Trade name :	MD 555 cleaner Special detergent for suction systems		
Revision :	02.01.2018	Version (Revision) :	3.0.1 (3.0.0)
Print date :	02.01.2018		

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

1.1 Product identifier

MD 555 cleaner Special detergent for suction systems

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

Relevant identified uses

MD 555 is a non-foaming special cleaner for dental suction systems including drainage lines.

Product Categories [PC]

PC35 - Washing and cleaning products (including solvent based products)

Uses advised against

None, if handled according to order.

Remark

The product is intended for professional use.

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

orochemie GmbH + Co. KG

Street : Max-Planck-Straße 27

Postal code/city: 70806 Kornwestheim

Telephone : +49 7154 1308-0

Telefax: +49 7154 1308-40

Information contact : DÜRR DENTAL SE, Höpfigheimer Str. 17, 74321 Bietigheim-Bissingen, Germany Tel: <u>+49 7142 705-0</u>, Fax: <u>+49 7142 705-500</u>, <u>info@duerrdental.com</u>

in Australia:

DÜRR DENTAL SE, PO Box 2067, Woonona East New South Wales 2517, Australia, Louis Manera +61 (0)412 95 95 25

1.4 Emergency telephone number

Poisons Information Centre: Dial 13 11 26 24 hours a day, 7 days a week Australia wide

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2A ; Causes serious eye irritation.

Classification procedure

The classification was carried out according to the calculation method of Regulation No. (EC) 1272/2008 [CLP].

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] Hazard pictograms



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H319	Causes serious eye irritation.
Precautionary state	ements
P280	Wear protective gloves and eye/face protection.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
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.
P501	Dispose of contents/container to hazardous or special waste collection point.
Other hazards	

None

2.3

SECTION 3: Composition / information on ingredients

3.2 Mixtures

Description

MD 555 contains organic acids, foam-free surfactants, dyes and auxiliary agents in aqueous solution.

Hazardous ingredients

CITRIC ACID ; EC No. : 201-069-1; CAS No. : 77-92-9			
Weight fraction :	≥ 40 - < 45 %		
Classification 1272/2008 [CLP] :	Eye Irrit. 2 ; H319		

Additional information

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information

Remove contaminated, saturated clothing immediately. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Following inhalation

Provide fresh air. In case of respiratory tract irritation, consult a physician.

In case of skin contact

Wash with plenty of water. When in doubt or if symptoms are observed, get medical advice.

After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion

If swallowed, immediately drink: Water Never give anything by mouth to an unconscious person or a person with cramps. Do NOT induce vomiting. Call a physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye irritation.

4.3 Indication of any immediate medical attention and special treatment needed None

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO2) Extinguishing powder Water spray Water mist The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

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Unsuitable extinguishing media Full water jet

5.2 Special hazards arising from the substance or mixture None known.

Hazardous combustion products None known.

5.3 Advice for firefighters

Adapt protective equipment to surrounding fire.

Special protective equipment for firefighters

Adapt protective equipment to surrounding fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. See protective measures under point 7 and 8.

For non-emergency personnel

Use personal protection equipment. See protective measures under point 7 and 8.

For emergency responders

Personal protection equipment

See protective measures under point 7 and 8.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Collect in closed and suitable containers for disposal.

Other information

Treat the recovered material as prescribed in the section on waste disposal.

6.4 Reference to other sections

None

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Keep/Store only in original container. Please note safety instructions and directions for use on the drum. Handle and open container with care. Provide adequate ventilation. Do not breathe vapour/aerosol.

Protective measures

Measures to prevent fire

Usual measures for fire prevention. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep/Store only in original container. Keep container tightly closed. Keep in a cool, well-ventilated place. Do not store in temperatures below 5 °C.

Hints on joint storage

Store the foodstuffs separately.

7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

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8.1 Control parameters

DNEL/DMEL and PNEC values

There are no data available on the preparation itself.

8.2 Exposure controls

Personal protection equipment

Eye/face protection

Eye glasses with side protection DIN EN 166

Skin protection

Hand protection

Short-term exposure (Level 2: < 30 min): disposable gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.1 mm.

Long-term exposure (Level 6: < 480 min): protective gloves to EN374 category III, e.g. nitrile rubber, material thickness 0.7 mm.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

Body protection

Body protection: not required.

Respiratory protection

Usually no personal respirative protection necessary.

General health and safety measures

Keep away from food, drink and animal feedingstuffs. Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing. Wash hands before breaks and after work. Separate storage of work clothes. When using do not eat, drink, smoke, sniff.

No data available

Occupational exposure controls

Technical measures to prevent exposure

Provide adequate ventilation.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

(1013 hPa)

Appearance :	liquid
Colour :	light red
Odour :	odourless
Safety relevan	it basis data
Melting point/melt	ting range :
Initial boiling poin	t and boiling
range '	

menting point/menting range.	(1013 11Fa)				
Initial boiling point and boiling range :	(1013 hPa)	ca.	100	°C	
Decomposition temperature :	(1013 hPa)		not applicable		
Flash point :			not applicable		
Ignition temperature :			not applicable		
Lower explosion limit :			not applicable		
Upper explosion limit :			not applicable		
Vapour pressure :	(50 °C)		No data available		
Density :	(20 °C)		1,2 - 1,24	g/cm ³	
Solvent separation test :	(20 °C)	<	3	%	
Water solubility :	(20 °C)		100	Wt %	
pH value :	(20 °C / 100 g/l)		1,5 - 2,5		
log P O/W :			No data available		
Flow time :	(20 °C)	<	12	S	DIN-cup 4 mm
Odour threshold :			not applicable		
Maximum VOC content (EC) :			0	Wt %	

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Not applicable.

Not applicable.

Not corrosive to metals.

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Oxidising liquids : Explosive properties : Corrosive to metals :

9.2 Other information

None

SECTION 10: Stability and reactivity

10.1 Reactivity

None, if handled according to order.

10.2 Chemical stability

Stable under recommended storage and handling conditions (see section 7). Exothermal reaction with alkalis.

10.3 Possibility of hazardous reactions

Exothermal reaction with alkalis. **10.4 Conditions to avoid**

No information available.

10.5 Incompatible materials Alkali (lye), concentrated.

10.6 Hazardous decomposition products None known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There are no data available on the mixture itself.

Acute effects	
Acute oral toxicity	
Parameter :	ATEmix calculated
Exposure route :	Oral
Effective dose :	not relevant
Parameter :	LD50 (CITRIC ACID ; CAS No. : 77-92-9)
Exposure route :	Oral
Species :	Rat
Effective dose :	9999,99 mg/kg
Practical experience/human	evidence
Eye contact: irritation.	
Acute dermal toxicity	
Parameter :	ATEmix calculated
Exposure route :	Dermal
Effective dose :	not relevant
Parameter :	LD50 (CITRIC ACID ; CAS No. : 77-92-9)
Exposure route :	Dermal
Species :	Rat
Effective dose :	6730 mg/kg
Acute inhalation toxicity	
Parameter :	ATEmix calculated
Exposure route :	Inhalative (vapour)
Effective dose :	not relevant
Irritant and corrosive effe	ects
Causes serious eye irritation.	
,	

Sensitisation

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None known.

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) No information available.

No information available.

11.5 Additional information

The classification was carried out according to the calculation method of Regulation No. (EC) 1272/2008 [CLP] as well as in-house investigations.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity

There are no data available on the preparation itself.

Bacteria toxicity Parameter :

Species :

EC0 (CITRIC ACID ; CAS No. : 77-92-9) Bacteria toxicity > 10000 mg/l 24 h

12.2 Persistence and degradability

Abiotic degradation

No data available.

Effective dose :

Exposure time :

Biodegradation

All active agents are biodegradable at the dilution rates arising in the sewage system.

12.3 Bioaccumulative potential

No information available.

12.4 Mobility in soil

Known or predicted distribution to environmental compartments

There are no data available on the preparation itself.

Adsorption/Desorption

12.5 Results of PBT and vPvB assessment No information available.

12.6 Other adverse effects

No information available.

12.7 Additional ecotoxicological information

Prevent from flowing into surface water/ground water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

Concentrate/larger quantities: 20 01 14* acids.

Waste treatment options

Appropriate disposal / Product

Dispose according to legislation. Consult the appropriate local waste disposal expert about waste disposal.

Appropriate disposal / Package

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

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SECTION 14: Transport information

14.1 UN number

No dangerous goods in sense of this transport regulation.

14.2 UN proper shipping name

No dangerous goods in sense of this transport regulation.

14.3 Transport hazard class(es) No dangerous goods in sense of this transport regulation.

14.4 Packing group No dangerous goods in sense of this transport regulation.

14.5 Environmental hazards No dangerous goods in sense of this transport regulation.

14.6 Special precautions for user

None

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not applicable

SECTION 15: Regulatory information

^{15.1} Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

Restrictions of occupation

According to directive 94/33/EC, juveniles are only allowed to handle this product as long as all effects of dangerous substances are prevented.

15.2 Chemical Safety Assessment

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

SECTION 16: Other information

16.1 Indication of changes

02. Classification of the substance or mixture ' 02. Label elements

16.2 Abbreviations and acronyms

- ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE = Acute Toxicity Estimates
- CAS = Chemical Abstracts Service
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- CMR = Carcinogen, Mutagen or Reproductive toxicant
- CO_2 = Carbon dioxide
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EC = European Commission
- EC50 = Half maximal effective concentration
- EN = European Standard (Norm)
- EU = European Union
- EUH statement = CLP-specific Hazard statement EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

H statement = GHS Hazard statement

IATA = International Air Transport Association ICAO-TI = International Civil Aviation Organization-Technical Instructions

IMDG = International Maritime Dangerous Goods

LC50 = Median lethal concentration

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LD50 = Median lethal dose LogPow = Logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) NOEC/NOEL = No observed effect concentration/level OECD = Organisation for Economic Co-operation and Development PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/20061 RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail RMM = Risk Management Measure RRN = REACH Registration Number STOT-RE = Specific Target Organ Toxicity - Repeated Exposure STOT-SE = Specific Target Organ Toxicity - Single Exposure SVHC = Substances of Very High Concern TLV/STEL = Threshold limit value/short-term exposure limit TLV/TWA = Threshold limit value/time weighted average UN = United Nations VOC = Volatile Organic Compound vPvB = Very Persistent and Very Bioaccumulative 16.3 Key literature references and sources for data None Classification for mixtures and used evaluation method according to regulation (EC) 16.4 1272/2008 [CLP] No information available. 16.5 Relevant H- and EUH-phrases (Number and full text) H319 Causes serious eye irritation. 16.6 Training advice None

16.7 Additional information

Notice the directions for use on the label.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.