

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**23952-66 Ammonia Salicylate Reagent**

Revision date: 07.07.2015

Product code: 2395266

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

23952-66 Ammonia Salicylate 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:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Harmful if swallowed.

Causes skin irritation.

Causes serious eye damage.

May cause respiratory irritation.

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

Sodium salicylate

Sodium Nitroferricyanide

**Signal word:** Danger

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#### Pictograms:



#### Hazard statements

- |      |                                   |
|------|-----------------------------------|
| H302 | Harmful if swallowed.             |
| H315 | Causes skin irritation.           |
| H318 | Causes serious eye damage.        |
| H335 | May cause respiratory irritation. |

#### Precautionary statements

- |                |  |
|----------------|--|
| P261           | Avoid breathing dust/fume/gas/mist/vapours/spray.  |
| P270           | Do not eat, drink or smoke when using this product.  |
| P280           | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P304+P340      | IF INHALED: Remove person to fresh air and keep comfortable for breathing.   |
| P302+P352      | IF ON SKIN: Wash with plenty of water.   |
| 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

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]	
54-21-7	Sodium salicylate	< 45 %
	200-198-0	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, STOT SE 3; H302 H315 H318 H335	
6132-04-3	tri-Sodium citrate dihydrate	40,0 - 45,0 %
	200-675-3	
6106-24-7	di-Sodium tartrate dihydrate	10,0 - 15,0 %
	212-773-3	
14402-89-2	Sodium Nitroferricyanide	<1,0 %
	238-373-9	
	Acute Tox. 3; H301	

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

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#### General information

Take off all contaminated clothing immediately.

#### After inhalation

Move to fresh air. If symptoms persist, call a physician.

#### After contact with skin

Wash off immediately with plenty of water. If skin irritation persists, call 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. Consult a physician. Never give anything by mouth to an unconscious person.

#### 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. Use personal protective equipment.

#### 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

Pick up and arrange disposal without creating dust.

Keep in suitable, closed containers 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

Use only in well-ventilated areas.

Avoid contact with skin and eyes.

#### 7.2. Conditions for safe storage, including any incompatibilities

##### Requirements for storage rooms and vessels

Keep at temperatures between 10 and 25 °C.

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#### Hints on joint storage

Do not store together with Strong acids and oxidizing agents

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

Reagent for analysis

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 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: &gt;480 min. In splash contact: Glove

material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: &gt; 30 min

##### Skin protection

Remove and wash contaminated clothing before re-use.

##### Respiratory protection

Respirator must be worn if exposed to dust.

### SECTION 9: Physical and chemical properties

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

Physical state:	powder
Colour:	light brown
Odour:	odourless
pH-Value (at 20 °C):	7,84

##### Changes in the physical state

Melting point:	97 °C
Initial boiling point and boiling range:	not applicable
Sublimation point:	no data available
Softening point:	no data available
Pour point:	no data available
:	no data available
Flash point:	not applicable

##### Flammability

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:

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):

1,689 g/cm<sup>3</sup>

Bulk density:

no data available

Water solubility:

soluble

**Solubility in other solvents**

no data available

Partition coefficient:

not applicable

Viscosity / dynamic:

not applicable

Viscosity / kinematic:

not applicable

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

**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**

To avoid thermal decomposition, do not overheat.

**10.5. Incompatible materials**

Strong acids and oxidizing agents

**10.6. Hazardous decomposition products**

No decomposition if stored and applied as directed.

**SECTION 11: Toxicological information**

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**11.1. Information on toxicological effects**
**Acute toxicity**

No data is available on the product itself.

**ATEmix calculated**

ATE (oral) 1744,4 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
54-21-7	Sodium salicylate				
	oral	LD50 mg/kg	930	Ratte	RTECS
6132-04-3	tri-Sodium citrate dihydrate				
	oral	LD50 mg/kg	>8000	rat	
14402-89-2	Sodium Nitroferricyanide				
	oral	LD50	99 mg/kg	rat	

**Irritation and corrosivity**

H318 - Causes serious eye damage.

May cause skin irritation.

**STOT-single exposure**

The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation. (Sodium salicylate)

**Specific effects in experiment on an animal**

No data is available on the product itself.

**SECTION 12: Ecological information**
**12.1. Toxicity**

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
54-21-7	Sodium salicylate					
	Acute fish toxicity	LC50 mg/l	1760	96 h		
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

**12.6. Other adverse effects**

No known effect.

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#### 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)

###### Other applicable information (land transport)

Not subject to transport regulations.

##### Inland waterways transport (ADN)

###### Other applicable information (inland waterways transport)

Not tested

##### Marine transport (IMDG)

###### Other applicable information (marine transport)

Not subject to transport regulations.

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

###### Other applicable information (air transport)

Not subject to transport regulations.

##### 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

#### 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: 30.04.2015

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

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

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.

#### 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.

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



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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. 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:**

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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.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310	Immediately call a POISON CENTER/doctor.
P363	Wash contaminated clothing before reuse.
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			< 2 %
	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.

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#### After inhalation

Move to fresh air.

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.

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#### Hints on joint storage

Incompatible with acids.

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

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.

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

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)

##### Changes in the physical state

Melting point:	> 240 °C
Initial boiling point and boiling range:	not applicable
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
:	no data available
Flash point:	not applicable

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**Flammability**

Solid: not applicable  
Gas: not applicable

**Explosive properties**

not applicable

Lower explosion limits: not applicable

Upper explosion limits: not applicable

Ignition temperature: not applicable

**Auto-ignition temperature**

Solid: not applicable

Gas: not applicable

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: not applicable

Viscosity / dynamic: not applicable

Viscosity / kinematic: not applicable

Flow time: not applicable

Vapour density: not applicable

Evaporation rate: not applicable

Solvent separation test: not applicable

Solvent content: not applicable

**9.2. Other information**

Solid content: no data available

Corrosive in contact with metals

Aluminium : 20,4 mm/a

**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.

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**10.5. Incompatible materials**

Acids

**10.6. Hazardous decomposition products**

nitrogen oxides (NOx), Acid chlorides

**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.

**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**

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no data available

#### **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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### 23954-66 Ammonia Cyanurate Reagent

Revision date: 08.05.2017

Product code: 2395466

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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: 26.05.2015/8.05.2017  
Safety datasheet sections which have been updated: 2, 8, 10, 11  
Revision: 26.05.2015  
Safety datasheet sections which have been updated: 2, 11  
Revision: 18.06.2014  
Safety datasheet sections which have been updated: 9  
Revision: 14.02.2013  
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.)*



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according to Regulation (EC) No 1907/2006

### 26022-00 AmVer Ammonia Test N Tube Reagent

Revision date: 28.05.2015

Product code: 2602200

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

### 1.1. Product identifier

26022-00 AmVer Ammonia Test N Tube 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:

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Causes serious eye irritation.

### 2.2. Label elements

#### Regulation (EC) No. 1272/2008

#### Hazard components for labelling

Sodium salicylate

Signal word: Warning

Pictograms:



#### Hazard statements

H319 Causes serious eye irritation.

#### Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

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P337+P313 present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.

#### 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]			
7732-18-5	Water			>99,0 %
	231-791-2			
54-21-7	Sodium salicylate			<5 %
	200-198-0			
	Acute Tox. 4, Eye Irrit. 2; H302 H319			
1310-73-2	sodium hydroxide; caustic soda			<1 %
	215-185-5	011-002-00-6		
	Skin Corr. 1A; H314			

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 contaminated clothing and shoes immediately.  
Show this safety data sheet to the doctor in attendance.

##### After inhalation

Move to fresh air.  
If symptoms persist, call a physician.

##### After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.  
If skin irritation persists, call a physician.

##### After contact with eyes

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

##### After ingestion

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Obtain medical attention.

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

irritant effects

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

Treat symptomatically.

### SECTION 5: Firefighting measures

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#### 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 order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

In the event of fire, wear self-contained breathing apparatus.

#### **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 (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers 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**

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

##### **Advice on protection against fire and explosion**

See also section 5

#### 7.2. Conditions for safe storage, including any incompatibilities

##### **Requirements for storage rooms and vessels**

Keep container tightly closed in a dry and well-ventilated place.

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

None known.

##### **Further information on storage conditions**

Keep locked up or in an area accessible only to qualified or authorised persons.

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

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
1310-73-2	Sodium hydroxide	-	2		STEL (15 min)	WEL

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#### Additional advice on limit values

None known.

#### 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 at the end of workday.

##### Eye/face protection

Safety glasses with side-shields

##### Hand protection

Use barrier skin cream.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

##### Skin protection

Avoid contact with skin, eyes and clothing.

##### Respiratory protection

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):	11,4

#### Changes in the physical state

Melting point:	not applicable
Initial boiling point and boiling range:	99 °C
Softening point:	not applicable
Pour point:	not applicable
:	no data available
Flash point:	not applicable
Sustaining combustion:	No data available

#### Flammability

Solid:	not applicable
Gas:	not applicable

#### Explosive properties

not applicable

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	no data available

#### Auto-ignition temperature

Solid:	not applicable
Gas:	not applicable

Decomposition temperature:	no data available
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**Oxidizing properties**

not applicable

Vapour pressure:

no data available

Vapour pressure:

no data available

Density (at 20 °C):

1,010 g/cm<sup>3</sup>

Bulk density:

not applicable

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:

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:

not applicable

no data available

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

See also section 10.3

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

No dangerous reaction known under conditions of normal use.

**10.5. Incompatible materials**

None known.

**10.6. Hazardous decomposition products**

No decomposition if stored and applied as directed.

**Further information**

Stable under recommended storage conditions.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

No toxicology information is available.

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
54-21-7	Sodium salicylate				
	oral	LD50 mg/kg	930	Ratte	RTECS

**Irritation and corrosivity**

May cause eye irritation.

**Sensitising effects**

Contains no substance or substances classified as sensitising.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Contains no ingredient listed as a carcinogen

**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**

No information on ecology is available.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
54-21-7	Sodium salicylate					
	Acute fish toxicity	LC50 mg/l	1760	96 h		
1310-73-2	sodium hydroxide; caustic soda					
	Acute fish toxicity	LC50 mg/l	45,4	96 h	Onchorhynchus mykiss	

**12.2. Persistence and degradability**

No data is available on the product itself.

**12.3. Bioaccumulative potential**

No data is available on the product itself.

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#### 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 known effect.

#### **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.

### SECTION 14: Transport information

#### **Inland waterways transport (ADN)**

##### **Other applicable information (inland waterways transport)**

Not tested

#### 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

not applicable

#### **Other applicable information**

Not subject to transport regulations.

### 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): -- not water contaminating

#### 15.2. Chemical safety assessment

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

**Safety Data Sheet**

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**SECTION 16: Other information****Changes**

Revision: 28.05.2015

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

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

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H319	Causes serious eye irritation.

**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.)*