

Color reference solution R1 for coloring liquids Reag. Ph. Eur., chapter 2.2.2

according to Regulation (EC) No 1907/2006

Revision date: 26.01.2024

Product code: 26261

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

1.1. Product identifier

Color reference solution R1 for coloring liquids Reag. Ph. Eur., chapter 2.2.2

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: Place:	Stempelstraße 6 D-47167 Duisburg	
Telephone: E-mail:	0203/5194-0 info@analytichem.de	Telefax: 0203/5194-290
Contact person: E-mail: Internet: Responsible Department:	Abteilung Produktsicherheit produktsicherheit@analytichem.de www.analytichem.de Abteilung Produktsicherheit	Telephone: 0203/5194-107/117
<u>1.4. Emergency telephone</u> number:	Exposure, or Accident Call CHEMTR	ous Goods] Incidents Spill, Leak, Fire, REC Day or Night Within USA and Canada: Canada: +1 703-741-5970 (collect calls

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 Carc. 1B; H350i Aquatic Chronic 2; H411

Full text of hazard statements: see SECTION 16.

2.2. Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling Cobalt(II) chloride hexahydrate

Signal word:

Pictograms:



Hazard statements

H290 H350i

May be corrosive to metals. May cause cancer by inhalation.



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H411	Toxic to aquatic life with long lasting effects.	
Precautionary statemer	nts	
P201	Obtain special instructions before use.	
P273	Avoid release to the environment.	
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.	
P308+P313	IF exposed or concerned: Get medical advice/attention.	
P391	Collect spillage.	
Special labelling of cert	ain mixtures	
EUH208	Contains Iron(III) chloride hexahydrate, Cobalt(II) chloride hexahydrate. May produce an allergic reaction. Restricted to professional users.	

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mixtures in aqueous solution

Relevant ingredients

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification (Regulation (E				
7647-01-0	Hydrochloric acid			1 - < 5 %	
	231-595-7				
	Skin Corr. 1B, STOT SE 3; ⊢	I314 H335			
10025-77-1	Iron(III) chloride hexahydrate	< 1 %			
	231-729-4	231-729-4 01-2119497998-05			
	Acute Tox. 4, Skin Irrit. 2, Ey				
7791-13-1	Cobalt(II) chloride hexahydra	ite		< 1 %	
	231-589-4	027-004-00-5	01-2119517584-37		
	Carc. 1B, Muta. 2, Repr. 1B, Acute Tox. 4, Resp. Sens. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H350i H341 H360F H302 H334 H317 H400 H410				

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

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity	
	Specific Conc. Limits, M-factors and ATE			
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		
10025-77-1	231-729-4	Iron(III) chloride hexahydrate	< 1 %	
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 500 mg/kg			
7791-13-1	231-589-4	Cobalt(II) chloride hexahydrate	< 1 %	
	Aquatic Acute	= > 2000 mg/kg; oral: LD50 = 537 mg/kg Carc. 1B; H350i: >= 0,01 - 100 1; H400: M=10 c 1; H410: M=10		

Further Information

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: Cobalt(II) chloride hexahydrate



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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. Call a physician immediately.

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

Irritant Allergic reactions Gastrointestinal complaints

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

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: Metal oxide smoke, toxic Hydrogen chloride (HCI)

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. In case of fire and/or explosion do not breathe fumes. Avoid contact with skin, eyes and clothes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Move undamaged containers from immediate hazard area if it can be done safely. Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures



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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 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 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid exposure - obtain special instructions before use.
Read label before use. Handle and open container with care.
When using do not eat, drink, smoke, sniff. Use personal protection equipment.
Provide adequate ventilation. Avoid contact with skin, eyes and clothes.
Do not breathe vapour/aerosol. If handled uncovered, arrangements with local exhaust ventilation have to be used.

Advice on protection against fire and explosion

Usual measures for fire prevention.

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.



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

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Store in a well-ventilated place. Keep container tightly closed. Store in a place accessible by authorized persons only.

Further information on storage conditions

Store in a dry place.

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)	

DNEL/DMEL values

CAS No	Substance							
DNEL type		Exposure route	Effect	Value				
7647-01-0	Hydrochloric acid							
Worker DNEL,	long-term	inhalation	local	8 mg/m³				
Worker DNEL,	acute	inhalation	local	15 mg/m³				
Consumer DN	EL, long-term	inhalation	local	8 mg/m³				
Consumer DNEL, acute		inhalation	local	15 mg/m³				
10025-77-1	5-77-1 Iron(III) chloride hexahydrate							
Worker DNEL,	long-term	dermal	systemic	2,8 mg/kg bw/day				
Consumer DN	EL, long-term	dermal	systemic	1,4 mg/kg bw/day				
Consumer DNEL, long-term		oral	systemic	0,28 mg/kg bw/day				
Consumer DN	EL, acute	oral	systemic	20 mg/kg bw/day				
7791-13-1	Cobalt(II) chloride hexahydrate							
Consumer DNEL, long-term		oral	systemic	0,12 mg/kg bw/day				

PNEC values

CAS No	Substance				
Environmental compartment Value					
7791-13-1 Cobalt(II) chloride hexahydrate					
Freshwater 0,0006 mg/l					
Marine water 0,0					
Freshwater sediment 9,5 mg/kg					
Marine sedime	9,5 mg/kg				
Micro-organisms in sewage treatment plants (STP)		0,37 mg/l			
Soil		10,9 mg/kg			



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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

goggles

Wear eye/face 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.

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

By short-term hand contact

Trade name/designation:KCL 741 Dermatril® LRecommended material:NBR (Nitrile rubber) 0,11 mmWearing 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.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

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:	red
Odour:	odourless
Odour threshold:	No data available
Melting point/freezing point:	
Boiling point or initial boiling point and	
boiling range:	

No data available No data available



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Flammability:	No data available	
Lower explosion limits:	No data available	
Upper explosion limits:	No data available	
Flash point:	No data available	
Auto-ignition temperature:	No data available	
Decomposition temperature:	No data available	
pH-Value:	acidic	
Viscosity / kinematic:	No data available	
-	completely miscible	
Water solubility: Solubility in other solvents	completely misciple	
-		
No data available Dissolution rate:	No data available	
Partition coefficient n-octanol/water:	No data available No data available	
Partition coefficient n-octanol/water: Dispersion stability:	No data available No data available	
Dispersion stability: Vapour pressure:	No data available No data available	
Vapour pressure: Vapour pressure:	No data available No data available	
Density:	1,008 g/cm ³	
Relative density:	No data available	
Bulk density:	No data available	
Relative vapour density:	No data available	
Particle characteristics:	No data available	
9.2. Other information		
Information with regard to physical hazard	classes	
Explosive properties		
No data available	No data available	
Sustaining combustion:		
Self-ignition temperature Solid:	No data available	
Gas:	No data available	
Oxidizing properties		
No data available		
Other safety characteristics	NT. J.A. 91-1-1	
Evaporation rate:	No data available	
Solvent separation test:	No data available	
Solvent content:	0	
Solid content:	0 No data availabla	
Sublimation point: Softening point:	No data available No data available	
Softening point: Pour point:	No data available No data available	
No data available:		
	Nie date zweiteble	
Viscosity / dynamic:	No data available	
Flow time:	No data available	
Further Information		
Corrosive to metals		
SECTION 10: Stability and reactivity		
10.1. 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



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No data available

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

Metal

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

Toxicocinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

Acute toxicity

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

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	Chemical name							
	Exposure route	Dose		Species	Source	Method			
10025-77-1	Iron(III) chloride hexahyd	Irate							
	oral	LD50 mg/kg	500	Rat	Study report (2004)	OECD Guideline 423			
	dermal	LD50 mg/kg	> 2000	Rat	Study report (2004)	OECD Guideline 402			
7791-13-1	Cobalt(II) chloride hexah	ydrate							
	oral	LD50 mg/kg	537	Rat	Revista Española de Fisiologia, 39: 291	OECD Guideline 401			
	dermal	LD50 mg/kg	> 2000	Rat	Study report (2007)	OECD Guideline 402			

Irritation and corrosivity

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

Sensitising effects

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

Contains Iron(III) chloride hexahydrate, Cobalt(II) chloride hexahydrate. May produce an allergic reaction.

Carcinogenic/mutagenic/toxic effects for reproduction

May cause cancer by inhalation. (Cobalt(II) chloride hexahydrate) Germ cell mutagenicity: 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.



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Information on likely routes of exposure

There are no data available on the preparation/mixture itself.

Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

Additional information on tests

There are no data available on the preparation/mixture itself.

Practical experience

There are no data available on the preparation/mixture itself.

11.2. Information on other hazards

Endocrine disrupting properties

There are no data available on the preparation/mixture itself.

Other information

There are no data available on the preparation/mixture itself.

Further information

There are no data available on the preparation/mixture itself.

SECTION 12: Ecological information

12.1. Toxicity

Toxic to aquatic life with long lasting effects.

CAS No	Chemical name								
	Aquatic toxicity	Dose		[h] [d]	Species	Source	Method		
7647-01-0	Hydrochloric acid								
	Acute fish toxicity	LC50	862 mg/l	96 h	Leuciscus idus				
7791-13-1	Cobalt(II) chloride hexahy	drate							
	Acute fish toxicity	LC50 mg/l	54,1	96 h	Pimephales promelas	Study report (2009)	other: ASTM guideline		
	Acute algae toxicity	ErC50 mg/l	71,314	96 h	Dunaliella tertiolecta	Study report (2010)	other: American Society for Testing and		
	Acute crustacea toxicity	EC50 mg/l	42,7	48 h	Aeolosoma sp.	Study report (2008)	Newman, J.P., Jr. 1975. The effects of h		
	Fish toxicity	NOEC mg/l	0,21	34 d	Pimephales promelas	Study report (2009)	other: This study was conducted accordin		
	Algae toxicity	NOEC mg/l	0,0018	7 d	Champia parvula	Study report - model refit from original	other: EPA 821-R- 02-014, Method 1009.0		
	Crustacea toxicity	NOEC mg/l	0,1697	14 d	Aeolosoma sp.	Study report (2008)	other: Newman, J.P., Jr. 1975. The effec		
	Acute bacteria toxicity	EC50 ()	120 mg/l	0,5 h	Activated sludge	Study report (2010)	OECD Guideline 209		

12.2. Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

There are no data available on the mixture itself.



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BCF

CAS No	Chemical name	BCF	Species	Source
10025-77-1	Iron(III) chloride hexahydrate		Fish, Oreochromis mossambicus	Indian Journal of En
7791-13-1	Cobalt(II) chloride hexahydrate	23	Asterias rubens	Marine Pollution Bul

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

Discharge into the environment must be avoided.

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 empty into 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. Dispose of waste according to "Kreislaufwirtschafts- und Abfallgesetz (KrW-/AbfG)".

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. (Hydrochloric acid)
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
Classification code:	C1
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E
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. (Hydrochloric acid)
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
Classification code:	C1



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Special Provisions:	274	
Limited quantity:	5 L	
Excepted quantity:	E1	
Marine transport (IMDG)		
14.1. UN number or ID number:	UN 3264	
14.2. UN proper shipping name:	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Hy	/drochloric acid)
14.3. Transport hazard class(es):	8	,
14.4. Packing group:	111	
Hazard label:	8	
Special Provisions:	223, 274	
Limited quantity:	5 L	
Excepted quantity:	E1	
EmS:	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. (Hy	/drochloric acid)
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	
14.5. Environmental hazards		
ENVIRONMENTALLY HAZARDOUS:	Yes	
Danger releasing substance:	cobalt dichloride	
SECTION 15: Regulatory information		
15.1. Safety, health and environmental regu	lations/legislation specific for the substance or mixture	
EU regulatory information		
Authorisations (REACH, annex XIV):		
Substances of very high concern, SVH	C (REACH article 50);	
Cobalt(II) chloride hexahydrate		

Restrictions on use (REACH, annex XVII):

Water hazard class (D):	2 - obviously hazardous to water
	nursing mothers. Observe employment restrictions for women of child-bearing age.
	work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or
Employment restrictions:	Observe restrictions to employment for juveniles according to the 'juvenile
National regulatory information	
Information according to Directive 2012/18/EU (SEVESO III):	E2 Hazardous to the Aquatic Environment
Entry 3, Entry 75	

SECTION 16: Other information





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Changes

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

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
Resp. Sens: Respiratory sensitisation
Skin Sens: Skin sensitisation
Muta: Germ cell mutagenicity
Carc: Carcinogenicity
Repr: Reproductive toxicity
STOT SE: Specific target organ toxicity - single exposure
Aquatic Acute: Acute aquatic hazard
Aquatic Chronic: Chronic aquatic hazard

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
Carc. 1B; H350i	Calculation method
Aquatic Chronic 2; H411	Calculation method

Relevant H and EUH statements (number and full text)

elevant H and EU	on statements (number and full text)
H290	May be corrosive to metals.
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.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
H350i	May cause cancer by inhalation.
H360F	May damage fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
EUH208	Contains Iron(III) chloride hexahydrate, Cobalt(II) chloride hexahydrate. May produce an allergic reaction.

Further Information

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