

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Lc 1/18 N surface cleaner

Revision date: 13.11.2017

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

1.1. Product identifier

Lc 1/18 N surface cleaner

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

Use of the substance/mixture

Cleaning agent

1.3. Details of the supplier of the safety data sheet

Company name:	LcM GmbH	
Street:	Siemensstrasse 26-28	
Place:	D-32120 Hiddenhausen	
Telephone:	+49 5223 189 66 30	Telefax: +49 5223 189 66 35
e-mail:	info@lcm-gmbh.eu	
Internet:	http://www.lcm-gmbh.info/	

1.4. Emergency telephone number:

+49 5223 189 66 30

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Flammable liquid: Flam. Liq. 2

Aspiration hazard: Asp. Tox. 1

Serious eye damage/eye irritation: Eye Irrit. 2

Specific target organ toxicity - single exposure: STOT SE 3

Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:

Highly flammable liquid and vapour.

May be fatal if swallowed and enters airways.

Causes serious eye irritation.

May cause drowsiness or dizziness.

Harmful to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics

Signal word: Danger

Pictograms:



Hazard statements

H225	Highly flammable liquid and vapour.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H304	May be fatal if swallowed and enters airways.
H412	Harmful to aquatic life with long lasting effects.

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Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P403+P233 Store in a well-ventilated place. Keep container tightly closed.
- P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P331 Do NOT induce vomiting.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

Special labelling of certain mixtures

- EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

No information available.

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]			
64-17-5	ethanol, ethyl alcohol			50 - < 100 %
	200-578-6	603-002-00-5		
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics			10 - < 25 %
	920-750-0		01-2119473851-33	
	Flam. Liq. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H225 H336 H304 H411			
	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics			10 - < 25 %
	927-241-2		01-2119471843-32	
	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 3; H226 H336 H304 H412			

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

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse.

After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion

Rinse mouth immediately and drink plenty of water.

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

No information available.

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

Carbon dioxide (CO₂), Foam, Extinguishing powder.

Unsuitable extinguishing media

Water.

5.2. Special hazards arising from the substance or mixture

Highly flammable. Vapours can form explosive mixtures with air.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

6.2. Environmental precautions

Do not allow uncontrolled discharge of product into the environment. Danger of explosion

6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Advice on protection against fire and explosion

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

Vapours can form explosive mixtures with air.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on storage compatibility

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances.

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7.3. Specific end use(s)

Cleaning agent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics			
	Consumer DNEL, long-term	oral	systemic	699 mg/kg bw/day
	Worker DNEL, long-term	dermal	systemic	773 mg/kg bw/day
	Consumer DNEL, long-term	dermal	systemic	699 mg/kg bw/day
	Worker DNEL, long-term	inhalation	systemic	2035 mg/m ³
	Consumer DNEL, long-term	inhalation	systemic	608 mg/m ³
	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics			
	Consumer DNEL, long-term	oral	systemic	300 mg/kg bw/day
	Worker DNEL, long-term	dermal	systemic	300 mg/kg bw/day
	Consumer DNEL, long-term	dermal	systemic	300 mg/kg bw/day
	Worker DNEL, long-term	inhalation	systemic	1500 mg/m ³
	Consumer DNEL, long-term	inhalation	systemic	900 mg/m ³

8.2. Exposure controls



Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Protective and hygiene measures

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

Eye/face protection

Suitable eye protection: goggles.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

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Skin protection

Flame-retardant protective clothing. Wear anti-static footwear and clothing .

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	colourless	
Odour:	Solvent	
pH-Value:		not determined

Changes in the physical state

Melting point:		not determined
Initial boiling point and boiling range:		78 °C
Flash point:		1 °C

Flammability

Solid:		not applicable
Gas:		not applicable

Explosive properties

negative, no explosion

Lower explosion limits:		0,7 vol. %
Upper explosion limits:		15 vol. %
Ignition temperature:		200 °C

Auto-ignition temperature

Solid:		not applicable
Gas:		not applicable

Decomposition temperature:		not determined
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Oxidizing properties

Not oxidising.

Vapour pressure:		not determined
Density (at 20 °C):		0,767 g/cm ³

Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water	
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Solubility in other solvents

not determined

Partition coefficient:		not determined
Vapour density:		not determined
Evaporation rate:		not determined
Solvent content:		100,00 %

9.2. Other information

Solid content:		not determined
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SECTION 10: Stability and reactivity

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10.1. Reactivity

Highly flammable.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames. Vapours can form explosive mixtures with air.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
64-17-5	ethanol, ethyl alcohol				
	oral	LD50 mg/kg	6200	Rat	IUCLID
	inhalative (4 h) vapour	LC50	>20 mg/l	Mouse	
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics				
	oral	LD50 mg/kg	>5000	Rat	
	dermal	LD50 mg/kg	>2000	Rabbit	
	inhalative (4 h) vapour	LC50	>20 mg/l	Rat	
	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics				
	oral	LD50 mg/kg	>5000	Rat	
	dermal	LD50 mg/kg	>2000	Rabbit	
	inhalative (4 h) vapour	LC50	>20 mg/l	Rat	

Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
64-17-5	ethanol, ethyl alcohol					
	Acute crustacea toxicity	EC50 9268 - 14221 mg/l	48 h	Daphnia magna	IUCLID	
	Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics					
	Acute fish toxicity	LC50 1-10 mg/l	96 h			
	Acute crustacea toxicity	EC50 1-10 mg/l	48 h			
	Fish toxicity	NOEC 0,1-1 mg/l				
	Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, < 2% aromatics					
	Acute fish toxicity	LC50 1-10 mg/l	96 h			
	Acute crustacea toxicity	EC50 1-10 mg/l	48 h			

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

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

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The product has not been tested.

12.6. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Dispose of waste according to applicable legislation.

Contaminated packaging

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:

UN 1993

14.2. UN proper shipping name:

FLAMMABLE LIQUID, N.O.S.(ethanol, ethyl alcohol/Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha)

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14.3. Transport hazard class(es): 3

14.4. Packing group: I

Hazard label: 3



Classification code: F1

Special Provisions: 274

Limited quantity: 0

Excepted quantity: E3

Transport category: 1

Hazard No: 33

Tunnel restriction code: D/E

Inland waterways transport (ADN)

14.1. UN number: UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S.(ethanol, ethyl alcohol,Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha)

14.3. Transport hazard class(es): 3

14.4. Packing group: I

Hazard label: 3



Classification code: F1

Special Provisions: 274

Limited quantity: 0

Excepted quantity: E3

Marine transport (IMDG)

14.1. UN number: UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S.(ethanol, ethyl alcohol,Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha)

14.3. Transport hazard class(es): 3

14.4. Packing group: I

Hazard label: 3



Special Provisions: 274

Limited quantity: 0

Excepted quantity: E3

EmS: F-E, S-E

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: UN 1993

14.2. UN proper shipping name: FLAMMABLE LIQUID, N.O.S.(ethanol, ethyl alcohol,Naphtha (petroleum), hydrotreated light; Low boiling point hydrogen treated naphtha)

14.3. Transport hazard class(es): 3

14.4. Packing group: I

Hazard label: 3

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Special Provisions:	A3	
Limited quantity Passenger:	Forbidden	
Passenger LQ:	Forbidden	
Excepted quantity:	E3	
IATA-packing instructions - Passenger:		351
IATA-max. quantity - Passenger:		1 L
IATA-packing instructions - Cargo:		361
IATA-max. quantity - Cargo:		30 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Warning: Combustible liquid.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

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

2010/75/EU (VOC): 100 % (767 g/l)

2004/42/EC (VOC): 100 % (767 g/l)

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

Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

