

## 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	
	GHS Classification			
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
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**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

##### Disposal recommendations

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

##### List of Wastes Code - 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

**List of Wastes Code - 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

**List of Wastes Code - 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 the present level of our knowledge. It does not, however, give assurance 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.)*

DOMINIQUE DUTSCHER SAS