

# Product information

## MD 520 impression disinfection



### MD 520 at a glance

- Cleaning and disinfection of dental impressions, impression trays, prosthetic models, etc. in the Hygojet by Dürr Dental and immersion disinfection in the Hygobox/disinfection box by Dürr Dental.
- Increased precision of the plaster cast thanks to its outstanding cleaning action.
- For use with alginates, silicones, polyether rubber, hydrocolloids, polysulphides, polymethyl methacrylate, prosthetic models, etc.
- No negative impact on dimensional stability or plaster compatibility.
- Comprehensive spectrum of activity: bactericidal, tuberculo-cidal, levurocidal, virucidal.
- VAH list.
- Virucidal activity in accordance with EN 14476.
- Tested in accordance with EN 13727, EN 13624, EN 14348, EN 14561, EN 14562 EN 14563, EN 14476.
- Extremely economical when used in the Hygojet. 4 x 2.5 L suffice for 1000 applications.

### Properties

MD 520 from Dürr System Hygiene is a highly effective, formaldehyde-free, ready-to-use solution for cleaning and disinfection of contaminated dental impressions, impression trays, and prosthetic models in the Hygojet by Dürr Dental. MD 520 is also suitable for immersion disinfection in the Hygobox/disinfection box by Dürr Dental. Dental impressions made of alginate, silicone, polyether rubber, polysulphide and hydrocolloids can be reliably cleaned and disinfected with MD 520 while maintaining dimensional accuracy and compatibility with plaster. The removal of blood, saliva, etc. associated with the process increases the precision of the plaster cast. MD 520 can also be used for the disinfection of dentures, bridges, crowns, orthodontic appliances, and drilling templates for implant systems, etc.

### Product composition

MD 520 is based on a combination of aldehydes, quaternary ammonium cations, special surfactants, and excipients in aqueous solution. 100 g MD 520 contain 0.5 g glutaraldehyde, 0.25 g alkyl benzyl dimethyl ammonium chloride.

### Microbiological efficacy

MD 520 is bactericidal<sup>[1]</sup>, tuberculocidal<sup>[1], [2]</sup>, levurocidal<sup>[1]</sup>, and virucidal (enveloped viruses including HBV, HCV, and HIV<sup>[3], [4]</sup> and non-enveloped viruses, such as adenoviruses<sup>[1], [3]</sup>, SV 40 polyomaviruses<sup>[3]</sup>, noroviruses<sup>[1], [3]</sup>, polioviruses<sup>[1], [3]</sup>). VAH list. Tested in accordance with EN 13727, EN 13624, EN 14348, EN 14561, EN 14562 EN 14563, EN 14476.

### Directions for use

MD 520 is applied undiluted. For use in the Hygojet, attach a valve to the 2.5-L bottle and place it upside down in the mounting device on the Hygojet. Carefully follow the operating instructions. Up to six impressions may be disinfected and cleaned in one cycle in the Hygojet with MD 520. To do so, rinse a maximum of six impressions with water for 10 seconds (5 seconds on each side). Then disinfect each impression with MD 520 by spraying both sides evenly and place the impressions in the system. The system will indicate the end of each disinfection cycle. After the final disin-

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fection cycle, set the timer to an exposure time of 10 minutes. The exposure time for Tb bacteria is 15 minutes. When the timer goes off, thoroughly rinse the disinfected impressions with water of at least potable quality (for 10 seconds – 5 seconds on each side) and dry with air, as necessary. Further process the impressions in accordance with the manufacturer's instructions (e.g. immerse alginate impressions in Hygrophor; immerse hydrocolloid impressions in 2% potassium sulphate solution, as applicable, and cast with plaster, etc.). Treat dentures, etc. as described above. For immersion disinfection and cleaning, hang the impressions, etc. in the disinfection box using the mounting device (max. of 2) or immerse them in the Hygobox (max. of 6). The required exposure time is only 5 minutes; for Tb bacteria the exposure time is 15 minutes. Then rinse the disinfected components with water of at least potable quality (for 30 seconds – 15 seconds on each side) and dry with air, as necessary.

### Environmental impact

All of the organic components of MD 520 are biodegradable at dilution levels that occur in wastewater. The packaging is made of polyethylene and polypropylene and can thus be recycled or incinerated. For recycling, flush bottles with water. The safety data sheet includes disposal instructions for the concentrate.

### Physical data

Appearance: clear, yellow solution

Density:  $D = 0.99 \pm 0.02 \text{ g/cm}^3$  (20°C)

pH:  $4.3 \pm 0.5$

### Shelf life

3 years

Service life for immersion disinfection will depend on the burden: 1 week maximum or 50 impressions in the Hygobox or 20 impressions in the disinfection box.

### Container sizes

10-L canister

2.5-L bottle

### Storage

Store product at between 5°C and room temperature.

### Sales

Dürr Dental SE  
Höpfigheimer Str. 17  
74321 Bietigheim-Bissingen  
Germany  
www.duerrdental.com  
info@duerrdental.com

### Manufacturer

orochemie GmbH + Co. KG  
Max-Planck-Straße 27  
70806 Kornwestheim  
Germany  
www.orochemie.de  
info@orochemie.de

Application	Time
Impression disinfection in the Hygojet	10 min
Immersion disinfection in the Hygobox/disinfection box	5 min
Instrument disinfection (in accordance with VAH) <sup>1)</sup>	5 min
Bacteria <sup>1)</sup> and yeasts <sup>1)</sup>	5 min
Tb bacteria <sup>2)</sup>	15 min
Vaccinia viruses including HBV, HCV, HIV <sup>3), 4)</sup>	30 sec
Adenoviruses <sup>1), 3)</sup>	2 min
SV 40 polyomaviruses <sup>3)</sup>	1 min
Noroviruses <sup>1), 3)</sup>	5 min
Polioviruses <sup>1), 3)</sup>	5 min

1) Testing at high burden (VAH, EN 13727, EN 13624, EN 14561, EN 14562, EN 14563, EN 14476).

2) Testing at low burden (EN 14348, EN 14563).

3) Testing with and without burden in accordance with DVV/RKI guidelines.

4) In accordance with RKI statement (Federal Health Bulletin 60, 353-363, 2017).

### Accessories

Hygojet, Hygobox, disinfection box.

### General instructions

Scientific studies have proven that dimensional accuracy and compatibility with plaster are maintained if MD 520 is used as directed in the Hygojet and for immersion disinfection in the Hygobox/disinfection box. At exposure times of greater than 10 minutes in the Hygojet and greater than 5 minutes for immersion disinfection, suitability must be tested and evaluated on a case-by-case basis. Do not mix MD 520 with amine-based disinfectants. Contact with MD 520 may result in reddish brown discolourations. To ensure safety, we recommend testing the product for each intended use. Use within 3 months after opening. Changes in product colour/odour may occur, especially when stored in sunlight. However, these changes in colour and/or odour have no impact on the disinfection efficacy of the product.

### Hazard warnings

MD 520 is classified and labelled in accordance with the CLP Regulation: see product label and safety data sheet.

### Independent expert opinions – in-house investigations

The expert opinions are available upon request.

**CE 0124**

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