

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**LCW 902 Crack-Set, LCW 902-A; 1/3**

Revision date: 26.04.2017

Product code: LCW902-1

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

LCW 902 Crack-Set, LCW 902-A; 1/3

**1.2. Relevant identified uses of the substance or mixture and uses advised against****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  
Unit 1, Chestnut Road Western Industrial Estate  
Dublin 12 - Ireland  
Tel. +353 (0)1 4602522 \* +353 (0)1 4509337  
info-ie@hach.com

**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

Skin corrosion/irritation: Skin Corr. 1A

Hazard Statements:

May be corrosive to metals.

Causes severe skin burns and eye damage.

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

Sulphuric acid 38 %

**Signal word:** Danger**Pictograms:****Hazard statements**

H290

May be corrosive to metals.

H314

Causes severe skin burns and eye damage.

**Precautionary statements**

P280

Wear protective gloves/protective clothing/eye protection/face protection.

P303+P361+P353

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

**Additional advice on labelling**

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

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**2.3. Other hazards**

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

**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]			
7732-18-5	Water			> 60 %
	231-791-2			
7664-93-9	Sulphuric acid ... %			< 40 %
	231-639-5	016-020-00-8		
	Skin Corr. 1A; H314			

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. Consult a physician.

**After contact with skin**

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

**After ingestion**

Do NOT induce vomiting. Drink 1 or 2 glasses 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**

Irritation and 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**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

The product itself does not burn.  
Gives off hydrogen by reaction with metals. Reacts violently with water.

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**5.3. Advice for firefighters**

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.

After cleaning, flush away traces with water.

**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.

Do not breathe vapours or spray mist. Use only in well-ventilated areas.

**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 container tightly closed in a dry and well-ventilated place.

**Advice on storage compatibility**

Protect against Bases, Oxidizing agents, Metals

**Further information on storage conditions**

Keep locked up or in an area accessible only to qualified or authorised persons.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
7664-93-9	Sulphuric acid	-	1		TWA (8 h)	
		-	-		STEL (15 min)	

**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.

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**Eye/face protection**

Safety glasses with side-shields

**Hand protection**

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

**Skin protection**

Avoid contact with skin, eyes and clothing.

**Respiratory protection**

Ensure adequate ventilation, especially in confined areas.

Breathing apparatus only if aerosol or dust is formed.

Recommended Filter type: ABEK-filter

**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:	colourless
Odour:	odourless

**Test method**

pH-Value (at 20 °C):	< 0,5
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**Changes in the physical state**

Melting point:	not applicable
Initial boiling point and boiling range:	119 °C
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not applicable
:	no data available
Flash point:	not applicable
Sustaining combustion:	No data available

**Flammability**

Solid:	not applicable
Gas:	not applicable

**Explosive properties**

not applicable

Lower explosion limits:	not applicable
Upper explosion limits:	not applicable
Ignition temperature:	not applicable

**Auto-ignition temperature**

Solid:	not applicable
Gas:	not applicable

Decomposition temperature:	not applicable
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**Oxidizing properties**

not applicable

Vapour pressure:	no data available
Vapour pressure:	no data available
Density (at 20 °C):	1,3 g/cm <sup>3</sup>

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Bulk density: no data available

Water solubility: completely soluble

**Solubility in other solvents**

soluble

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

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

Corrosive to metals

Reactivity Hazard: Oxidizing agents

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

Reacts with the following substances: Alkali metals, Alkaline earth metals

**10.4. Conditions to avoid**

Extremes of temperature and direct sunlight.

**10.5. Incompatible materials**

Bases, Oxidizing agents

**10.6. Hazardous decomposition products**

Gives off hydrogen by reaction with metals.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

No data is available on the product itself.

**Irritation and corrosivity**

The product causes burns of eyes, skin and mucous membranes.

Liquid causes strong irritation of upper respiratory system and severe corneal injury. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach.

**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.

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**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**

LD50/oral/rat = 2140 mg/kg (25 % solution)

**Additional information on tests**

None known.

**Practical experience****Other observations**

None known.

**Further information**

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.

**12.2. Persistence and degradability**

No data is available on the product itself.

**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 known effect.

Discharge into the environment must be avoided.

**Further information**

Discharge into the environment must be avoided.

**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

**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

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### 14.4. Packing group:

Hazard label:

II

9



Classification code:

M11

Special Provisions:

251 340

Limited quantity:

SP251

Excepted quantity:

SP340

Transport category:

2

Hazard No:

-

Tunnel restriction code:

E

### Marine transport (IMDG)

#### 14.1. UN number:

UN 3316

#### 14.2. UN proper shipping name:

CHEMICAL KIT

#### 14.3. Transport hazard class(es):

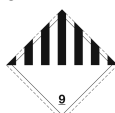
9

#### 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

#### 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.

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#### 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).
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 26.04.2017

Safety datasheet sections which have been updated: 14, 15

Revision: 15.10.2015

Safety datasheet sections which have been updated: 2, 11

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

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.

#### 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.)*



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

LCW 902 Crack-Set, LCW 902-B; 2/3

CAS No: 7727-21-1  
Index No: 016-061-00-1  
EC No: 231-781-8

**1.2. Relevant identified uses of the substance or mixture and uses advised against****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  
Unit 1, Chestnut Road Western Industrial Estate  
Dublin 12 - Ireland  
Tel. +353 (0)1 4602522 \* +353 (0)1 4509337  
info-ie@hach.com

**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  
Serious eye damage/eye irritation: Eye Irrit. 2  
Specific target organ toxicity - single exposure: STOT SE 3  
Skin corrosion/irritation: Skin Irrit. 2  
Respiratory or skin sensitisation: Resp. Sens. 1  
Respiratory or skin sensitisation: Skin Sens. 1  
Hazard Statements:  
May intensify fire; oxidiser.  
Harmful if swallowed.  
Causes serious eye irritation.  
May cause respiratory irritation.  
Causes skin irritation.  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
May cause an allergic skin reaction.

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

dipotassium peroxodisulphate, potassium persulphate

**Signal word:** Danger**Pictograms:**

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### Hazard statements

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

### Precautionary statements

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

### 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

### 3.1. Substances

#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification according to Regulation (EC) No. 1272/2008 [CLP]			
7727-21-1	dipotassium peroxodisulphate, potassium persulphate			100 %
	231-781-8	016-061-00-1		
	Ox. Sol. 3, Acute Tox. 4, Eye Irrit. 2, STOT SE 3, Skin Irrit. 2, Resp. Sens. 1, Skin Sens. 1; H272 H302 H319 H335 H315 H334 H317			

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Show this safety data sheet to the doctor in attendance.

#### After inhalation

Move to fresh air.

#### After contact with skin

Take off all contaminated clothing immediately. Wash off immediately with plenty of water. Consult 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. Consult a physician.

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

irritant effects, Allergic reactions, Cough, Shortness of breath

### 4.3. Indication of any immediate medical attention and special treatment needed

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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.

#### Unsuitable extinguishing media

No Limit

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

Oxidizing agents (strong) - Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges.

In the event of fire the following can be released: Sulphur oxides

### 5.3. Advice for firefighters

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

Use mechanical handling equipment.

Keep in suitable, closed containers 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.

Use only in well-ventilated areas. Do not breathe vapours/dust.

#### Further information on handling

Observe label precautions.

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

#### Requirements for storage rooms and vessels

Keep in a dry, cool place.

#### Advice on storage compatibility

Keep away from combustible material.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

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### Occupational exposure limits

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
7727-21-1	Dipotassium peroxodisulphate (Measured as [S2O8])	-	0.1		TWA (8 h)	
		-	-		STEL (15 min)	

### 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.

#### Eye/face protection

Safety glasses with side-shields

#### Hand protection

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

#### Skin protection

Avoid contact with skin, eyes and clothing.

#### Respiratory protection

Provide adequate ventilation.

Breathing apparatus only if aerosol or dust is formed.

Recommended Filter type: ABEK-filter

#### 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: powder  
 Colour: white  
 Odour: odourless

#### Test method

pH-Value (at 20 °C): 4

#### Changes in the physical state

Melting point: 100 °C Decomposition temperature  
 Initial boiling point and boiling range: not applicable  
 Sublimation point: no data available  
 Softening point: no data available  
 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

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**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:

100 °C

**Oxidizing properties**

no data available

Vapour pressure:

no data available

Vapour pressure:

no data available

Density (at 20 °C):

2,48 g/cm³

Bulk density:

1150 kg/m³

Water solubility:

47 g/L

(at 20 °C)

**Solubility in other solvents**

no data available

Partition coefficient:

not applicable

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**

Oxidizing agents (strong)

**10.2. Chemical stability**

Stable under recommended storage conditions.

**10.3. Possibility of hazardous reactions**

Reacts with the following substances: Metals, Heavy metals, Reducing agents

**10.4. Conditions to avoid**

To avoid thermal decomposition, do not overheat.

Exposure to moisture.

**10.5. Incompatible materials**

Combustible material

Reducing agents

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Bases

### 10.6. Hazardous decomposition products

Sulphur oxides

## 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	
7727-21-1	dipotassium peroxodisulphate, potassium persulphate					
	oral	LD50 802 mg/kg	Rat	GESTIS		

#### Irritation and corrosivity

Contact with eyes or skin causes irritation.

#### Sensitising effects

May cause sensitisation by inhalation.

May cause sensitisation by skin contact.

#### Carcinogenic/mutagenic/toxic effects for reproduction

Contains no ingredient listed as a carcinogen

#### STOT-single exposure

H335 - May cause respiratory irritation.

#### 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.

#### Additional information on tests

None known.

#### 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.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
7727-21-1	dipotassium peroxodisulphate, potassium persulphate					
	Acute fish toxicity	LC50 100 mg/l	96 h	Poecilia reticulata	Hommel	

### 12.2. Persistence and degradability

No data is available on the product itself.

### 12.3. Bioaccumulative potential

no data available

### 12.4. Mobility in soil

no data available

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

no data available

**12.6. Other adverse effects**

Discharge into the environment must be avoided.

**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

**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

**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)**

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**LCW 902 Crack-Set, LCW 902-B; 2/3**

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<b>14.1. UN number:</b>	UN 3316
<b>14.2. UN proper shipping name:</b>	CHEMICAL KIT
<b>14.3. Transport hazard class(es):</b>	9
<b>14.4. Packing group:</b>	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

**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**

For this substance a chemical safety assessment has not been carried out.

**SECTION 16: Other information****Changes**

Revision Date 26.04.2017

Safety datasheet sections which have been updated: 9, 14, 15

Revision: 15.10.2015

Safety datasheet sections which have been updated: 2, 8, 11

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

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.



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### **LCW 902 Crack-Set, LCW 902-B; 2/3**

Revision date: 26.04.2017

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#### **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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**LCW 902 Crack-Set, LCW 902-C; 3/3**

Revision date: 26.04.2017

Product code: LCW902-3

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

LCW 902 Crack-Set, LCW 902-C; 3/3

**1.2. Relevant identified uses of the substance or mixture and uses advised against****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  
Unit 1, Chestnut Road Western Industrial Estate  
Dublin 12 - Ireland  
Tel. +353 (0)1 4602522 \* +353 (0)1 4509337  
info-ie@hach.com

**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****Regulation (EC) No. 1272/2008**

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1A

Serious eye damage/eye irritation: Eye Dam. 1

Hazard Statements:

Causes severe skin burns and eye damage.

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

Sodium hydroxide; caustic soda

**Signal word:** Danger**Pictograms:****Hazard statements**

H314 Causes severe skin burns and eye damage.

**Precautionary statements**

P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P314 Get medical advice/attention 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**

no data available

**Safety Data Sheet**

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**LCW 902 Crack-Set, LCW 902-C; 3/3**

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**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]			
7732-18-5	Water			< 70%
	231-791-2			
1310-73-2	Sodium hydroxide; caustic soda			< 30%
	215-185-5	011-002-00-6		
	Skin Corr. 1A; H314			
141-53-7	Sodium formate			< 10%
	205-488-0			

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. Consult a physician.  
Show this safety data sheet to the doctor in attendance.

**After contact with eyes**

Rinse immediately with plenty of water for at least 15 minutes. Call a physician immediately.

**After ingestion**

Do NOT induce vomiting. Drink 1 or 2 glasses 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**

Irritation and 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**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**5.3. Advice for firefighters**

In the event of fire, wear self-contained breathing apparatus.

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**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.  
After cleaning, flush away traces with water.

**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.

**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.

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters****Occupational exposure limits**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
1310-73-2	Sodium hydroxide	-	-		TWA (8 h)	
		-	2		STEL (15 min)	

**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

**Hand protection**

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

**Skin protection**

Avoid contact with skin, eyes and clothing.

**Respiratory protection**

Provide adequate ventilation.

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## LCW 902 Crack-Set, LCW 902-C; 3/3

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Breathing apparatus only if aerosol or dust is formed.

Recommended Filter type: ABEK-filter

### 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: colourless  
 Odour: odourless

### Test method

pH-Value (at 20 °C): 14

### Changes in the physical state

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

### Flammability

Solid: not applicable  
 Gas: not applicable

### Explosive properties

not applicable

Lower explosion limits: not applicable  
 Upper explosion limits: not applicable  
 Ignition temperature: not applicable

### Auto-ignition temperature

Solid: not applicable  
 Gas: not applicable

Decomposition temperature: no data available

### Oxidizing properties

not applicable

Vapour pressure: no data available  
 Vapour pressure: no data available  
 Density (at 20 °C): 1,33 g/cm<sup>3</sup>  
 Bulk density: no data available  
 Water solubility: completely soluble

### Solubility in other solvents

soluble

Partition coefficient: no data available  
 Viscosity / dynamic: no data available  
 Viscosity / kinematic: no data available

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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
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no data available

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

#### **10.1. Reactivity**

None known.

#### **10.2. Chemical stability**

Stable under recommended storage conditions.

#### **10.3. Possibility of hazardous reactions**

None known.

#### **10.4. Conditions to avoid**

Extremes of temperature and direct sunlight.

#### **10.5. Incompatible materials**

Acids

#### **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.

##### **Irritation and corrosivity**

The product causes burns of eyes, skin and mucous membranes.

##### **Sensitising effects**

No known effect.

##### **Carcinogenic/mutagenic/toxic effects for reproduction**

No known effect.

##### **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.

##### **Additional information on tests**

None known.

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### Further information

Handle in accordance with good industrial hygiene and safety practice.

## SECTION 12: Ecological information

### 12.1. Toxicity

Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
1310-73-2	Sodium hydroxide; caustic soda					
	Acute fish toxicity	LC50 mg/l	45,4	96 h Onchorhynchus mykiss		

### 12.2. Persistence and degradability

No data is available on the product itself.

### 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

Discharge into the environment must be avoided.

## 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

## 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

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## LCW 902 Crack-Set, LCW 902-C; 3/3

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Transport category: 2  
Hazard No: -  
Tunnel restriction code: E

### 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  
**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

## 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).  
Water contaminating class (D): 1 - slightly water contaminating



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#### **15.2. Chemical safety assessment**

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

### **SECTION 16: Other information**

#### **Changes**

Revision Date 26.04.2017

Safety datasheet sections which have been updated: 7, 9, 14, 15

Revision: 15.10.2015

Safety datasheet sections which have been updated: 2, 8

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

H314 Causes severe skin burns and eye damage.

#### **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.)*