

Safety Data Sheet

according to Regulation (EC) No 1907/2006

107266 Alkaline Iodide-Azide Reagent Powder Pillows

Revision date: 24.10.2018

Product code: 107266

Page 1 of 11

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

107266 Alkaline Iodide-Azide Reagent Powder Pillows

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

Acute toxicity: Acute Tox. 3

Acute toxicity: Acute Tox. 3

Acute toxicity: Acute Tox. 3

Skin corrosion/irritation: Skin Corr. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

May be corrosive to metals.

Toxic if swallowed.

Toxic in contact with skin.

Toxic if inhaled.

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause damage to organs through prolonged or repeated exposure.

Harmful to aquatic life with long lasting effects.

2.2. Label elements**Regulation (EC) No. 1272/2008**

Safety Data Sheet

according to Regulation (EC) No 1907/2006

107266 Alkaline Iodide-Azide Reagent Powder Pillows

Revision date: 24.10.2018

Product code: 107266

Page 2 of 11

Hazard components for labelling

Lithium hydroxide
sodium azide

Signal word:

Danger

Pictograms:



Hazard statements

H290 May be corrosive to metals.
H301+H311+H331 Toxic if swallowed, in contact with skin or if inhaled.
H314 Causes severe skin burns and eye damage.
H373 May cause damage to organs through prolonged or repeated exposure.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe 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.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
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.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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]			
1310-65-2	Lithium hydroxide			55 - 65 %
	215-183-4			
	Acute Tox. 3, Acute Tox. 3, Skin Corr. 1A; H331 H301 H314			
7681-11-0	Potassium iodide			30-30%
	231-659-4			
	Skin Irrit. 2, Eye Irrit. 2; H315 H319			
26628-22-8	sodium azide			1-5 %
	247-852-1	011-004-00-7		
	Acute Tox. 1, Acute Tox. 2, Acute Tox. 2, Skin Corr. 1C, STOT SE 3, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1; H310 H330 H300 H314 H335 H373 H400 H410 EUH032			

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

107266 Alkaline Iodide-Azide Reagent Powder Pillows

Revision date: 24.10.2018

Product code: 107266

Page 3 of 11

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Take off all contaminated clothing immediately.
Consult a physician. Show this safety data sheet to the doctor in attendance.

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 immediately with plenty of water for at least 15 minutes.
Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty. 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. Show this safety data sheet to the doctor in attendance.

After ingestion

Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting.
Consult a physician. Show this safety data sheet to the doctor in attendance.

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

Toxic by inhalation. Toxic in contact with skin. Toxic if swallowed. Risk of serious damage to eyes. Acute dermal irritation/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**

Water, Dry powder, Carbon dioxide (CO₂)

The product itself does not burn.

Unsuitable extinguishing media

None known.

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.
Contact with metals liberates poisonous gas.
Container may explode if heated.
Cool closed containers exposed to fire with water spray.

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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

107266 Alkaline Iodide-Azide Reagent Powder Pillows

Revision date: 24.10.2018

Product code: 107266

Page 4 of 11

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

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.
Should not be released into the environment.

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**

Avoid contact with skin and eyes.
Use only in well-ventilated areas. Do not breathe vapours/dust.
Wash thoroughly after handling.

Advice on protection against fire and explosion

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

Hints on joint storage

Do not store together with Acids, Metals, Oxidizing agents

Further information on storage conditions

Accessible only for authorized 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 ³	fibres/ml	Category	Origin
1310-65-2	Lithium hydroxide	-	1		STEL (15 min)	WEL
26628-22-8	Sodium azide (as NaN ₃)	-	0.1		TWA (8 h)	WEL
		-	0.3		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.

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

107266 Alkaline Iodide-Azide Reagent Powder Pillows

Revision date: 24.10.2018

Product code: 107266

Page 5 of 11

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.
- Use only in area provided with appropriate exhaust ventilation.

Eye/face protection

- Safety glasses with side-shields

Hand protection

- 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.
- Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

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: 0,11 mm
- Break through time: 180 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.
- Remove and wash contaminated clothing before re-use.

Respiratory protection

- Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In the case of vapour formation use a respirator with an approved filter.
- Suitable mask with particle filter P3 (European Norm 143)

Environmental exposure controls

- Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Crystalline powder
Colour:	white
Odour:	odourless
pH-Value (at 20 °C):	12,6 (5 % solution)

Changes in the physical state

Melting point:	110 °C
Initial boiling point and boiling range:	no data available
Sublimation point:	no data available
Softening point:	no data available
Pour point:	no data available
:	no data available
Flash point:	not applicable

Flammability

Solid:	not applicable
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Safety Data Sheet

according to Regulation (EC) No 1907/2006

107266 Alkaline Iodide-Azide Reagent Powder Pillows

Revision date: 24.10.2018

Product code: 107266

Page 6 of 11

Gas: not applicable

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:

no data available

Vapour pressure:

no data available

Density (at 20 °C):

1,94 g/cm³

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:

no data available

Evaporation rate:

no data available

Solvent separation test:

no data available

Solvent content:

no data available

9.2. Other information

Solid content:

no data available

Corrosive in contact with metals

Aluminium: 6,3 mm/a

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

Corrosive to metals

The substance or mixture is not classified as self heating. The substance or mixture is not classified self-reactive.

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.

Exposure to moisture.

107266 Alkaline Iodide-Azide Reagent Powder Pillows

Revision date: 24.10.2018

Product code: 107266

Page 7 of 11

10.5. Incompatible materials

Metals, Acids, Combustible material, Oxidizing agents

10.6. Hazardous decomposition products

Hydrogen, by reaction with metals

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No toxicology information is available.

Acute toxicity

Toxic if swallowed, in contact with skin or if inhaled.

Toxic by inhalation, in contact with skin and if swallowed.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
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		
7681-11-0	Potassium iodide				
	oral	LD50 2779 mg/kg	rat		
26628-22-8	sodium azide				
	oral	LD50 27 mg/kg	rat		
	dermal	LD50 20 mg/kg	rabbit		
	inhalation vapour	ATE 0,5 mg/l			
	inhalation aerosol	ATE 0,05 mg/l			

Irritation and corrosivity

Causes severe skin burns and eye damage.

Causes skin and eye burns.

Sensitising effects

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

No known effect.

Carcinogenic/mutagenic/toxic effects for reproduction

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

Contains no ingredient listed as a carcinogen

STOT-single exposure

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

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

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

H373 - May cause damage to organs through prolonged or repeated exposure.

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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

107266 Alkaline Iodide-Azide Reagent Powder Pillows

Revision date: 24.10.2018

Product code: 107266

Page 8 of 11

Practical experience

Observations relevant to classification

None known.

Other observations

None known.

Further information

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

SECTION 12: Ecological information

12.1. Toxicity

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

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
7681-11-0	Potassium iodide					
	Acute fish toxicity	LC50 896 mg/l	96 h	Oncorhynchus mykiss (rainbow trout)	EPA	
26628-22-8	sodium azide					
	Acute fish toxicity	LC50 0,68 mg/l	96 h	Lepomis macrochirus (Bluegill sunfish)		
	Acute crustacea toxicity	EC50 4,2 mg/l	48 h	Daphnia pulex (Water flea)		

12.2. Persistence and degradability

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

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 data available

Further information

no data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

In accordance with local and national regulations.

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

Safety Data Sheet

according to Regulation (EC) No 1907/2006

107266 Alkaline Iodide-Azide Reagent Powder Pillows

Revision date: 24.10.2018

Product code: 107266

Page 9 of 11

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**Land transport (ADR/RID)**

14.1. UN number: UN2680
14.2. UN proper shipping name: LITHIUM HYDROXIDE
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Classification code: C6
Limited quantity: 1 kg
Transport category: 2
Hazard No: 80
Tunnel restriction code: E

Other applicable information (land transport)

Excepted Quantities: E2

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

Not tested

Marine transport (IMDG)

14.1. UN number: UN2680
14.2. UN proper shipping name: LITHIUM HYDROXIDE
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8



Special Provisions: -
Limited quantity: 1 kg
EmS: F-A, S-B

Other applicable information (marine transport)

Excepted Quantities: E2

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN2680
14.2. UN proper shipping name: LITHIUM HYDROXIDE
14.3. Transport hazard class(es): 8
14.4. Packing group: II
Hazard label: 8

Safety Data Sheet

according to Regulation (EC) No 1907/2006

107266 Alkaline Iodide-Azide Reagent Powder Pillows

Revision date: 24.10.2018

Product code: 107266

Page 10 of 11



Limited quantity Passenger:

5 kg

IATA-packing instructions - Passenger:

859

IATA-max. quantity - Passenger:

15 kg

IATA-packing instructions - Cargo:

863

IATA-max. quantity - Cargo:

50 kg

Other applicable information (air transport)

Excepted Quantities: E2

Passenger-LQ: Y844

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

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**

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):

2 - clearly 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: 24.10.2018

Safety datasheet sections which have been updated: 2, 10, 11, 15, 16

Revision: 02.11.2016

Safety datasheet sections which have been updated: 2-16

Revision: 01.03.2013

Safety Data Sheet

according to Regulation (EC) No 1907/2006

107266 Alkaline Iodide-Azide Reagent Powder Pillows

Revision date: 24.10.2018

Product code: 107266

Page 11 of 11

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. 3; H301	Calculation method
Acute Tox. 3; H311	Calculation method
Acute Tox. 3; H331	Calculation method
Skin Corr. 1A; H314	On basis of test data
Eye Dam. 1; H318	Calculation method
STOT RE 2; H373	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H300	Fatal if swallowed.
H301	Toxic if swallowed.
H301+H311+H331	Toxic if swallowed, in contact with skin or if inhaled.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
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.
EUH032	Contact with acids liberates very 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.)