

Safety Data Sheet

according to Regulation (EC) No 1907/2006

LCK 433 Nichtionische Tenside/Nonionic Surfactants/Les non-ioniques tensio-actifs; 1/1

Revision date: 04.12.2018

Product code: LCK433

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

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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:

Flammable liquid: Flam. Liq. 3

Carcinogenicity: Carc. 2

Hazard Statements:

Flammable liquid and vapour.

Suspected of causing cancer.

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

dichloromethane; methylene chloride

ethanol; ethyl alcohol

Signal word:

Warning

Pictograms:**Hazard statements**

H226

Flammable liquid and vapour.

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H351 Suspected of causing cancer.

Precautionary statements

P201 Obtain special instructions before use.
 P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
 P281 Use personal protective equipment as required.
 P308+P313 IF exposed or concerned: Get medical advice/attention.

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****Hazardous components**

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	GHS Classification			
75-09-2	dichloromethane; methylene chloride			<50 %
	200-838-9	602-004-00-3		
	Carc. 2; H351			
7732-18-5	Water			40-50 %
	231-791-2			
64-17-5	ethanol, ethyl alcohol			<6 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2; H225			
7447-40-7	Potassium chloride			<5 %
	231-211-8			

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. Obtain medical attention.

After contact with skin

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

Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious

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person. Induce vomiting, but only if victim is fully conscious. Obtain medical attention.

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

Suspect cancer hazard

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.
Water, Carbon dioxide (CO₂), Alcohol-resistant foam Dry powder,

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

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.
Do not breathe vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas.

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).

6.4. Reference to other sections

13. Disposal considerations

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.

Advice on protection against fire and explosion

None known.
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 container tightly closed in a dry and well-ventilated place.

7.3. Specific end use(s)

Laboratory chemicals Reagent for analysis

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SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
75-09-2	Dichloromethane	100	350		TWA (8 h)	WEL
		300	1060		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
75-09-2	Dichloromethane	carbon monoxide	30 ppm	end-tidal breath	Post shift

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.

Wash hands before breaks and after work.

General industrial hygiene practice.

Eye/face protection

Safety glasses with side-shields

Hand protection

Use barrier skin cream.

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

Gloves material: Viton, Layer thickness: 0,70 mm, Breakthrough time: >480 min. In splash contact: Glove material: nitrile rubber, Layer thickness 0,20 mm, Breakthrough time: > 30 min

Consult your supplier if the material is to be used for special applications such as in the food industry or for hygiene, medical or surgical end-use.

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

no data available

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 + yellow
Odour:	solvent-like
pH-Value (at 20 °C):	7,9

Changes in the physical state

Melting point: not applicable

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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:	45 °C
Sustaining combustion:	No data available
Flammability	
Solid:	no data available
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:	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):	1,22 g/cm ³
Bulk density:	not applicable
Water solubility: (at 20 °C)	20 g/L
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 no data available
Solvent content:	no data available

9.2. Other information

Solid content: no data available

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

No dangerous reaction known under conditions of normal use.

10.2. Chemical stability

The product is chemically stable.

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10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.
No hazardous decomposition products are known.

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

10.5. Incompatible materials

Oxygen,
Alkali metals,
Alkaline earth metals,
Powdered metals

10.6. Hazardous decomposition products

Phosgene
Hydrochloric acid

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

Dichloromethane : LD50/oral/rat = 1600mg/kg
LC50/inhalation/8h/rat = 52 g/m³

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
75-09-2	dichloromethane; methylene chloride				
	oral	LD50 mg/kg 1600	rat		
64-17-5	ethanol, ethyl alcohol				
	oral	LD50 mg/kg 6200	Rat	IUCLID	
	inhalation (4 h) vapour	LC50 95,6 mg/l	Rat	RTECS	
7447-40-7	Potassium chloride				
	oral	LD50 mg/kg 2600	Ratte	RTECS	

Irritation and corrosivity

No known effect.

Sensitising effects

No known effect.

Carcinogenic/mutagenic/toxic effects for reproduction

H351 - Suspected of causing cancer.

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

Further information

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

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SECTION 12: Ecological information**12.1. Toxicity**

Leuciscus idus (Golden orfe) :529 mg/l

LC50/96h/Lepomis macrochirus = : 220mg/l

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
75-09-2	dichloromethane; methylene chloride					
	Acute fish toxicity	LC50 193 mg/l	96 h	Pimephales promelas (fathead minnow)		
64-17-5	ethanol, ethyl alcohol					
	Acute crustacea toxicity	EC50 9268 - 14221 mg/l	48 h	Daphnia magna	IUCLID	
7447-40-7	Potassium chloride					
	Acute fish toxicity	LC50 920 mg/l	96 h	Gambusia affinis (Mosquito fish)	IUCLID	
	Acute algae toxicity	ErC50 2500 mg/l	72 h	Pseudokirchneriella subcapitata (green algae)	IUCLID	
	Acute crustacea toxicity	EC50 825 mg/l	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.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
64-17-5	ethanol, ethyl alcohol	-0,31

12.4. Mobility in soil

No data is available on the product itself.

12.5. Results of PBT and vPvB assessment

No data is available on the product itself.

12.6. Other adverse effects

No known effect.

SECTION 13: Disposal considerations**13.1. Waste treatment methods****Disposal recommendations**

Our local agencies will accept used cuvettes to ensure their proper disposal.

List of Wastes Code - 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

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

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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

Contaminated packaging

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

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

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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

no data available

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****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 3: ethanol, ethyl alcohol

Entry 59: dichloromethane; methylene chloride

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 Date 04.12.2018

Safety datasheet sections which have been updated: 3

Revision Date 28.08.2017

Safety datasheet sections which have been updated: 2, 3, 4, 10, 11

Revision Date 21.03.2017

Safety datasheet sections which have been updated: 7, 14

Revision: 08.10.2015

Safety datasheet sections which have been updated: 9

Revision: 26.03.2014

Safety datasheet sections which have been updated: 2, 4-16

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This data sheet contains changes from the previous version in section(s): 9

Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H351	Suspected of causing cancer.

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.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)