

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**23955-66 Ammonia Cyanurate Reagent**

Revision date: 08.05.2017

Product code: 2395566

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

23955-66 Ammonia Cyanurate Reagent

**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. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage.

Harmful to aquatic life with long lasting effects.

**2.2. Label elements****Regulation (EC) No. 1272/2008****Hazard components for labelling**

Lithium hydroxide

**Signal word:**

Danger

**Pictograms:**

according to Regulation (EC) No 1907/2006

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### Hazard statements

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H412	Harmful to aquatic life with long lasting effects.

### Precautionary statements

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face 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.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310	Immediately call a POISON CENTER/doctor.
P501	Dispose of contents/container to Disposal.

### 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			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
6132-04-3	tri-Sodium citrate dihydrate			80-90 %
	200-675-3			
6106-24-7	di-Sodium tartrate dihydrate			5-15 %
	212-773-3			
1310-65-2	Lithium hydroxide			1-5 %
	215-183-4			
	Acute Tox. 3, Acute Tox. 3, Skin Corr. 1A; H331 H301 H314			
2893-78-9	Sodium dichloroisocyanurate, troclosene sodium			1-5 %
	220-767-7	613-030-00-X		
	Ox. Sol. 2, Acute Tox. 4, Eye Irrit. 2, STOT SE 3, Aquatic Acute 1, Aquatic Chronic 1; H272 H302 H319 H335 H400 H410 EUH031			

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.

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

#### **After contact with skin**

Wash off with soap and water. Take off contaminated clothing and shoes immediately.  
Call a physician immediately. Show this safety data sheet to the doctor in attendance.

#### **After contact with eyes**

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

#### **After ingestion**

Drink 1 or 2 glasses of water. Prevent vomiting if possible. Never give anything by mouth to an unconscious person.

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

#### **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.

#### **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**

Sweep up or vacuum up spillage and collect in suitable container for disposal.

#### **6.4. Reference to other sections**

13. Disposal considerations

### SECTION 7: Handling and storage

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Avoid contact with skin and eyes. 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 in a dry place. Keep away from heat.

##### **Hints on joint storage**

Incompatible with acids.

#### **7.3. Specific end use(s)**

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Reagent for analysis

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

**8.1. Control parameters**

**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
1310-65-2	Lithium hydroxide	-	1		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.

**Eye/face protection**

Safety glasses with side-shields

**Hand protection**

Use barrier skin cream. Wash hands before breaks and after work. Chemical resistant protective gloves The protective gloves to be used must comply with the specifications of EC directive 89/686/EEC and the resultant standard EN374.

**Skin protection**

Avoid contact with skin, eyes and clothing.

**Respiratory protection**

Provide adequate ventilation.

**SECTION 9: Physical and chemical properties**

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

Physical state:	solid
Colour:	white
Odour:	slight chlorine
pH-Value (at 20 °C):	12,3 (5 % solution)
<b>Changes in the physical state</b>	
Melting point:	> 240 °C
Initial boiling point and boiling range:	not applicable
Sublimation point:	not applicable
Softening point:	no data available
Pour point:	no data available
:	no data available
Flash point:	not applicable
<b>Flammability</b>	
Solid:	no data available
Gas:	no data available

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**Explosive properties**

no data available

Lower explosion limits:

not applicable

Upper explosion limits:

not applicable

Ignition temperature:

not applicable

**Auto-ignition temperature**

Solid:

no data available

Gas:

no data available

Decomposition temperature:

no data available

**Oxidizing properties**

no data available

Vapour pressure:

not applicable

Vapour pressure:

not applicable

Density (at 20 °C):

1,783 g/cm<sup>3</sup>

Bulk density:

no data available

Water solubility:

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

Flow time:

no data available

Vapour density:

not applicable

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

no data available

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

No dangerous reaction known under conditions of normal use.

**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**

Product is sensitive to light and moisture. Extremes of temperature and direct sunlight.

**10.5. Incompatible materials**

Acids

**10.6. Hazardous decomposition products**

nitrogen oxides (NOx), Acid chlorides

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**SECTION 11: Toxicological information**

**11.1. Information on toxicological effects**

**Acute toxicity**

No data is available on the product itself.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
6132-04-3	tri-Sodium citrate dihydrate				
	oral	LD50 >8000 mg/kg	rat		
1310-65-2	Lithium hydroxide				
	oral	LD50 210 mg/kg	Ratte		
	inhalation vapour	ATE 3 mg/l			
	inhalation (4 h) aerosol	LC50 0,96 mg/l	Ratte		
2893-78-9	Sodium dichloroisocyanurate, troclosene sodium				
	oral	ATE 500 mg/kg			

**Irritation and corrosivity**

Causes skin and eye burns.

**Sensitising effects**

No known effect.

**Aspiration hazard**

No aspiration toxicity classification

**Specific effects in experiment on an animal**

No data is available on the product itself.

**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**

No data is available on the product itself. Do not let product enter drains.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
6132-04-3	tri-Sodium citrate dihydrate					
	Acute crustacea toxicity	EC50 736 mg/l	48 h			

**12.2. Persistence and degradability**

No data is available on the product itself.

**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 known effect.

### 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

### SECTION 14: Transport information

#### Land transport (ADR/RID)

- 14.1. UN number:** UN 2680  
**14.2. UN proper shipping name:** Lithium hydroxide  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II

#### Inland waterways transport (ADN)

- 14.2. UN proper shipping name:** Not tested

#### Marine transport (IMDG)

- 14.1. UN number:** UN 2680  
**14.2. UN proper shipping name:** Lithium hydroxide  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II  
Marine pollutant: --  
EmS: F-A,S-B

#### Air transport (ICAO-TI/IATA-DGR)

- 14.1. UN number:** UN 2680  
**14.2. UN proper shipping name:** Lithium hydroxide  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** II

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

Use personal protective equipment.

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

Not relevant

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#### Other applicable information

Additional Information: This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper Shipping Name: Chemical Kit, Hazard Class: 9, UN Number 3316, Package group II, EMS Code: F-A, S-P

#### SECTION 15: Regulatory information

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

###### National regulatory information

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: 8.05.2017

Safety datasheet sections which have been updated: 2, 7, 8, 10, 11

Revision: 27.04.2015

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

Revision: 14.03.2013

Safety datasheet sections which have been updated: 4-16

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

H272	May intensify fire; oxidiser.
H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH031	Contact with acids liberates toxic gas.

##### 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.)*