

Safety Data Sheet

according to UK REACH Regulation

Etching agent acc. to HASSON

Revision date: 14.07.2021

Product code: 19009.xxxxx

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

1.1. Product identifier

Etching agent acc. to HASSON

Further trade names

This MSDS covers the following products in all container sizes:

- REF 19009.xxxxx Ätzmittel nach HASSON

UFI: T1NP-A18F-600J-2NAF

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

Use of the substance/mixture

For use as an etchant in metallography. Use as laboratory reagent. The product is intended for research, analysis and scientific education.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name:	MORPHISTO GmbH	
Street:	Schumannstr. 142/144	
Place:	D-63069 Offenbach	
Telephone:	+49 (0) 69 / 400 3019-60	Telefax: +49 (0) 69 / 400 3019-64
e-mail:	info@morphisto.de	
Internet:	http://www.morphisto.de	

Supplier

Company name:	MORPHISTO GmbH	
Street:	Schumannstr. 142/144	
Place:	D-63069 Offenbach	
Telephone:	+49 (0) 69 / 400 3019-60	Telefax: +49 (0) 69 / 400 3019-64
e-mail:	info@morphisto.de	
Internet:	http://www.morphisto.de	

1.4. Emergency telephone number:

Poison Information Center Mainz, Germany, Tel: +49(0)6131/19240

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Hazard categories:

Substance or mixture corrosive to metals: Met. Corr. 1

Skin corrosion/irritation: Skin Corr. 1

Serious eye damage/eye irritation: Eye Dam. 1

Respiratory or skin sensitisation: Skin Sens. 1

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause an allergic skin reaction.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Iron(III) chloride hexahydrate

Hydrochloric acid 37 %

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Signal word: Danger

Pictograms:

Hazard statements

H290 May be corrosive to metals.
 H314 Causes severe skin burns and eye damage.
 H317 May cause an allergic skin reaction.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 P310 Immediately call a POISON CENTER/doctor.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
 P310 Immediately call a POISON CENTER/doctor.
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 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.
 P405 Store locked up.
 P406 Store in a corrosion-resistant container with a resistant inner liner.

Special labelling of certain mixtures

EUH019 May form explosive peroxides.
 EUH208 Contains Eisen(III)-chlorid-Hexahydrat. May produce an allergic reaction.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients
3.2. Mixtures
Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
64-17-5	ethanol, ethyl alcohol			40 - < 45 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			
10025-77-1	Iron(III) chloride hexahydrate			15 - < 20 %
	231-729-4		01-2119497998-05	
	Met. Corr. 1, Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Skin Sens. 1; H290 H302 H315 H318 H317			
7647-01-0	Hydrochloric acid 37 %			5 - < 10 %
	231-595-7	017-002-01-X	01-2119484862-27	
	Met. Corr. 1, Skin Corr. 1B, STOT SE 3; H290 H314 H335			

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	
64-17-5	200-578-6	ethanol, ethyl alcohol	40 - < 45 %
		inhalation: LC50 = 124,7 mg/l (vapours); oral: LD50 = >5000 mg/kg Eye Irrit. 2; H319: >= 50 - 100	
10025-77-1	231-729-4	Iron(III) chloride hexahydrate	15 - < 20 %
		oral: LD50 = 1160 mg/kg	
7647-01-0	231-595-7	Hydrochloric acid 37 %	5 - < 10 %
		Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25 STOT SE 3; H335: >= 10 - 100	

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

First aider: Pay attention to self-protection! Take off contaminated clothing and wash it before reuse. Remove affected person from the danger area and lay down. Remove casualty to fresh air and keep warm and at rest. If unconscious place in recovery position and seek medical advice.

After inhalation

Provide fresh air. Remove person to fresh air and keep comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. If breathing is difficult, have oxygen inhaled. Medical treatment necessary.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. Medical treatment necessary.

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.

After ingestion

Rinse out mouth, spit out liquid again. Immediately - while maintaining consciousness - make the victim drink 1 glass of water (approx. 200 ml). 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. Observe risk of aspiration if vomiting occurs. Symptoms of poisoning may develop several hours following exposure. Victim should be under medical observation for at least 48 hours after exposure.

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

Irritation. Corrosion. Allergic reactions. Nausea. vomiting. Risk of serious damage to eyes. Functional disorders of the CNS and cardiovascular system. Circulatory collapse.

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

Treat symptomatically.

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

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

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Non-flammable. Vapours can form explosive mixtures with air. Can be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide (CO). Hydrochloric gas.

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5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit. Vapours can form explosive mixtures with air. Fight fire remotely due to the risk of explosion.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. 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 measures

Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Ventilate affected area.

For non-emergency personnel

Clear danger zone. Follow emergency plan. Consult an expert.

For emergency responders

Move undamaged containers from immediate hazard area if it can be done safely. Vapours can form explosive mixtures with air.

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

6.3. Methods and material for containment and cleaning up

For containment

Cover drains.

For cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal. Clean contaminated articles and floor according to the environmental legislation.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Provide adequate ventilation. Use extractor hood (laboratory). If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Wear suitable protective clothing. Handle and open container with care. Always close containers tightly after the removal of product. Avoid exposure. Keep away from sources of ignition - No smoking.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Contaminated work clothing should not be allowed out of the workplace. Street clothing should be stored separately from work clothing. 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, drink, smoke, sniff. Ensure cleanliness and dryness in the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide

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adequate ventilation as well as local exhaustion at critical locations. Store in a cool dry place. Protect from moisture. Make sure spills can be contained, e.g. in sump pallets or kerbed areas. Unsuitable container/equipment material: Metal. Remove all sources of ignition.

Hints on joint storage

Do not store together with: food and feed. pharmaceuticals. Infectious substances. Radioactive substances. Explosive substances. Oxidizing substances. Oxidizing liquids. Organic peroxides. Self-reactive substances and mixtures. Pyrophoric solids. Substances which in contact with water form flammable gases. Ammonium nitrate and preparations containing ammonium nitrate.

Further information on storage conditions

Recommended storage temperature: 15-25°C.

7.3. Specific end use(s)

For use as an etchant in metallography. Use as laboratory reagent. The product is intended for research, analysis and scientific education.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
7647-01-0	Hydrogen chloride (gas and aerosol mists)	1	2		TWA (8 h)	WEL
		5	8		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
64-17-5	ethanol, ethyl alcohol			
Worker DNEL, acute		inhalation	local	1900 mg/m ³
Worker DNEL, long-term		dermal	systemic	343 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	950 mg/m ³
Consumer DNEL, acute		inhalation	local	950 mg/m ³
Consumer DNEL, long-term		dermal	systemic	206 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	114 mg/m ³
Consumer DNEL, long-term		oral	systemic	87 mg/kg bw/day
10025-77-1	Iron(III) chloride hexahydrate			
Worker DNEL, long-term		dermal	systemic	2,8 mg/kg bw/day
7647-01-0	Hydrochloric acid 37 %			
Worker DNEL, acute		inhalation	local	8 mg/m ³
Worker DNEL, long-term		inhalation	local	15 mg/m ³

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PNEC values

CAS No	Substance	Value
Environmental compartment		
64-17-5	ethanol, ethyl alcohol	
Freshwater		0,96 mg/l
Freshwater (intermittent releases)		2,75 mg/l
Marine water		0,79 mg/l
Marine water (intermittent releases)		2,75 mg/l
Freshwater sediment		3,6 mg/kg
Marine sediment		2,9 mg/kg
Secondary poisoning		0,72 mg/kg
Micro-organisms in sewage treatment plants (STP)		580 mg/l
Soil		0,63 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. Provide adequate ventilation. Provide washing facilities at the workplace, provide an eye shower or eyewash bottle and mark them. Have fire-extinguishers in readiness before opening containers. If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: Eye glasses with side protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Check leak tightness/impermeability prior to use.

Recommended material: Breakthrough time (maximum wearing time): >480 min.

FKM (fluororubber). 0,4mm.

Butyl rubber.0,5mm.

continuous:

CR (polychloroprenes, Chloroprene rubber). 0,5mm.

Protect skin by using skin protective cream.

Skin protection

Use of protective clothing:

lab coat or Chemical protection clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Suitable respiratory protective equipment: gas filtering equipment (EN 141). A; Identification color: brown or Combination filtering device (EN 14387)type: B-P2.Identification color: grey/white.

Thermal hazards

Vapours may form explosive mixtures with air. Decomposes when heated.

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Environmental exposure controls

Do not allow uncontrolled discharge of product into the environment.

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

Physical state: Liquid
Colour: dark brown-yellowish
Odour: stinging

Changes in the physical state

Melting point/freezing point: not determined
Boiling point or initial boiling point and boiling range: 78 °C
Flash point: Ethanol:12 °C

Flammability

Solid/liquid: not applicable
Gas: not applicable

Explosive properties

May form explosive peroxides.

Lower explosion limits: Ethanol:3,5 vol. %
Upper explosion limits: Ethanol:15 vol. %
Auto-ignition temperature: Ethanol:400 °C
Decomposition temperature: not determined

Oxidizing properties

The product is not: oxidising.

pH-Value (at 20 °C): 1-2

Water solubility: easily soluble
(at 20 °C)**Solubility in other solvents**

not determined

Partition coefficient n-octanol/water: not determined

Vapour pressure: 58 hPa
(at 20 °C)Vapour pressure: 293 hPa
(at 50 °C)Density: 0,97 g/cm³

Relative vapour density: not determined

9.2. Other information**Other safety characteristics**

Solvent content: 77,42 %
Solid content: 16,00 %
Evaporation rate: not determined

Further Information**SECTION 10: Stability and reactivity****10.1. Reactivity**

Corrosive to metals. Possibility of hazardous reactions. Explosive.

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10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Base, Peroxides, Oxidizing agent, metals, Alkalis (alkalis).

10.4. Conditions to avoid

Handle with care - avoid bumps, friction and impact. Explosive. Remove all sources of ignition. Keep away from: Heat. Ignition.

10.5. Incompatible materials

Metal. Protect against: Contact with air/oxygen. Keep away from: Base, Oxidizing agent, Peroxides.

10.6. Hazardous decomposition products

 Resulting from the use of the product: Chlorine. May form explosive peroxides. Can be released in case of fire: Carbon dioxide (CO₂). Carbon monoxide (CO). Hydrochloric gas.

SECTION 11: Toxicological information
11.1. Information on hazard classes as defined in GB CLP Regulation
Acute toxicity

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

CAS No	Chemical name					
	Exposure route	Dose	Species	Source	Method	
64-17-5	ethanol, ethyl alcohol					
	oral	LD50 >5000 mg/kg	Rat	ECHA Dossier		
	inhalation (4 h) vapour	LC50 124,7 mg/l	Rat	ECHA Dossier		
10025-77-1	Iron(III) chloride hexahydrate					
	oral	LD50 1160 mg/kg	Rat	MSDS external		

Irritation and corrosivity

 Causes severe skin burns and eye damage.
 Causes serious eye damage.

Sensitising effects

Contains Eisen(III)-chlorid-Hexahydrat. May produce an allergic reaction. May cause an allergic skin reaction. (Iron(III) chloride hexahydrate)

Carcinogenic/mutagenic/toxic effects for reproduction

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.

Further information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information
12.1. Toxicity

The product is not: Ecotoxic.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
64-17-5	ethanol, ethyl alcohol					
	Acute fish toxicity	LC50 mg/l	14200	96 h	Pimephales promelas	ECHA Dossier
	Acute algae toxicity	ErC50	275 mg/l	72 h	Chlorella vulgaris	ECHA Dossier
	Acute crustacea toxicity	EC50 mg/l	5012	48 h	Ceriodaphnia dubia	ECHA Dossier
	Crustacea toxicity	NOEC	9,6 mg/l	9 d	Daphnia magna	ECHA Dossier
10025-77-1	Iron(III) chloride hexahydrate					
	Acute fish toxicity	LC50	23 mg/l	96 h	Oryzias latipes (48h)	MSDS external
	Acute crustacea toxicity	EC50 mg/l	29,74	48 h	Daphnia magna	MSDS external
7647-01-0	Hydrochloric acid 37 %					
	Acute fish toxicity	LC50 mg/l	3,25	96 h	Lepomis macrochirus	ECHA Dossier
	Acute algae toxicity	ErC50	4,7 mg/l	72 h	Chlorella vulgaris	ECHA Dossier
	Acute crustacea toxicity	EC50 mg/l	4,92	48 h	Daphnia magna	ECHA Dossier
	Acute bacteria toxicity	(>=5 mg/l)		3 h	activated sludge	ECHA Dossier

12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
64-17-5	ethanol, ethyl alcohol			
	other guideline	84%	20	ECHA Dossier
	Biodegradable.			

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol, ethyl alcohol	-0,31

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Disposal recommendations

Do not allow to enter into surface water or drains. Hazardous waste according to Directive 2008/98/EC (waste framework directive). Dispose of waste according to applicable legislation. Consult the appropriate local waste

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disposal expert about waste disposal. The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process. Observe in addition any national regulations!

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information**Land transport (ADR/RID)**

14.1. UN number: UN 2582
14.2. UN proper shipping name: FERRIC CHLORIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Classification code: C1
Limited quantity: 5 L
Excepted quantity: E1
Transport category: 3
Hazard No: 80
Tunnel restriction code: E

Other applicable information (land transport)

Dangerous Ingredients: Iron(III) chloride, Hydrochloric acid...%.

Inland waterways transport (ADN)

14.1. UN number: UN 2582
14.2. UN proper shipping name: FERRIC CHLORIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



Classification code: C1
Limited quantity: 5 L
Excepted quantity: E1

Other applicable information (inland waterways transport)

Dangerous Ingredients: Iron(III) chloride, Hydrochloric acid...%.

Marine transport (IMDG)

14.1. UN number: UN 2582
14.2. UN proper shipping name: FERRIC CHLORIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8



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Special Provisions: 223
 Limited quantity: 5 L
 Excepted quantity: E1
 EmS: F-A, S-B
 Segregation group: 1 - acids

Other applicable information (marine transport)

Dangerous Ingredients: Iron(III) chloride, Hydrochloric acid...%.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 2582
14.2. UN proper shipping name: FERRIC CHLORIDE SOLUTION
14.3. Transport hazard class(es): 8
14.4. Packing group: III
 Hazard label: 8



Special Provisions: A3 A803
 Limited quantity Passenger: 1 L
 Passenger LQ: Y841
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 852
 IATA-max. quantity - Passenger: 5 L
 IATA-packing instructions - Cargo: 856
 IATA-max. quantity - Cargo: 60 L

Other applicable information (air transport)

Dangerous Ingredients: Iron(III) chloride, Hydrochloric acid...%.

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 40

2010/75/EU (VOC): 41,81 %

2004/42/EC (VOC): 41,81 %

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 1 - slightly hazardous to water

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Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information
Changes

Rev. 1,00; 14.07.2021: Initial release, Kap. 1-16.

Abbreviations and acronyms

CLP: Classification, labelling and Packaging
 REACH: Registration, Evaluation and Authorization of Chemicals
 GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
 UN: United Nations
 CAS: Chemical Abstracts Service
 DNEL: Derived No Effect Level
 DMEL: Derived Minimal Effect Level
 PNEC: Predicted No Effect Concentration
 ATE: Acute toxicity estimate
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%
 LL50: Lethal loading, 50%
 EL50: Effect loading, 50%
 EC50: Effective Concentration 50%
 ErC50: Effective Concentration 50%, growth rate
 NOEC: No Observed Effect Concentration
 BCF: Bio-concentration factor
 PBT: persistent, bioaccumulative, toxic
 vPvB: very persistent, very bioaccumulative
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 RID: Regulations concerning the international carriage of dangerous goods by rail
 ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
 (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation
 intérieures)
 IMDG: International Maritime Code for Dangerous Goods
 EmS: Emergency Schedules
 MFAG: Medical First Aid Guide
 IATA: International Air Transport Association
 ICAO: International Civil Aviation Organization
 MARPOL: International Convention for the Prevention of Marine Pollution from Ships
 IBC: Intermediate Bulk Container
 VOC: Volatile Organic Compounds
 SVHC: Substance of Very High Concern
 For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	On basis of test data
Skin Sens. 1; H317	Calculation method

Relevant H and EUH statements (number and full text)

H225 Highly flammable liquid and vapour.
 H290 May be corrosive to metals.

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H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
EUH019	May form explosive peroxides.
EUH208	Contains Eisen(III)-chlorid-Hexahydrat. May produce an allergic reaction.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. 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 data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)