

Safety Data Sheet

according to Regulation (EC) No 1907/2006

105932 Detergens Reagent

Revision date: 26.07.2016

Product code: 105932

Page 1 of 11

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

105932 Detergens Reagent

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Reagent for 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:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Dam. 1

Germ cell mutagenicity: Muta. 2

Carcinogenicity: Carc. 2

Hazard Statements:

Causes skin irritation.

Causes serious eye damage.

Suspected of causing genetic defects.

Suspected of causing cancer.

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

sulphuric acid ... %

Signal word: Danger**Pictograms:**

Safety Data Sheet

according to Regulation (EC) No 1907/2006

105932 Detergens Reagent

Revision date: 26.07.2016

Product code: 105932

Page 2 of 11

Hazard statements

H318	Causes serious eye damage.
H315	Causes skin irritation.
H341	Suspected of causing genetic defects.
H351	Suspected of causing cancer.

Precautionary statements

P201	Obtain special instructions before use.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
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.
P332+P313	If skin irritation occurs: Get medical advice/attention.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER/doctor.
P362	Take off contaminated clothing.
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

no data available

SECTION 3: Composition/information on ingredients**3.2. Mixtures**

Safety Data Sheet

according to Regulation (EC) No 1907/2006

105932 Detergens Reagent

Revision date: 26.07.2016

Product code: 105932

Page 3 of 11

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			75-85 %
	231-791-2			
7558-80-7	di-Sodium hydrogen phosphate anhydrous			15-20 %
	231-449-2			
7664-93-9	sulphuric acid ... %			< 5,0 %
	231-639-5			
	Met. Corr. 1, Skin Corr. 1A; H290 H314			
67-66-3	chloroform; trichloromethane			0,1-1 %
	200-663-8	602-006-00-4		
	Carc. 2, Muta. 2, Repr. 2, Acute Tox. 3, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT RE 1; H351 H341 H361d H331 H302 H315 H319 H372			
7784-46-5	Sodium arsenite			< 0,1 %
	232-070-5	033-002-00-5		
	Carc. 1A, Muta. 1B, Repr. 1B, Acute Tox. 3, Acute Tox. 3, Skin Irrit. 2, Eye Irrit. 2, STOT SE 1, STOT RE 1, Aquatic Acute 1 (M-Factor = 10), Aquatic Chronic 1 (M-Factor = 10); H350 H340 H360 H331 H301 H315 H319 H370 H372 H400 H410			
92-31-9	Toluidine Blue			< 0,01 %
	202-146-2			
	Muta. 2, Acute Tox. 4; H341 H302			

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.
- Take off all contaminated clothing immediately.
- 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

- Drink 1 or 2 glasses of water.
- Prevent vomiting if possible.
- Do NOT induce vomiting.
- Call a physician immediately.
- Never give anything by mouth to an unconscious person.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

105932 Detergens Reagent

Revision date: 26.07.2016

Product code: 105932

Page 4 of 11

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

Irritation and corrosion, Cough

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,

Unsuitable extinguishing media

No Limit

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

Prevent fire extinguishing water from contaminating surface water or the ground water system.

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).

Soak up with inert absorbent material.

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

Flush into sewer with plenty of water.

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Solutions with low pH-value must be neutralized before discharge.

pH: 6-9

Keep in suitable, closed containers for disposal.

Disposal together with normal waste is not allowed. Special disposal required according to local regulations.

Clean contaminated floors and objects thoroughly while observing environmental regulations.

S40 - To clean the floor and all objects contaminated by this material, use diluted alkaline solution.

P381 - Eliminate all ignition sources if safe to do so.

6.4. Reference to other sections

13. Disposal considerations

Safety Data Sheet

according to Regulation (EC) No 1907/2006

105932 Detergens Reagent

Revision date: 26.07.2016

Product code: 105932

Page 5 of 11

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

See also section 5

Further information on handling

Observe label precautions.
Avoid contact with skin, eyes and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Storage temperature: 5-25 °C. Keep away from heat and sources of ignition.

Keep away from combustible materials.

Store in original container. Do not use containers made of Light metals, Metals

Hints on joint storage

None known.
Do not store near acids.

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
67-66-3	Chloroform	2	9.9		TWA (8 h)	WEL
7664-93-9	Sulphuric acid (mist)	-	0.05		TWA (8 h)	WEL

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.

Eye/face protection

Safety glasses with side-shields

Chemical resistant goggles must be worn.

Hand protection

Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU

Safety Data Sheet

according to Regulation (EC) No 1907/2006

105932 Detergens Reagent

Revision date: 26.07.2016

Product code: 105932

Page 6 of 11

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.

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

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

Ensure adequate ventilation, especially in confined areas.

In case of insufficient ventilation, wear suitable respiratory equipment.

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:	liquid
Colour:	blue
Odour:	odourless
pH-Value:	1,2

Changes in the physical state

Melting point:	-38 °C
Initial boiling point and boiling range:	110 °C
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	no data available
:	no data available
Flash point:	no data available
Sustaining combustion:	No data available

Flammability

Solid:	not applicable
Gas:	no data available

Explosive properties

no data available

Lower explosion limits:	no data available
Upper explosion limits:	no data available
Ignition temperature:	no data available

Auto-ignition temperature

Solid:	not applicable
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:	1,142 g/cm ³

Safety Data Sheet

according to Regulation (EC) No 1907/2006

105932 Detergens Reagent

Revision date: 26.07.2016

Product code: 105932

Page 7 of 11

Bulk density: not applicable

Water solubility: miscible

Solubility in other solvents

soluble (Alcohol)

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

No dangerous reaction known under conditions of normal use.

Gives off hydrogen by reaction with metals.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Reacts with the following substances: Oxidizing agents, Metals

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

Decomposes on heating.

10.5. Incompatible materials

woven fabric, Organic materials, Metals

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No toxicology information is available.

Acute toxicity

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

No data is available on the product itself.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

105932 Detergens Reagent

Revision date: 26.07.2016

Product code: 105932

Page 8 of 11

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7558-80-7	di-Sodium hydrogen phosphate anhydrous				
	oral	LD50 8290 mg/kg	rat		
7664-93-9	sulphuric acid ... %				
	oral	LD50 2140 mg/kg	rat		
67-66-3	chloroform; trichloromethane				
	oral	LD50 695 mg/kg	rat	Gestis	
	dermal	LD50 20000 mg/kg	rabbit	Gestis	
	inhalation (4 h) vapour	LC50 47,7 mg/l	rat	Gestis	
	inhalation aerosol	ATE 0,5 mg/l			
7784-46-5	Sodium arsenite				
	oral	LD50 41 mg/kg	rat		
	dermal	LD50 150 mg/kg	rat		
	inhalation vapour	ATE 3 mg/l			
	inhalation aerosol	ATE 0,5 mg/l			
92-31-9	Toluidine Blue				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

Causes serious eye damage.
Causes skin irritation.

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing genetic defects. (chloroform; trichloromethane; Toluidine Blue)
Suspected of causing cancer. (chloroform; trichloromethane)
Reproductive toxicity: 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.

Practical experience
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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

105932 Detergens Reagent

Revision date: 26.07.2016

Product code: 105932

Page 9 of 11

No data is available on the product itself.

CAS No	Chemical name	Aquatic toxicity		Dose	[h] [d]	Species	Source	Method
67-66-3	chloroform; trichloromethane	Acute fish toxicity		LC50	28 mg/l	96 h		Gestis
		Acute crustacea toxicity		EC50	66,8 mg/l	48 h		Gestis
7784-46-5	Sodium arsenite	Acute algae toxicity		ErC50	0,07 mg/l			
		Acute crustacea toxicity		EC50	1,27 mg/l	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
67-66-3	chloroform; trichloromethane	2

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

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

Land transport (ADR/RID)

Safety Data Sheet

according to Regulation (EC) No 1907/2006

105932 Detergens Reagent

Revision date: 26.07.2016

Product code: 105932

Page 10 of 11

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 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****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 19: Sodium arsenite

Entry 32: chloroform; trichloromethane

National regulatory information**15.2. Chemical safety assessment**

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

SECTION 16: Other information**Changes**

Revision: 26.07.2016

Safety datasheet sections which have been updated: 1-16

Relevant H and EUH statements (number and full text)

H290	May be corrosive to metals.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H340	May cause genetic defects.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

105932 Detergens Reagent

Revision date: 26.07.2016

Product code: 105932

Page 11 of 11

H341	Suspected of causing genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
H361d	Suspected of damaging the unborn child.
H370	Causes damage to organs.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic 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.)