

# Safety Data Sheet

## according to Regulation (EC) No. 1907/2006 (REACH)

Trade name : MD 555 cleaner Special detergent for suction systems  
Revision : 22.01.2015  
Date of print : 22.01.2015

Version : 1.0.0

### 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 AG, Höpfigheimer Straße 17, 74321 Bietigheim-Bissingen, Germany

Tel: +49 7142 705-0, Fax: +49 7142 705-500, info@duerr.de

in Great Britain/Ireland:

DÜRR DENTAL [Products] UK Ltd., 14 Linnell Way - Telford Way Industrial Estate, Kettering Northants NN16 8PS, United Kingdom

Tel: +44 1536 526740, Fax.: +44 1536 526749, info@duerruk.com

#### 1.4 Emergency telephone number

INT: +49 6132 84463 (24 h/7 d)

### 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.

Skin Irrit. 2 ; H315 - Skin corrosion/irritation : Category 2 ; Causes skin irritation.

##### Classification procedure

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

##### Classification according to Directive 1999/45/EC

Irritating to eyes and skin.

Xi ; R 36/38

#### 2.2 Label elements

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

Hazard pictograms



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Exclamation mark (GHS07)

### Signal word

Warning

### Hazard statements

H315 Causes skin irritation.  
H319 Causes serious eye irritation.

### Precautionary statements

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.

### Labelling (1999/45/EC)

#### Hazard symbols and hazard statements of dangerous substances and preparations



Xi ; Irritant

#### R-phrases

36/38 Irritating to eyes and skin.

#### S-phrases

37 Wear suitable gloves.  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice .

### 2.3 Other hazards

None

## SECTION 3: Composition/ information on ingredients

### 3.2 Mixtures

#### Description

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

#### Hazardous ingredients

CITRIC ACID MONOHYDRATE ; REACH registration No. : 02-2119773813-30 ; EC No : 201-069-1; CAS No. : 5949-29-1

Weight fraction : 20 - 25 %

Classification 67/548/EEC : Xi ; R36

Classification 1272/2008 [CLP] : Eye Irrit. 2 ; H319

PHOSPHORIC ACID ; REACH registration No. : 01-2119485924-24 ; EC No : 231-633-2; CAS No. : 7664-38-2

Weight fraction : 15 - 20 %

Classification 67/548/EEC : C ; R34

Classification 1272/2008 [CLP] : Skin Corr. 1B ; H314 Eye Dam. 1 ; H318

#### Additional information

Full text of R-, 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).

#### After inhalation

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

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### 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. Causes skin 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 (CO<sub>2</sub>). Extinguishing powder. Water spray. Water mist. The product itself does not burn. Co-ordinate fire-fighting measures to the fire surroundings.

#### Unsuitable extinguishing media

High power 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

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### 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. Open and handle container with care. Provide adequate ventilation. Do not breathe vapour/aerosol.

##### Protective measures

###### Fire prevent measures

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

#### 8.1 Control parameters

##### Occupational exposure limit values

PHOSPHORIC ACID ; CAS No. : 7664-38-2

Limit value type (country of origin) : TLV/STEL ( EC )

Limit value : 2 mg/m<sup>3</sup>

Limit value type (country of origin) : TLV/TWA ( EC )

Limit value : 1 mg/m<sup>3</sup>

##### DNEL/DMEL and PNEC values

There are no data available on the preparation itself.

###### DNEL/DMEL

Limit value type : DNEL/DMEL (DNEL Consumer, Local) ( PHOSPHORIC ACID ; CAS No. : 7664-38-2 )

Exposure route : Inhalation

Exposure frequency : Long-term (repeated)

Limit value : 0,73 mg/m<sup>3</sup>

Limit value type : DNEL/DMEL (Worker, Local) ( PHOSPHORIC ACID ; CAS No. : 7664-38-2 )

Exposure route : Inhalation

Exposure frequency : Long-term (repeated)

Limit value : 2,92 mg/m<sup>3</sup>

#### 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

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Body protection: not applicable.

### Respiratory protection

Usually no personal respiratory protection necessary.

### General health and safety measures

Keep away from food, drink and animal feeding stuffs. 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.

### 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

**Appearance :** liquid

**Colour :** light red

**Odour :** odourless

#### Safety relevant basis data

<b>Melting point / melting range :</b>	( 1013 hPa )	No data available
<b>Boiling temperature / boiling range :</b>	( 1013 hPa ) ca.	100 °C
<b>Decomposition temperature :</b>	( 1013 hPa )	not applicable
<b>Flash point :</b>		not applicable
<b>Ignition temperature :</b>		not applicable
<b>Lower explosion limit :</b>		not applicable
<b>Upper explosion limit :</b>		not applicable
<b>Vapour pressure :</b>	( 50 °C )	No data available
<b>Density :</b>	( 20 °C )	1,15 - 1,25 g/cm <sup>3</sup>
<b>Solvent separation test :</b>	( 20 °C ) <	3 %
<b>Water solubility :</b>	( 20 °C )	100 Wt %
<b>pH value :</b>	( 20 °C / 50 g/l )	1,5 - 2,5
<b>pH value :</b>	( 20 °C / 100 g/l ) <	1
<b>log P O/W :</b>		No data available
<b>Flow time :</b>	( 20 °C ) <	12 s DIN-cup 4 mm
<b>Odour threshold :</b>		not applicable
<b>Oxidising liquids :</b>	Not applicable.	
<b>Explosive properties :</b>	Not applicable.	
<b>Corrosive to metals :</b>	Not 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). Exothermic reaction with alkalis.

### 10.3 Possibility of hazardous reactions

Exothermic reaction with alkalis.

### 10.4 Conditions to avoid

No information available.

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### 10.5 Incompatible materials

No information available.

### 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 :	LD50 ( PHOSPHORIC ACID ; CAS No. : 7664-38-2 )
Exposure route :	Oral
Species :	Rat
Effective dose :	1530 mg/kg
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. Causes skin irritation.

##### Acute dermal toxicity

Parameter :	LD50 ( PHOSPHORIC ACID ; CAS No. : 7664-38-2 )
Exposure route :	Dermal
Species :	Rabbit
Effective dose :	2740 mg/kg

##### Acute inhalation toxicity

Parameter :	LD50 ( PHOSPHORIC ACID ; CAS No. : 7664-38-2 )
Exposure route :	Inhalation
Species :	Rabbit
Effective dose :	1,689 mg/l

#### Irritant and corrosive effects

Causes serious eye irritation. Causes skin irritation.

#### Sensitisation

None known.

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

No information available.

### 11.4 Additional information

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

## SECTION 12: Ecological information

### 12.1 Toxicity

#### Aquatic toxicity

There are no data available on the preparation itself.

##### Acute (short-term) fish toxicity

Parameter :	LC50 ( PHOSPHORIC ACID ; CAS No. : 7664-38-2 )
Species :	Fish
Evaluation parameter :	Acute (short-term) fish toxicity
Effective dose :	3 - 3,5 mg/l
Exposure time :	96 h

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Parameter : LC0 ( PHOSPHORIC ACID ; CAS No. : 7664-38-2 )  
Species : Fish  
Evaluation parameter : Acute (short-term) fish toxicity  
Effective dose : 100 - 1000 mg/l

### 12.2 Persistence and degradability

#### Abiotic degradation

No data available.

#### Biodegradation

All active agents are biodegradable at the dilution rates arising in the sewage system. The surfactant contained in this preparation complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

### 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.

### 12.5 Results of PBT and vPvB assessment

No information available.

### 12.6 Other adverse effects

No information available.

### 12.7 Further ecological 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

##### 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.

## 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

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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

None

### 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<sub>2</sub> = 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  
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. 1907/2006]  
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



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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

### 16.4 Relevant R-, H- and EUH-phrases (Number and full text)

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
34	Causes burns.
36	Irritating to eyes.
36/38	Irritating to eyes and skin.

### 16.5 Training advice

None

### 16.6 Additional information

Notice the directions for use on the label.  
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Dipl. Ing. Elisabeth Gehring Tel. No.: +49 7154 1308-37

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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.

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