

Safety Data Sheet

according to Regulation (EC) No 1907/2006

LCW 908 Kaltaufschlusslösung/Cold Digestion Solution

Revision date: 26.07.2018

Product code: LCW908

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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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 number:

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

Serious eye damage/eye irritation: Eye Dam. 1

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**

Nitric acid 18 %

Signal word: Danger**Pictograms:****Hazard statements**

H290

May be corrosive to metals.

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H314 Causes severe skin burns and eye damage.

Precautionary statements

- P280 Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
 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.

Additional advice on labelling

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

2.3. Other hazards

no data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
7732-18-5	Water			80-90 %
	231-791-2			
7697-37-2	Nitric acid ... %			10-20 %
	231-714-2	007-004-00-1		
	Ox. Liq. 2, Skin Corr. 1A; H272 H314 EUH071			

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.
- Call a physician immediately.
- Show this safety data sheet to the doctor in attendance.

After inhalation

- Move to fresh air.
- If not breathing, give artificial respiration. Consult a physician.

After contact with skin

- Wash off immediately with plenty of water.
- Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.
- Consult a physician.

After contact with eyes

- Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

After ingestion

- Clean mouth with water and drink afterwards plenty of water.
- Do NOT induce vomiting.
- Call a physician immediately.

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

Irritation and corrosion, Cough, Spasm.
Serious eye damage/eye irritation
Risk of serious damage to the lungs (by aspiration).

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.
Water spray jet, , Dry powder, Carbon dioxide (CO₂), Alcohol-resistant foam

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.
The following may develop in event of fire: sulfur oxides.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

Additional information

Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Only qualified personnel equipped with suitable protective equipment may intervene. Immediately evacuate personnel to safe areas.
Do not breathe vapours, mist or gas.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local/national regulations (see section 13).
Soak up with inert absorbent material.
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.4. Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas.
Avoid contact with skin and eyes.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Protect from light, moisture and damage.
Keep in a dry, cool place.

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Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Hints on joint storage

None known.

7.3. Specific end use(s)

Laboratory chemicals
Reagent for analysis

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
7697-37-2	Nitric acid	1	2.6		STEL (15 min)	WEL

Additional advice on limit values

None known.

8.2. Exposure controls

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Protective and hygiene measures

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

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 0,20 mm, Breakthrough time: > 30 min

Skin protection

Remove and wash contaminated clothing before re-use.

Respiratory protection

Avoid breathing dust or vapour.

Provide adequate ventilation.

Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	odourless
pH-Value (at 20 °C):	< 1

Changes in the physical state

Melting point:	- 47 °C
Initial boiling point and boiling range:	121 °C

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Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	no data available
:	no data available
Flash point:	not applicable
Sustaining combustion:	No data available
Flammability	
Solid:	no data available
Gas:	no data available
Explosive properties	
no data available	
Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	no data available
Auto-ignition temperature	
Solid:	no data available
Gas:	no data available
Decomposition temperature:	no data available
Oxidizing properties	
no data available	
Vapour pressure:	no data available
Vapour pressure:	no data available
Density (at 20 °C):	1,055 g/cm ³
Bulk density:	not applicable
Water solubility:	soluble
Solubility in other solvents	
no data available	
Partition coefficient:	no data available
Viscosity / dynamic:	no data available
Viscosity / kinematic:	no data available
Flow time:	no data available
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 in contact with metals

10.2. Chemical stability

Stable under recommended storage conditions.

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10.3. Possibility of hazardous reactions

no data available

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat. Exposure to sunlight.

10.5. Incompatible materials

Oxidizing agents

Combustible material

Gives off hydrogen by reaction with metals.

10.6. Hazardous decomposition products

nitrogen oxides (NO_x)

Further information

None known.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

No data is available on the product itself.

Irritation and corrosivity

The product causes burns of eyes, skin and mucous membranes.

Inhalation of mist causes irritation of respiratory system.

Ingestion may cause nausea, vomiting, sore throat, stomach-ache and eventually lead to a perforation of the intestine.

Sensitising effects

Contains no substance or substances classified as sensitising.

Carcinogenic/mutagenic/toxic effects for reproduction

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

STOT-single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT-repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

No aspiration toxicity classification

Specific effects in experiment on an animal

No data is available on the product itself.

Additional information on tests

no data available

Practical experience

Observations relevant to classification

no data available

Other observations

no data available

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

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No data is available on the product itself.

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
7697-37-2	Nitric acid ... %					
	Acute fish toxicity	LC50	72 mg/l	96 h	Gambusia affinis	IUCLID

12.2. Persistence and degradability

The methods for determining biodegradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

No data is available on the product itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
7697-37-2	Nitric acid ... %	-0,21

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

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

Waste disposal number of contaminated packaging

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

Contaminated packaging

Dispose of as unused product.

The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

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

- 14.1. UN number:** UN 2031
14.2. UN proper shipping name: Nitric acid < 20% %
14.3. Transport hazard class(es): 8

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14.4. Packing group:

II

Hazard label:

8



Classification code:

C1

Limited quantity:

1 L

Transport category:

2

Hazard No:

80

Tunnel restriction code:

E

Other applicable information (land transport)

Excepted Quantities: E2

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

Not tested

Marine transport (IMDG)**14.1. UN number:**

UN 2031

14.2. UN proper shipping name:

NITRIC ACID

14.3. Transport hazard class(es):

8

14.4. Packing group:

II

Hazard label:

8



Special Provisions:

-

Limited quantity:

1 L

EmS:

F-A, S-B

Other applicable information (marine transport)

Excepted Quantities: E2

Air transport (ICAO-TI/IATA-DGR)**14.1. UN number:**

UN 2031

14.2. UN proper shipping name:

NITRIC ACID

14.3. Transport hazard class(es):

8

14.4. Packing group:

II

Hazard label:

8



Limited quantity Passenger:

Forbidden

IATA-packing instructions - Passenger:

Forbidden

IATA-max. quantity - Passenger:

Forbidden

IATA-packing instructions - Cargo:

855

IATA-max. quantity - Cargo:

30 L

Other applicable information (air transport)

Excepted Quantities: E0

Passenger-LQ: Forbidden

14.5. Environmental hazards

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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

Not relevant

Other applicable information

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).

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

Revision: 26.07.2018

Safety datasheet sections which have been updated: 15

Revision: 13.10.2015

This data sheet contains changes from the previous version in section(s): 2.2

Revision: 19.05.2015

This data sheet contains changes from the previous version in section(s): 2

Revision: 09.12.2013

This data sheet contains changes from the previous version in section(s): 2-15

Relevant H and EUH statements (number and full text)

H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
EUH071	Corrosive to the respiratory tract.

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.)