

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Orthocryl LC cleaning fluid

Print date: 13.03.2014

Product code: 160-430

Page 1 of 7

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

1.1. Product identifier

Orthocryl LC cleaning fluid

Further trade names

Article no.: 160-430-00, 160-431-00

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

Use of the substance/mixture

Health services.

1.3. Details of the supplier of the safety data sheet

Company name:	DENTAURUM GmbH & Co. KG	
Street:	Turnstr. 31	
Place:	D-75228 Ispringen	
Telephone:	+49 7231 803 0	Telefax: +49 7231 803 295
e-mail:	info@dentaurum.de	
Internet:	www.dentaurum.com	

Further Information

Emergency telephone:		
07:00 - 16:15 (Mo - Do),	07:00 - 13:15 (Fr)	+49 7231 803 184
16:15 - 18:00 (Mo - Do),	13:15 - 18:00 (Fr)	+49 7231 803 0

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: F - Highly flammable
 R phrases:
 Highly flammable.

GHS classification

Hazard categories:
 Flammable liquid: Flam. Liq. 2
 Hazard Statements:
 Highly flammable liquid and vapour.

2.2. Label elements

Signal word:	Danger
Pictograms:	GHS02



Hazard statements

H225 Highly flammable liquid and vapour.

Precautionary statements

P210	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233	Keep container tightly closed.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P403+P235	Store in a well-ventilated place. Keep cool.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Orthocryl LC cleaning fluid

Print date: 13.03.2014

Product code: 160-430

Page 2 of 7

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
200-578-6	ethanol, ethyl alcohol	<= 96 %
64-17-5	F - Highly flammable R11	
603-002-00-5	Flam. Liq. 2; H225	
201-159-0	butanone; ethyl methyl ketone	<= 1 %
78-93-3	F - Highly flammable, Xi - Irritant R11-36-66-67	
606-002-00-3	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336	

Full text of R and H phrases: see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Move victim out of danger zone. Take off immediately all contaminated clothing.

After inhalation

Provide fresh air.

shortage of breath.: Oxygen.

In case of unconsciousness place in unconscious position and seek medical advice.

After contact with skin

Wash with generous amount of water. In case of skin irritation, seek medical treatment.

After contact with eyes

Rinse immediately carefully and thoroughly with eye-bath or water. In case of troubles or persistent symptoms, consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink large quantities of water.

Do NOT induce vomiting.

Immediately get medical attention.

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

Symptoms: Intoxication. Dizziness. vomiting.

Depression of the central nervous system.

Frequently or prolonged contact with skin may cause dermal irritation.

Prolonged/repetitive skin contact may cause skin defatting or dermatitis.

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

Treatment: Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water fog. alcohol resistant foam. Dry extinguishing powder. Carbon dioxide.

Extinguishing media which must not be used for safety reasons

High power water jet.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Orthocryl LC cleaning fluid

Print date: 13.03.2014

Product code: 160-430

Page 3 of 7

5.2. Special hazards arising from the substance or mixture

Combustible.
Vapours may form explosive mixtures with air.

5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Protective clothing. (Full protective suit.)

Additional information

Use water spray/stream to protect personnel and to cool endangered containers. 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

Wear personal protection equipment.
Provide adequate ventilation.
Keep away from: heat. Keep away from sources of ignition - No smoking.
Do not breathe gas/fumes/vapour/spray.
Avoid contact with skin, eye and clothing.

6.2. Environmental precautions

Do not empty into drains or the aquatic environment.
In case of gas being released or leakage into waters, ground or the drainage system, the appropriate authorities must be informed.

6.3. Methods and material for containment and cleaning up

Provide adequate ventilation.
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Treat the assimilated material according to the section on waste disposal. Flush away residues with water.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep container tightly closed.
Use only in well-ventilated areas.
Provide adequate ventilation.
In case of open handling equipment with built-in suction must be used.
Avoid contact with skin and eyes.

Advice on protection against fire and explosion

Combustible. Vapours may form explosive mixtures with air. The vapours are heavier than air and can accumulate in high concentrations on the ground, in cavities, channels and cellars. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges. Use explosion-protected machinery, apparatus, suction equipment, appliances etc. Use water spray/stream to protect personnel and to cool endangered containers.

Further information on handling

Take off immediately all contaminated clothing.
Do not breathe gas/fumes/vapour/spray.
Avoid contact with skin and eyes.
Keep away from food, drink and animal feedingstuffs.
When using do not eat, drink or smoke.
Wash hands before breaks and at the end of work.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a cool, well-ventilated place. Store in a dry place.
Keep away from: heat. Keep away from sources of ignition - No smoking.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Orthocryl LC cleaning fluid

Print date: 13.03.2014

Product code: 160-430

Page 4 of 7

Further information on storage conditions

Storage class: (LGK): 3

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
78-93-3	Butan-2-one (methyl ethyl ketone)	200	600		TWA (8 h)	WEL
		300	899		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL
		-	-		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
78-93-3	Butan-2-one	butan-2-one	70 µmol/L	urine	Post shift

8.2. Exposure controls

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection

Recommendation:

Dermatril Single-use gloves. NBR (Nitrile rubber). 0,11 mm

REF 162-907-00 (7/S), REF 162-908-00 (8/M), REF 162-909-00 (9/L)

Eye protection

Tightly sealed safety glasses.

Skin protection

Wear antistatic work clothing.

Environmental exposure controls

Do not empty into drains or the aquatic environment.

In case of gas being released or leakage into waters, ground or the drainage system, the appropriate authorities must be informed.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	blue
Odour:	like: Alcohol

Test method

Changes in the physical state

Boiling point: ca. 78 °C

Flash point: ca. 12 °C

Explosive properties

Vapours may form explosive mixtures with air.

Lower explosion limits: 3,5 vol. %

Upper explosion limits: 15 vol. %

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Orthocryl LC cleaning fluid

Print date: 13.03.2014

Product code: 160-430

Page 5 of 7

Vapour pressure:
(at 20 °C) ca. 60 hPa

Density (at 20 °C): 0,808 g/cm³

Water solubility: complete miscible

SECTION 10: Stability and reactivity

10.3. Possibility of hazardous reactions

Vapours may form explosive mixtures with air.

10.4. Conditions to avoid

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Can be released in case of fire: Carbon monoxide. Carbon dioxide (CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
64-17-5	ethanol, ethyl alcohol				
	oral	LD50	6200 mg/kg	Rat.	
	inhalative (4 h) vapour	LC50	95,6 mg/l	Rat.	

Irritation and corrosivity

Frequently or prolonged contact with skin may cause dermal irritation.
Prolonged/repetitive skin contact may cause skin defatting or dermatitis.
Irritating to eyes.

Sensitising effects

none/none

SECTION 12: Ecological information

12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	h	Species	Source
64-17-5	ethanol, ethyl alcohol					
	Acute crustacea toxicity	EC50 mg/l	9268 - 14221	48	Daphnia magna	

12.2. Persistence and degradability

Easily biodegradable (concerning to the criteria of the OECD)

12.3. Bioaccumulative potential

No indication of bio-accumulation potential.

12.4. Mobility in soil

No data available

12.6. Other adverse effects

Do not empty into drains or the aquatic environment.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Orthocryl LC cleaning fluid

Print date: 13.03.2014

Product code: 160-430

Page 6 of 7

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Waste disposal according to official state regulations.
Do not empty into drains or the aquatic environment.

Contaminated packaging

Water. Completely emptied packings can be re-cycled.

SECTION 14: Transport information

Land transport (ADR/RID)

<u>14.1. UN number:</u>	UN1170
<u>14.2. UN proper shipping name:</u>	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
<u>14.3. Transport hazard class(es):</u>	3
<u>14.4. Packing group:</u>	II
Hazard label:	3



Classification code:	F1
Special Provisions:	144 601
Limited quantity:	1 L
Transport category:	2
Hazard No:	33
Tunnel restriction code:	D/E

Other applicable information (land transport)

E2

Marine transport (IMDG)

<u>14.1. UN number:</u>	UN1170
<u>14.2. UN proper shipping name:</u>	ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
<u>14.3. Transport hazard class(es):</u>	3
<u>14.4. Packing group:</u>	II
Hazard label:	3



Special Provisions:	144
Limited quantity:	1 L
EmS:	F-E, S-D

Other applicable information (marine transport)

E2

Air transport (ICAO)

<u>14.1. UN number:</u>	UN1170
<u>14.2. UN proper shipping name:</u>	Ethanol solution
<u>14.3. Transport hazard class(es):</u>	3

Safety Data Sheet

according to Regulation (EC) No 1907/2006

Orthocryl LC cleaning fluid

Print date: 13.03.2014

Product code: 160-430

Page 7 of 7

14.4. Packing group:

II

Hazard label:

3



Special Provisions:

A3 A58 A180

Limited quantity Passenger:

1 L

IATA-packing instructions - Passenger:

353

IATA-max. quantity - Passenger:

5 L

IATA-packing instructions - Cargo:

364

IATA-max. quantity - Cargo:

60 L

Other applicable information (air transport)

E2

: Y341

14.5. Environmental hazards

Dangerous for the environment:

no

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

SECTION 16: Other information

Full text of R phrases referred to under Sections 2 and 3

- | | |
|----|---|
| 11 | Highly flammable. |
| 36 | Irritating to eyes. |
| 66 | Repeated exposure may cause skin dryness or cracking. |
| 67 | Vapours may cause drowsiness and dizziness. |

Full text of H statements referred to under Sections 2 and 3

- | | |
|------|-------------------------------------|
| H225 | Highly flammable liquid and vapour. |
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |

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 receiver of our product is singularly responsible for adhering to existing laws and regulations.

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