

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### LCA 555 Standard Solution BSB5/BOD5/DBO5; 1/1

Revision date: 29.03.2017

Product code: LCA555

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

### 1.1. Product identifier

LCA 555 Standard Solution BSB5/BOD5/DBO5; 1/1

### 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:

Oxidising solid: Ox. Sol. 3

Acute toxicity: Acute Tox. 4

Hazard Statements:

May intensify fire; oxidiser.

Harmful if swallowed.

### 2.2. Label elements

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

#### Hazard components for labelling

Sodium nitrate

Signal word: Warning

Pictograms:



#### Hazard statements

H272 May intensify fire; oxidiser.  
H302 Harmful if swallowed.

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#### Precautionary statements

- P210 Keep away from heat. No Smoking.  
P221 Take any precaution to avoid mixing with combustibles.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.

#### 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]			
7631-99-4	Sodium nitrate	> 95 %		
	231-554-3			
	Ox. Sol. 3, Acute Tox. 4; H272 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.

##### After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.  
Consult 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.  
Consult a physician.

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

irritant effects, Diarrhoea, Nausea, Vomiting

#### 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.

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

Oxidizing properties  
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**

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.

#### **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.  
The product should only be used in areas from which all naked lights and other sources of ignition have been excluded.

##### **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**

##### **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

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#### Hand protection

Use barrier skin cream.

Chemical resistant protective gloves

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

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:	lyophilised cake
Colour:	white
Odour:	mild, unpleasant
pH-Value:	5,5 - 8

#### Changes in the physical state

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

#### Flammability

Solid:	no data available
Gas:	no data available

#### 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

H272 - May intensify fire; oxidiser.

Vapour pressure:	not applicable
Vapour pressure:	not applicable
Density (at 20 °C):	2,26 g/cm <sup>3</sup>
Bulk density:	no data available
Water solubility: (at 20 °C)	soluble

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#### 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

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

Reacts with the following substances: Organic Substances, Combustible material, Powdered metals

#### 10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

#### 10.5. Incompatible materials

Combustible material

Alkali metals

#### 10.6. Hazardous decomposition products

Nitrous acid and other nitrosating agents

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

##### Toxicokinetics, metabolism and distribution

No toxicology information is available.

##### Acute toxicity

No data is available on the product itself.

##### ATEmix calculated

ATE (oral) 1306,9 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7631-99-4	Sodium nitrate				
	oral	LD50 mg/kg	1267	rat	

#### Irritation and corrosivity

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Irritating to eyes.

May cause nausea, abdominal spasms and irritation of the mucous membranes.

#### 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

#### Specific effects in experiment on an animal

No toxicology information is 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.

Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
7631-99-4	Sodium nitrate					
	Acute fish toxicity	LC50 mg/l	6200	96 h	Ictalurus catus (catfish)	IUCLID
	Acute crustacea toxicity	EC50 mg/l	3580	48 h	Daphnia magna (Water flea)	IUCLID

#### 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

##### Advice on disposal

In accordance with local and national regulations. Our local agencies will accept used cuvettes to ensure their proper disposal.

##### Waste disposal number of waste from residues/unused products

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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 3316  
**14.2. UN proper shipping name:** Chemical kit  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** II  
Hazard label: 9



Classification code: M11  
Special Provisions: 251 340  
Limited quantity: SP251  
Excepted quantity: SP340  
Transport category: 2  
Hazard No: -  
Tunnel restriction code: E

### Inland waterways transport (ADN)

**Other applicable information (inland waterways transport)**  
Not tested

### Marine transport (IMDG)

**14.1. UN number:** UN 3316  
**14.2. UN proper shipping name:** CHEMICAL KIT  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** II  
Hazard label: 9



Marine pollutant: -  
Special Provisions: 251, 340  
Limited quantity: See SP251  
Excepted quantity: SP340  
EmS: F-A, S-P

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

**14.1. UN number:** UN 3316

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**14.2. UN proper shipping name:** CHEMICAL KIT**14.3. Transport hazard class(es):** 9**14.4. Packing group:** II

Hazard label: 9



Special Provisions: A44 A163

Limited quantity Passenger: 1 kg

Passenger LQ: Y960

Excepted quantity: E0

IATA-packing instructions - Passenger: 960

IATA-max. quantity - Passenger: 10 kg

IATA-packing instructions - Cargo: 960

IATA-max. quantity - Cargo: 10 kg

**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

**Other applicable information**

These transport data apply to the entire pack

**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 Date 29.03.2017

Safety datasheet sections which have been updated: 7, 9, 14

Revision Date 23.04.2015

Safety datasheet sections which have been updated: 2

Revision: 6.05.2014

Safety datasheet sections which have been updated: 2, 4, 6, 8, 10, 11, 12, 14

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

H272 May intensify fire; oxidiser.

H302 Harmful if swallowed.

**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.)*