



according to Regulation (EC) No 1907/2006

26028-53 Color Standard Solution

Revision date: 12.01.2016 Product code: 2602853 Page 1 of 9

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

1.1. Product identifier

26028-53 Color Standard Solution

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

Use of the substance/mixture

Water analysis

1.3. Details of the supplier of the safety data sheet

Company name: HACH LANGE GmbH
Street: Willstätterstr. 11
Place: D-40549 Düsseldorf
Telephone: +49 (0)211 5288-383
e-mail: SDS@hach.com
Internet: www.de.hach.com
Responsible Department: HACH LANGE Ltd.

5, Pacific Way

Salford Manchester M50 1DL - United Kingdom Tel. +44 (0) 161 872 1487 * Fax +44 (0) 161 848 7324

e-Mail: info-uk@hach.com

HACH LANGE Ltd.

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com

1.4. Emergency telephone Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency

number: service -

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

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

Skin corrosion/irritation: Skin Corr. 1B

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

hydrochloric acid 11 %

Signal word: Danger

Pictograms:



Hazard statements

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.



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Precautionary statements

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

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

or shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P310 Immediately call a POISON CENTER/doctor. P390 Absorb spillage to prevent material damage.

Additional advice on labelling

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name				
	EC No	Index No	REACH No		
	Classification according to Regulat	ion (EC) No. 1272/2008 [CLP]	•		
7732-18-5	Water				
	231-791-2				
-	hydrochloric acid %				
	231-595-7	017-002-01-X			
	Skin Corr. 1B, STOT SE 3; H314 F				
7791-13-1	Cobalt(II) chlorid hexahydrate				
	231-589-4	027-004-00-5			
	Carc. 1B, Muta. 2, Repr. 1B, Acute Tox. 4, Resp. Sens. 1, Skin Sens. 1, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1 (M-Factor = 10); H350i H341 H360F H302 H334 H317 H400 H410				

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

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off all contaminated clothing immediately.

After inhalation

Move to fresh air.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Show this safety data sheet to the doctor in attendance.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting.

Consult a physician. Show this safety data sheet to the doctor in attendance.



Be Right™

Safety Data Sheet

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

Irritation and corrosion

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

Additional information

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste.

6.4. Reference to other sections

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas. Do not breathe vapours/dust.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep tightly closed in a dry, cool and well-ventilated place. Accessible only for authorized persons.

7.3. Specific end use(s)

Standard solution

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7647-01-0	Hydrogen chloride (gas and aerosol mists)	1	2		TWA (8 h)	WEL
		5	8		STEL (15 min)	WEL



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Additional advice on limit values

Limit values in other countries:

Poland: Exposure limit(s) Co 0,2 mg/m3

8.2. Exposure controls

Appropriate engineering controls

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Protective and hygiene measures

Wash hands before breaks and after work.

Eye/face protection

Safety glasses with side-shields

Hand protection

Use barrier skin cream.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374. In full contact: Gloves material: Viton, Layer thickness: 0.70 mm, Breakthrough time: >480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0.40 mm, Breakthrough time: > 30 min

Skin protection

Remove and wash contaminated clothing before re-use.

Respiratory protection

Breathing apparatus only if aerosol or dust is formed. ABEK-filter

Environmental exposure controls

Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: liquid
Colour: yellow
Odour: odourless

pH-Value (at 20 °C): <1

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

No data available

Pour point:

no data available

not applicable

Flash point:

not applicable

not applicable

Flammability

Solid: not applicable
Gas: not applicable

Explosive properties

no data available

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable

not applicable

Auto-ignition temperature

Solid: no data available



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Gas: no data available

Decomposition temperature: no data available

Oxidizing properties

no data available

Vapour pressure:no data availableVapour pressure:no data availableDensity (at 20 °C):1,02 g/cm³Bulk density:no data availableWater solubility:completely soluble

(at 20 °C)

Solubility in other solvents

no data available

Partition coefficient: no data available Viscosity / dynamic: no data available Viscosity / kinematic: no data available no data available Flow time: Vapour density: no data available Evaporation rate: no data available Solvent separation test: no data available Solvent content: no data available

9.2. Other information

Solid content: no data available

Corrosive in contact with metals

SECTION 10: Stability and reactivity

10.1. Reactivity

Corrosive to metals

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

10.4. Conditions to avoid

Stable under recommended storage conditions.

10.5. Incompatible materials

Bases

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

Further information

This information is not available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No toxicology information is available.



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Acute toxicity

No data is available on the product itself.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
-	hydrochloric acid %				
	dermal	LD50 >5010 mg/kg			
7791-13-1	Cobalt(II) chlorid hexahydrate				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

Causes burns.

Sensitising effects

No known effect.

Carcinogenic/mutagenic/toxic effects for reproduction

Known carcinogen.

Specific effects in experiment on an animal

No toxicology information is available.

Additional information on tests

None known.

Practical experience

Observations relevant to classification

None known.

Other observations

None known.

Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

12.1. Toxicity

May cause long-term adverse effects in the aquatic environment.

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d] Spec	cies	Source	Method
-	hydrochloric acid %					
	Acute fish toxicity	LC50 862 mg/	96 h Leuc	ciscus idus		

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

no data available





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12.6. Other adverse effects

no data available

Further information

no data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

In accordance with local and national regulations.

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number: UN1789

14.2. UN proper shipping name: HYDROCHLORIC ACIDsolution

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8



Classification code: C1
Special Provisions: 520
Limited quantity: 5 L
Transport category: 3
Hazard No: 80
Tunnel restriction code: E

Other applicable information (land transport)

Excepted Quantities: E1

Inland waterways transport (ADN) Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

14.1. UN number: UN1789

14.2. UN proper shipping name: HYDROCHLORIC ACID solution

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8



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Marine pollutant:

Special Provisions:

Limited quantity:

EmS:

223

5 L

F-A, S-B

Other applicable information (marine transport)

Excepted Quantities: E1

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN1789

14.2. UN proper shipping name: HYDROCHLORIC ACID solution

14.3. Transport hazard class(es):814.4. Packing group:IIIHazard label:8



Special Provisions: A3 A803 Limited quantity Passenger: 1 L

IATA-packing instructions - Passenger:852IATA-max. quantity - Passenger:5 LIATA-packing instructions - Cargo:856IATA-max. quantity - Cargo:60 L

Other applicable information (air transport)

Excepted Quantities: E1 Passenger-LQ: Y841

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

no data available

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

no data available

SECTION 15: Regulatory information

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

National regulatory information

Employment restrictions: Observe restrictions to employment for juvenils 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 contaminating class (D): 3 - highly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes



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Revision: 11.01.2016

Safety datasheet sections which have been updated: 2

Revision: 19.10.2015

Safety datasheet sections which have been updated: 3

Revision: 21.05.2015

Safety datasheet sections which have been updated: 2, 4, 11

Safety datasheet sections which have been updated:8 Revision Date 15.01.2013

Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
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.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

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