



according to Regulation (EC) No 1907/2006

## 1055-99 Sulfamic Acid

Revision date: 03.01.2019 Product code: 105599 Page 1 of 9

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

### 1.1. Product identifier

1055-99 Sulfamic Acid

## 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 M5

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

Acute toxicity: Acute Tox. 4 Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:
May be corrosive to metals.
Harmful if swallowed.
Causes skin irritation.
Causes serious eye irritation.

Harmful to aquatic life with long lasting effects.

### 2.2. Label elements

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

### Hazard components for labelling

sulfamic acid, sulphamic acid, sulphamidic acid

Signal word: Warning



Be Right<sup>™</sup>

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

### 1055-99 Sulfamic Acid

Revision date: 03.01.2019 Product code: 105599 Page 2 of 9

### Pictograms:





#### **Hazard statements**

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

H412 Harmful to aquatic life with long lasting effects.

### **Precautionary statements**

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P332+P313 If skin irritation occurs: Get medical advice/attention.

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

present and easy to do. Continue rinsing.

P337+P313 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	Chemical name					
	EC No Index No REACH No						
	Classification according to Regulation (EC) No. 1272/2008 [CLP]						
5329-14-6	sulfamic acid, sulphamic acid, sulpl	namidic acid		95 - <= 100 %			
	226-218-8	016-026-00-0					
	Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Aquatic Chronic 3; H302 H315 H319 H412						

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.

Call a physician immediately.

## After contact with eyes

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





according to Regulation (EC) No 1907/2006

#### 1055-99 Sulfamic Acid

Revision date: 03.01.2019 Product code: 105599 Page 3 of 9

### After ingestion

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician immediately.

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

irritant effects, Cough, Shortness of breath

### 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, Carbon dioxide (CO2), Alcohol-resistant foam Dry powder

### 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 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.

In the case of respirable dust and/or fumes, use self-contained breathing apparatus and dust impervious protective suit.

### 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. Only qualified personnel equipped with suitable protective equipment may intervene. Immediately evacuate personnel to safe areas.

Do not breathe vapours, mist or gas. Ensure adequate ventilation.

## 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).

### 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. Do not breathe vapours/dust.

### Advice on protection against fire and explosion

None known.

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.





according to Regulation (EC) No 1907/2006

### 1055-99 Sulfamic Acid

Revision date: 03.01.2019 Product code: 105599 Page 4 of 9

### 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.

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.

General industrial hygiene practice.

Ensure that eye flushing systems and safety showers are located close to the working place.

@N07.0011183

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

Breathing apparatus only if aerosol or dust is formed.

Recommended Filter type: ABEK-filter

## **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Physical state: solid
Colour: white
Odour: odourless

pH-Value (at 20 °C): 1,18

# Changes in the physical state

Melting point: 205 °C Initial boiling point and boiling range: not applicable Sublimation point: no data available Softening point: not applicable



according to Regulation (EC) No 1907/2006

### 1055-99 Sulfamic Acid

Revision date: 03.01.2019 Product code: 105599 Page 5 of 9

Pour point: not applicable
Flash point: no data available
Sustaining combustion: No data available

**Flammability** 

Solid: not applicable
Gas: not applicable

**Explosive properties** 

not applicable

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable

not applicable

**Auto-ignition temperature** 

Solid: not applicable
Gas: not applicable

Decomposition temperature: 205 °C

**Oxidizing properties** 

not applicable

Vapour pressure: 0,0078 hPa

(at 20 °C)

Density (at 20 °C):

Bulk density:

Nature solubility:

2,13 g/cm³

not applicable

213 g/L

(at 20 °C)

Solubility in other solvents

soluble

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 Mild steel: 20.67 mm/a

### **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

May be corrosive to metals.

## 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

Reacts with the following substances: Chlorine, Oxidizing agents, Metals, Bases, Nitric acid





# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

### 1055-99 Sulfamic Acid

Revision date: 03.01.2019 Product code: 105599 Page 6 of 9

### 10.4. Conditions to avoid

Heat.

### 10.5. Incompatible materials

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

### 10.6. Hazardous decomposition products

Decomposition products: nitrogen oxides (NOx) Sulphur oxides, Ammonia

### **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

### Toxicocinetics, metabolism and distribution

No toxicology information is available.

### **Acute toxicity**

Harmful if swallowed. LD50/oral/rat = 3160 mg/kg

#### **ATEmix** calculated

ATE (oral) 1455,8 mg/kg

CAS No	Chemical name								
	Exposure route	Dose Species		Source	Method				
5329-14-6	sulfamic acid, sulphamic a	sulfamic acid, sulphamic acid, sulphamidic acid							
	oral	LD50 1450 mg/kg	Rat						

### Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

### Sensitising effects

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

# Carcinogenic/mutagenic/toxic effects for reproduction

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.

No aspiration toxicity classification

# Specific effects in experiment on an animal

No toxicology information is available.

#### **Further information**

Handle in accordance with good industrial hygiene and safety practice.

### **SECTION 12: Ecological information**

### 12.1. Toxicity

No information on ecology is available.





Be Right"

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

### 1055-99 Sulfamic Acid

Revision date: 03.01.2019 Product code: 105599 Page 7 of 9

CAS No	Chemical name							
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method		
5329-14-6	sulfamic acid, sulphamic a	sulfamic acid, sulphamic acid, sulphamidic acid						
	Acute fish toxicity	LC50 70,3 mg/l	96 h	Pimephales promelas				

#### 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.

#### 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.

## **SECTION 13: Disposal considerations**

### 13.1. Waste treatment methods

#### 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

In accordance with local and national regulations.

### **SECTION 14: Transport information**

### Land transport (ADR/RID)

**14.1. UN number:** UN 2967

14.2. UN proper shipping name: Sulphamic acid mixture

14.3. Transport hazard class(es): 8
14.4. Packing group: III

### Inland waterways transport (ADN)

### Other applicable information (inland waterways transport)

Not tested

# Marine transport (IMDG)

**14.1. UN number:** UN 2967

14.2. UN proper shipping name: Sulphamic acid mixture

14.3. Transport hazard class(es): 8
14.4. Packing group: |||





# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

1055-99 Sulfamic Acid

Revision date: 03.01.2019 Product code: 105599 Page 8 of 9

Marine pollutant:

EmS: F-A,S-B

Air transport (ICAO-TI/IATA-DGR)

**14.1. UN number:** UN 2967

14.2. UN proper shipping name: Sulphamic acid mixture

14.3. Transport hazard class(es): 8
14.4. Packing group: III

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: ves



### 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

### **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): 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: 15.06.2016

Safety datasheet sections which have been updated: 2, 3, 4, 6, 7, 8, 9, 11, 15, 16

Revision: 15.06.2016

Safety datasheet sections which have been updated: 2, 8

Revision: 20.04.2015

Safety datasheet sections which have been updated: 2, 4, 9, 11

Revision: 12.05.2014

Safety datasheet sections which have been updated: 4, 6, 8, 9, 10, 11, 12, 14

# 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
Acute Tox. 4; H302	Calculation method
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method
Aquatic Chronic 3; H412	Calculation method

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

H290 May be corrosive to metals.



# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

## 1055-99 Sulfamic Acid

Revision date: 03.01.2019 Product code: 105599 Page 9 of 9

H302 Harmful if swallowed. H315 Causes skin irritation.

H319 Causes serious eye irritation.

H412 Harmful 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.)





according to Regulation (EC) No 1907/2006

### 1077-99 Potassium Iodide Powder Pillow

Revision date: 28.11.2017 Product code: 107799 Page 1 of 8

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

### 1.1. Product identifier

1077-99 Potassium Iodide Powder Pillow

## 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:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:
Causes skin irritation.
Causes serious eye irritation.

#### 2.2. Label elements

## Regulation (EC) No. 1272/2008

### Hazard components for labelling

Potassium iodide

Signal word: Warning

Pictograms:



## **Hazard statements**

H315 Causes skin irritation.H319 Causes serious eye irritation.



Be Right<sup>™</sup>

# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

### 1077-99 Potassium Iodide Powder Pillow

Revision date: 28.11.2017 Product code: 107799 Page 2 of 8

### **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

present and easy to do. Continue rinsing.

P337+P313 If eve irritation persists: Get medical advice/attention.

P302+P352 IF ON SKIN: Wash with plenty of water.

P332+P313 If skin irritation occurs: Get medical advice/attention.
P312 Call a POISON CENTER/doctor if you feel unwell.

#### 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	Chemical name				
	EC No	Index No	REACH No			
	Classification according to Regulation (EC) No. 1272/2008 [CLP]					
7681-11-0	Potassium iodide					
	231-659-4					
	Skin Irrit. 2, Eye Irrit. 2; H315 H319	_		_		

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.

Show this safety data sheet to the doctor in attendance.

#### After inhalation

Move to fresh air.

### 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

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

### After ingestion

Do NOT induce vomiting. Drink 1 or 2 glasses of water.

Never give anything by mouth to an unconscious person.

Consult a physician.

## 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**

### 5.1. Extinguishing media





according to Regulation (EC) No 1907/2006

### 1077-99 Potassium Iodide Powder Pillow

Revision date: 28.11.2017 Product code: 107799 Page 3 of 8

### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Carbon dioxide (CO2), Alcohol-resistant foam, Dry powder

#### 5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

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. 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 let product enter drains.

### 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).

### 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.

Do not breathe vapours/dust.

# Advice on protection against fire and explosion

None known.

See also section 5

### Further information on handling

Observe label precautions.

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

### Requirements for storage rooms and vessels

Keep containers tightly closed in a dry, cool and well-ventilated place.

Protect from moisture.

# 7.3. Specific end use(s)

Laboratory chemicals

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

### 8.1. Control parameters

#### 8.2. Exposure controls





according to Regulation (EC) No 1907/2006

## 1077-99 Potassium Iodide Powder Pillow

Revision date: 28.11.2017 Product code: 107799 Page 4 of 8

### Appropriate engineering controls

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

#### Protective and hygiene measures

Wash hands before breaks and after work.

General industrial hygiene practice.

Ensure that eye flushing systems and safety showers are located close to the working place.

# Eye/face protection

Safety glasses with side-shields

### Hand protection

Use barrier skin cream.

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

In case of full contact: Glove material: Nitrile rubber Layer thickness: > 0,11 mm Break through time: 480 min

In case of contact through splashing:

Glove material: Nitrile rubber Layer thickness: > 0,11mm Break through time: > 480 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves.

### Skin protection

Avoid contact with skin, eyes and clothing.

# Respiratory protection

Ensure adequate ventilation, especially in confined areas.

#### **Environmental exposure controls**

Do not flush into surface water or sanitary sewer system.

Prevent further leakage or spillage if safe to do so.

### **SECTION 9: Physical and chemical properties**

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

Physical state: solid, powder Colour: colourless Odour: odourless

pH-Value (at 20 °C): 6,7 (5 % solution)

# Changes in the physical state

Melting point: 680 °C
Initial boiling point and boiling range: not applicable
Sublimation point: no data available
Softening point: not applicable
Pour point: no data available
: no data available
Flash point: not applicable



according to Regulation (EC) No 1907/2006

### 1077-99 Potassium Iodide Powder Pillow

Revision date: 28.11.2017 Product code: 107799 Page 5 of 8

**Flammability** 

Solid: not applicable
Gas: not applicable

**Explosive properties** 

not applicable

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

no data available

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:

Vapour pressure:

Density (at 20 °C):

Bulk density:

No data available

3,07 g/cm³

no data available

no data available

soluble

vater solubility:

soluble

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

### **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

# 10.2. Chemical stability

Sensitivity to light

### 10.3. Possibility of hazardous reactions

Reacts with the following substances: Alkali metals, Ammonia, Oxidizing agents, Fluorine

## 10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

Exposure to moisture.

### 10.5. Incompatible materials

Powdered metal salts



according to Regulation (EC) No 1907/2006

### 1077-99 Potassium Iodide Powder Pillow

Revision date: 28.11.2017 Product code: 107799 Page 6 of 8

### 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 data is available on the product itself.

CAS No	Chemical name								
	Exposure route	Dose	Species	Source	Method				
7681-11-0	Potassium iodide								
		LD50 2779 mg/kg	rat						

### Irritation and corrosivity

May cause eye and skin irritation.

### Sensitising effects

No known effect.

### 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

### **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.

CAS No	Chemical name							
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method		
7681-11-0	Potassium iodide							
	Acute fish toxicity	LC50 896 mg/l		Oncorhynchus mykiss (rainbow trout)	EPA			

## 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.

### 12.4. Mobility in soil

No data is available on the product itself.

#### 12.5. Results of PBT and vPvB assessment

No data is available on the product itself.



according to Regulation (EC) No 1907/2006

### 1077-99 Potassium Iodide Powder Pillow

Revision date: 28.11.2017 Product code: 107799 Page 7 of 8

### 12.6. Other adverse effects

Discharge into the environment must be avoided.

### **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: -

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:

# 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)

14.1. UN number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:

FmS:

### Other applicable information (marine transport)

Not subject to transport regulations.

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

14.1. UN number:

14.2. UN proper shipping name:

14.3. Transport hazard class(es):

14.4. Packing group:



Be Right<sup>™</sup>

# **Safety Data Sheet**

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

## 1077-99 Potassium Iodide Powder Pillow

Revision date: 28.11.2017 Product code: 107799 Page 8 of 8

### Other applicable information (air transport)

Not subject to transport regulations.

### 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 relevant

Other applicable information

-

## **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: 28.11.2017

Safety datasheet sections which have been updated: 2, 11

Revision: 23.04.2015

Safety datasheet sections which have been updated: 2, 4

Revision: 24.03.2014

Safety datasheet sections which have been updated: 2-13, 15, 16

## Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Skin Irrit. 2; H315	Calculation method
Eye Irrit. 2; H319	Calculation method

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

H315 Causes skin irritation.
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.)



# **Safety Data Sheet**

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

### 24092-32 Sodium Thiosulfate Standard Solution, 0.0246 N

Revision date: 08.03.2018 Product code: 2409232 Page 1 of 8

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

### 1.1. Product identifier

24092-32 Sodium Thiosulfate Standard Solution, 0.0246 N

## 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

This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

### 2.2. Label elements

### Additional advice on labelling

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

## 2.3. Other hazards

None known.

### **SECTION 3: Composition/information on ingredients**

### 3.2. Mixtures



according to Regulation (EC) No 1907/2006

### 24092-32 Sodium Thiosulfate Standard Solution, 0.0246 N

Revision date: 08.03.2018 Product code: 2409232 Page 2 of 8

#### **Hazardous components**

CAS No	Chemical name					
	EC No	Index No	REACH No			
	Classification according to Regula	ition (EC) No. 1272/2008 [CL	P]			
7732-18-5	Water			60-70 %		
	231-791-2					
57-55-6	1,2-Propanediol			20-30 %		
	200-338-0					
7757-82-6	Sodium sulfate					
	231-820-9					
10102-17-7	Sodium thiosulfate			< 1 %		
	231-867-5					

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.

If symptoms persist, call a physician.

### After contact with skin

Wash off immediately with plenty of water.

In the case of skin irritation or allergic reactions see 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.

Call a physician immediately.

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

No known effect.

### 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.





Be Right"

## **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

### 24092-32 Sodium Thiosulfate Standard Solution, 0.0246 N

Revision date: 08.03.2018 Product code: 2409232 Page 3 of 8

### 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

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

See also section 5

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

### Requirements for storage rooms and vessels

Keep containers tightly closed in a dry, cool and well-ventilated place.

### Hints on joint storage

Do not store together with Oxidizing agents

#### 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/m³	fibres/ml	Category	Origin
57-55-6	Propane-1,2-diol, particulates	-	10		TWA (8 h)	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.





# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

### 24092-32 Sodium Thiosulfate Standard Solution, 0.0246 N

Revision date: 08.03.2018 Product code: 2409232 Page 4 of 8

Smoking, eating and drinking should be prohibited in the application area.

### 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.

Glove material (Break through time > 480 Min.):

Fluorinated rubber (0,4 mm)

### Skin protection

Remove and wash contaminated clothing before re-use.

#### Respiratory protection

Provide adequate ventilation.

Breathing apparatus only if aerosol or dust is formed. Recommended Filter type: ABEK-filter

## **Environmental exposure controls**

Should not be released into the environment.

## **SECTION 9: Physical and chemical properties**

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

Physical state: liquid

Colour: colourless, clear

Odour: sweet

pH-Value (at 20 °C): 9,9

Changes in the physical state

Melting point:

Initial boiling point and boiling range:

Sublimation point:

Softening point:

Pour point:

Pour point:

Inot applicable

not applicable

not applicable

not applicable

not applicable

Softening point:

No data available

Flammability

Solid: not applicable
Gas: not applicable

**Explosive properties** 

not applicable

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

not applicable

not applicable

**Auto-ignition temperature** 

Solid: not applicable
Gas: not applicable
Decomposition temperature: no data available

**Oxidizing properties** 

not applicable

Vapour pressure:

Vapour pressure:

no data available

no data available





# **Safety Data Sheet**

according to Regulation (EC) No 1907/2006

### 24092-32 Sodium Thiosulfate Standard Solution, 0.0246 N

Revision date: 08.03.2018 Product code: 2409232 Page 5 of 8

Density (at 20 °C): 1,05 g/cm³
Bulk density: not applicable
Water solubility: soluble

Solubility in other solvents

no data available

(at 20 °C)

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: 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.

### 10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

### 10.5. Incompatible materials

Oxidizing agents

### 10.6. Hazardous decomposition products

Sodium oxides Carbon oxides

### **Further information**

Stable under recommended storage conditions.

## **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

#### **Acute toxicity**

No data is available on the product itself.



according to Regulation (EC) No 1907/2006

# 24092-32 Sodium Thiosulfate Standard Solution, 0.0246 N

Revision date: 08.03.2018 Product code: 2409232 Page 6 of 8

CAS No	Chemical name								
	Exposure route	Dose		Species	Source	Method			
57-55-6	1,2-Propanediol								
	oral	LD50 mg/kg	20000	rat	Toxicology and Appli				
	dermal	LD50 mg/kg	20800	rabbit	Raw Material Data Ha				
7757-82-6	Sodium sulfate								
	oral	LD50 mg/kg	5989	mouse					
10102-17-7	Sodium thiosulfate								
	oral	LD50 mg/kg	>5000	rat	RTECS				

### Irritation and corrosivity

No known effect.

#### 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 data is available on the product itself.

Do not flush into surface water or sanitary sewer system.



according to Regulation (EC) No 1907/2006

# 24092-32 Sodium Thiosulfate Standard Solution, 0.0246 N

Revision date: 08.03.2018 Product code: 2409232 Page 7 of 8

CAS No	Chemical name	Chemical name							
	Aquatic toxicity	Dose		[h]   [d]	Species	Source	Method		
57-55-6	1,2-Propanediol	1,2-Propanediol							
	Acute fish toxicity	LC50 mg/l	51600		Oncorhynchus mykiss (rainbow trout)	OECD 203			
	Acute crustacea toxicity	EC50 mg/l	34400		Daphnia magna (Water flea)	Information taken from reference works and the literature.			
7757-82-6	Sodium sulfate								
	Acute fish toxicity	LC50	120 mg/l	96 h	Gambusia affinis	Merck			
	Acute crustacea toxicity	EC50 mg/l	2564	48 h					
10102-17-7	Sodium thiosulfate								
	Acute fish toxicity	LC50 mg/l	>10000	96 h					
	Acute crustacea toxicity	EC50 mg/l	1223	48 h					

### 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.

## Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
57-55-6	1,2-Propanediol	-0,92

#### 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



# **Safety Data Sheet**

HACH LANGE GmbH

according to Regulation (EC) No 1907/2006

## 24092-32 Sodium Thiosulfate Standard Solution, 0.0246 N

Revision date: 08.03.2018 Product code: 2409232 Page 8 of 8

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**

### 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

no data available

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

not applicable

#### 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**

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: 08.03.2018

Safety datasheet sections which have been updated: 4, 7, 8

#### **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.)