritation: Causes serious eve damage.

Risk of serious damage to eyes.

## Sensitising effects

Based on available data, the classification criteria are not met.

Contains iron trichloride. May produce an allergic reaction.

## Carcinogenic/mutagenic/toxic effects 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.

## Specific effects in experiment on an animal

There are no data available on the mixture itself.

### Additional information on tests

There are no data available on the mixture itself.

### **Practical experience**

There are no data available on the mixture itself.

## 11.2. Information on other hazards

### Other information

There are no data available on the mixture itself.



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## **Further information**

Risk of serious damage to eyes.

Causes burns.

Irritant

Cough

Dyspnoea

Vomiting

Gastric perforation

Nausea

Abdominal pain

# **SECTION 12: Ecological information**

## 12.1. Toxicity

Based on available data, the classification criteria are not met.

CAS No	Chemical name							
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method	
7664-93-9	sulphuric acid							
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Desmodesmus subspicatus	Study report (2009)	OECD Guideline 201	
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna	Study report (2009)	OECD Guideline 202	
	Fish toxicity	NOEC mg/l	0,025	65 d	Jordanella floridae	Water Research Vol. 11, 612 - 626, 1977	Groups of sexually mature flagfish	
7647-01-0	Hydrochloric acid							
	Acute fish toxicity	LC50	862 mg/l	96 h	Leuciscus idus			
10125-13-0 Kupfer-II-chlorid-2-hydrat								
	Acute fish toxicity	LC50 mg/l	0,193	96 h	Pimephales promelas	Study report (1996)	measurements were conducted by standard	
	Acute algae toxicity	ErC50 mg/l	0,152	72 h	Pseudokirchneriella subcapitata	Publication (2005)	OECD Guideline 201	
	Acute crustacea toxicity	EC50 mg/l	0,007	48 h	Daphnia magna	Study report (1978)	- Test were conducted on Daphnia magna t	
	Fish toxicity	NOEC mg/l	0,123	12 d	Atherinops affinis	Mar. Environ. Res. 31: 17-35 (1991)	Three tests are reported, designed to de	
	Algae toxicity	NOEC mg/l	0,0102	19 d	other aquatic plant: giant kelp Macrocystis pyrife	Mar. Ecol. Prog. Ser. 68: 147 - 156 (199	Tests were conducted to determine the ef	
	Crustacea toxicity	NOEC mg/l	0,033	14 d	Penaeus mergulensis and Penaeus monodon	Bull. Environ. Contain. Toxicol. (1995)	The effects of dissolved copper on the g	

# 12.2. Persistence and degradability

There are no data available on the mixture itself.

## 12.3. Bioaccumulative potential

There are no data available on the mixture itself.

## BCF

CAS No	Chemical name	BCF	Species	Source
10125-13-0	Kupfer-II-chlorid-2-hydrat	0,02 - 20	Crangon crangon	Symp. Biologica. Hun



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### 12.4. Mobility in soil

There are no data available on the mixture itself.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

### 12.7. Other adverse effects

Avoid release to the environment.

#### **Further information**

Do not allow to enter into surface water or drains.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

### **Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Send to a physico-chemical treatment facility under observation of official regulations.

Do not mix with other wastes.

Do not allow to enter into surface water or drains.

### Contaminated packaging

Handle contaminated packages in the same way as the substance itself. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

# **SECTION 14: Transport information**

### Land transport (ADR/RID)

14.1. UN number or ID number: UN 3264
---------------------------------------

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid,

Hydrochloric acid)

14.3. Transport hazard class(es): 8 14.4. Packing group: Ш Hazard label: 8 Classification code: C1 Special Provisions: 274 1 L Limited quantity: Excepted quantity: F2 Transport category: 2 Hazard No: 80 Tunnel restriction code: F

Inland waterways transport (ADN)

14.1. UN number or ID number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid,

Hydrochloric acid)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8Classification code:C1Special Provisions:274Limited quantity:1 LExcepted quantity:E2

### Marine transport (IMDG)



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14.1. UN number or ID number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid,

Hydrochloric acid)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8Special Provisions:274Limited quantity:1 LExcepted quantity:E2EmS:F-A. S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 3264

14.2. UN proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid,

Hydrochloric acid)

14.3. Transport hazard class(es):814.4. Packing group:IIHazard label:8Special Provisions:A3 A803Limited quantity Passenger:0.5 I

Limited quantity Passenger: 0.5 L
Passenger LQ: Y840
Excepted quantity: E2

IATA-packing instructions - Passenger:851IATA-max. quantity - Passenger:1 LIATA-packing instructions - Cargo:855IATA-max. quantity - Cargo:30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

# 14.6. Special precautions for user

Warning: strongly corrosive.

### 14.7. Maritime transport in bulk according to IMO instruments

not applicable

### **SECTION 15: Regulatory information**

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

## **EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 75

Marketing and use of explosives precursors (Regulation (EU) 2019/1148):

Acquisition, introduction, possession or use of this product by the general public is restricted by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

# National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile

work protection guideline' (94/33/EC).

Water hazard class (D): 3 - highly hazardous to water

## **SECTION 16: Other information**

## Changes

This data sheet contains changes from the previous version in section(s): 12.



according to Regulation (EC) No 1907/2006

## Eisen(III)-chlorid/Kupfer(II)-chlorid-Lösung gemäß ASTM G-28 Practice B

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#### Abbreviations and acronyms

Met. Corr: Substance or mixture corrosive to metals

Acute Tox: Acute toxicity Skin Corr: Skin corrosion Skin Irrit: Skin irritation Eye Dam: Eye damage Skin Sens: Skin sensitisation

STOT SE: Specific target organ toxicity - single exposure

Aquatic Acute: Acute aquatic hazard Aquatic Chronic: Chronic aquatic hazard

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 EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

### Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Skin Corr. 1A; H314	Calculation method
Eye Dam. 1; H318	Calculation method

### Relevant H and EUH statements (number and full text)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

May be corrosive to metals.

EUH208 Contains iron trichloride. May produce an allergic reaction.

### **Further Information**

H290

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

Provide appropriate information, instructions and training to users

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)