

Algipedia

Complete guide to alginates



Clinical
Alginates

Zhermack 
Dental



Zhermack Alginates, *the most complete range from the number 1 manufacturer in the world*



The purpose of this guide is to highlight the applications and advantages of each type of alginate, to guide practitioners in choosing the product which is best adapted to their needs and to give useful suggestions regarding the use of alginates.

Alginates are the most used impression materials in all dental practices. They are essential in daily clinical practice in all dental specialisations: conservative, cosmetic, aesthetic, prostheses, orthodontics, implantology and pediatric dentistry.

Specific characteristics for each application

The wide range of alginates from Zhermack* offers distinctive characteristics for each application: maximum elasticity and resistance, different working and setting times (normal, rapid, extra-rapid), consistency and flowability, colour variations and dimensional stability.

What do Zhermack alginates have in common?

All Zhermack alginates offer essential base characteristics:

- **Easy mix formulation:** facilitates mixing by means of rapid water absorption
- **Dust Free Formula:** minimum dust to protect operator health, limiting the suspension of particles in the environment and resulting inhalation
- **Storage over time:** 5 year shelf life from the production date
- **Superior dimensional stability:** all formulations are optimised to reduce distortion, offering practitioners a choice of products which offer from 48 to 120 hours of dimensional stability
- **Thixotropy:** even in the lighter formulations, the alginate will not drip into patients' mouth
- **Pleasing flavours which are well-tolerated by patients**

Dentist safety, patient satisfaction

Zhermack alginates contain natural, foodborne substances which allow dentists to easily and safely perform impression, minimising the possibility of allergic reactions in patients.

For Zhermack, quality is a standard

To ensure the quality requirements of practitioners, Zhermack carries out scrupulous inspections on incoming raw materials, semi-finished product and final products. Quality and reliability are essential conditions that contribute to Zhermack's success every day around the world.



USEFUL SUGGESTIONS

Dosing and storage



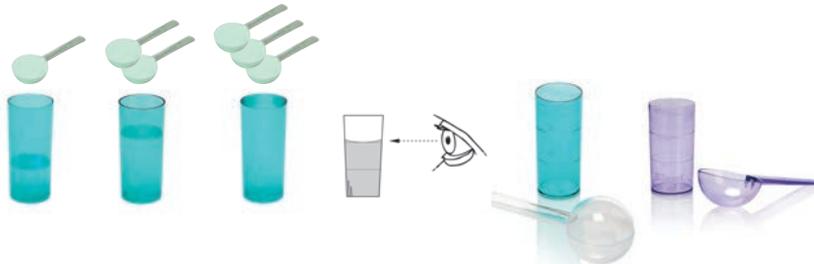
- 1 Open the bag and pour the alginate into a hermetically-sealed container. It is best to keep the product batch number and expiration date, cutting them from the bag



- 2 Shake 2 or 3 times to disperse the powder evenly



- 3 Powder dosing: with the help of a dosing measuring spoon, scoop out the alginate without compressing the powder. Level and remove excess alginate, passing the flat part of the spatula on the spoon and then pour into a rubber mixing bowl.



- 4 Water dosing*: for each level scoop of powder, 1/3 of a measuring cup of water is necessary (see figure). An ideal reading level of the water can be performed by positioning the measuring cup at eye level. When the lower part of the drop (meniscus) is tangent to the notch on the measuring cup, the dose is correct.
The violet measuring cup is used for **Hydrogum® 5** and **Hydrocolor 5**.
The green measuring cup is used for all other alginates

*Times may vary depending on water temperature



- 5 Close the container and store at 5-27°C/41-80°F

CLASSIC

hydrogum

elastic

FAST SET 2'10"



Impressions for study models

- » Quick mixing
- » Thixotropic
- » Elastic and resistant

MINT FLAVOUR



USEFUL SUGGESTIONS

Manual mixing



Once you have chosen the Zhermack alginate which is most suitable for your needs, make sure you have on hand: rubber mixing bowl, powder and water measures for dosing (follow manufacturer's instructions) and a stopwatch.



- 1 Pour the water* in the powder (not vice-versa)

* Times may vary depending on water temperature



- 2 Start mixing by pressing the material against the sides of the mixing bowl with a hard spatula



- 3 This procedure must be performed during the mixing time indicated by the manufacturer. Once an even consistency has been obtained, mixing is complete

Chromatic alginates

For colour changing Alginates (**hydrocolor 5, tropicalgin, phase plus**), mixing time, working time and time in mouth coincide with each colour change.



GENTLE

hydrogum soft

extra elastic

FAST SET 2'10"



MINT FLAVOUR

Non muco-compressive impressions
Preliminary edentulous jaw impressions

- » Easy mixing
- » Creamy consistency
- » Extra elastic



USEFUL SUGGESTIONS

Automatic mixing with Alghamix II



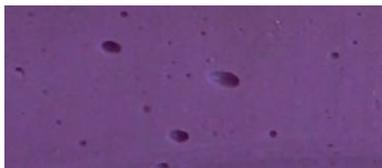
Obtaining an even, manual mix without air bubbles requires good dexterity. For enhanced mixing done simply and quickly, Zhermack offers **Alghamix II**, the mechanical mixer for alginates, plasters and silicones.



- 1 Pour water into the powder (not vice-versa) and position the spatula on the edge of the bowl. Activate the "slow" speed and start mixing by pressing against the side of the bowl



- 2 Once all the water has been absorbed, switch to "fast" speed and finish mixing. This procedure must be performed during the mixing time indicated by the manufacturer.



Enlargement of manual alginates mixing



Enlargement of alginates mixing with **Alghamix II**

EXOTIC PLEASURE

hydrogum 5

high stability

EXTRA FAST SET 1'50"



MANGOSTEEN FRUIT FLAVOUR

Impressions for diagnostic models
Impressions for antagonists in fixed and removable prostheses

- » 5 days of dimensional stability
- » Higher consistency
- » Smooth, even impressions



USEFUL SUGGESTIONS

Choosing the impression tray



To create the best impression, it is important to select an impression tray which is:

- both rigid and does not distort
- leaves enough proportional space, on both a vestibular and a lingual level
- covers all involved structures (including the last molars)

Zhermack offers **Hi-Tray Metal**, **Light Clear**, **Plastic**, **Light Edentulous**, a complete range of stainless steel and plastic impression trays which offer rigidity, resistance, improved retention capacity and maximum versatility.



- 1 After having mixed the alginate and before the end of the working time, collect it with the special spatula and proceed to load the impression tray



- 2 Insert the impression tray in the mouth and wait until completely set*

*Times may vary depending on water temperature

FULL DETAILS

neocolloid

high precision

NORMAL SET 3'30"



HERBAL FLAVOUR

Precision impressions

Impressions for skeletal prosthesis models

- » For injection
- » Compatible with reversible hydrocolloids in mixed techniques



USEFUL SUGGESTIONS

Impression treatment



To prevent cross-contamination and ensure patient safety, all personnel must be protected with tested, safe products.

Zeta Hygiene is a complete range of disinfectants and sterilisers for all applications: special products for instruments, equipment, delicate surfaces, suction circuits, impressions, hands and floors.



1 Impression washing

After impression taking, rinse thoroughly to eliminate any residue and traces of saliva.



2 Impression disinfection

Remove any excess water and disinfect the impression immediately. Ideal disinfection is obtained by dipping the impression in **Zeta 7 solution** or by spraying **Zeta 7 spray** (Zhermack) directly onto the impression.

X-TRA ELASTIC

orthoprint

orthodontic

EXTRA FAST SET 1'50"



VANILLA FLAVOUR

Impressions for orthodontic models

- » Highly elastic, even with braces
- » Pleasant flavour, reducing the emetic reflex
- » Excellent impression readability



USEFUL SUGGESTIONS

Model development



Before pouring the model, have the following on hand: rubber mixing bowl, spatula, powder and water measures.

It is important to use the right plaster/stone for all types of work:

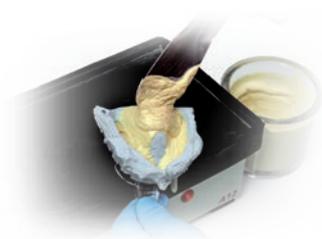
- Class III (**Elite® Model, Elite® Model Fast, Elite® Ortho, Elite® Arti**) are used for study models, antagonists, articulators and temporary work.
- Class IV (**Elite® Master, Elite® Rock, Elite® Rock Fast, Elite® Stone, Elite® Base**) are used for fixed, skeletal and removable prostheses.



- 1 Dry the impression, eliminating surface water. Weigh the plaster and measure the volume of water. Then, first pour the water and then the plaster (not vice-versa)



- 2 Mix according to the times specified by the manufacturer. For mixing without air bubbles, Zhermack suggests using a **Elite® Mix** vacuum mixer



- 3 With the help of a vibrator, pour the plaster in such a way that it flows inside the impression, filling it from the bottom upwards. Separate the model from the impression once it has cooled completely



Impression storage

If it is not possible to pour the model immediately after impression taking, eliminate excess water from the impression and conserve it in a hermetically sealed bag (**Long Life Bag Zhermack**) at room temperature (23°C/73°F). In these conditions, the plaster pouring can be stored up to 48 hours from impression taking.

Impressions taken with **Hydrogum® 5** and **Hydrocolor 5** can be stored in these conditions for up to **5 days, limiting size distortion**.

COOL SENSATION

hydrocolor 5

chromatic high stability

FAST SET 2'10"



COOL BERRY FLAVOUR

Impressions for study models and case planning

Impressions for antagonists in fixed and removable prostheses

Recommended in pediatric dentistry

» Colour change alginate*

» 5 days of dimensional stability

» Pleasant, refreshing flavour

**Changes colour to guide dentists during the 3 working phases*



USEFUL SUGGESTIONS

Temporary pieces with direct technique



Alginates can also be used as matrices for the creation of provisionals made in the dental practice. Before tooth preparation, an impression is taken in alginate, which must be washed and stored as indicated before. After preparing the tooth, Zhermack recommends use of **Acrytemp**, available in the following shades: A2 - A3 - A3.5.



- 1 Apply **Acrytemp** inside the impression and reposition it on the prepared tooth



- 2 Follow manufacturer instructions, remove the temporary from the impression once it has hardened



- 3 Finish the temporary made in **Acrytemp**



- 4 Temporary completed

FRIENDLY & EXOTIC

tropicalgin

chromatic

FAST SET 2'35"



MANGO FLAVOUR

Impressions for study models and antagonists

Recommended in pediatric dentistry

- » Colour change alginate*
- » High final hardness
- » Excellent impression readability
- » Pleasant flavour for younger patients

**Changes colour to guide dentists during the 3 working phases*



GUIDE TO PRODUCT SELECTION

	Special features	Setting time	Time in Mouth	Flavour	Applications / impressions	Packaging	
						Code	Item
HYDROGUM	Elastic	Fast 2'10"	1'00"	Mint	study models	C302025	1 500g bag
						C302041	Kit of 2 bags + measures
						C302051	Single dose sachet
HYDROGUM SOFT	Extra elastic	Fast 2'10"	1'00"	Mint	non mucous compressive	C302060	1 453g bag
					preliminary edentulous jaw	C302044	Single dose sachet
HYDROGUM 5	High stability	Extra Fast 1'50"	45"	Mangosteen fruit	diagnostic models	C302070	1 453g bag
					antagonists in fixed and removable	C302071	Kit of 2 bags + measures
						C302075	Single dose sachet
NEOCOLLOID	High precision	Normal 3'30"	1'30"	Herbal	precision	C302205	1 500g bag
					skeletal prosthesis models	C302221	Kit of 2 bags + measures
						C302230	Single dose sachet
ORTHOPRINT	Orthodontic	Extra Fast 1'50"	45"	Vanilla	orthodontic models	C302145	1 500g bag
						C302161	Kit of 2 bags + measures
						C302171	Single dose sachet
HYDROCOLOR 5	Chromatic High stability	Fast 2'10"	1'00"	Cool Berry	study models and case planning	C302120	1 453g bag
					antagonists in fixed and removable prostheses	C302125	Kit of 2 bags + measures
					in pediatric dentistry	C302130	Single dose sachet
TROPICALGIN	Friendly & Exotic	Fast 2'35"	1'00"	Mango	in pediatric dentistry	C302240	1 453g bag
					study models and antagonists	C302242	Kit of 2 bags + measures
						C302245	Single dose sachet
PHASE PLUS	Easy Handling	Fast 2'35"	1'00"	Spearmint	study models	C302086	1 453g bag
						C302111	Single dose sachet

EASY HANDLING

phase plus *chromatic*

FAST SET 2'35"



SPEARMINT FLAVOUR

Impressions for study models

- » Colour change alginate*
- » Creamy consistency
- » High final hardness

**Changes colour to guide dentists during the 3 working phases*



BRANCHES

GERMANY

Zhermack GmbH Deutschland

Öhlmühle 10 - D-49448 Marl

T +49 (0) 54 43 / 20 33 - 0
F +49 (0) 54 43 / 20 33 - 11
info@zhermack.de
www.zhermack.de

POLAND

Zhermapol Sp. z o.o.

ul. Augustówka 14
02 - 981 Warszawa - Polska

T +48 22 858 82 72
+48 22 292 71 17
F +48 22 642 07 14
biuro@zhermack.com
www.zhermapol.pl

USA

Zhermack Inc.

P.O. Box 4195, River Edge
New Jersey 07661 - 4195

T +1 (877) 819 6206
+1 (732) 389 8540
F +1 (732) 389 8543
info@zhermackusa.com
www.zhermackusa.com

Zhermack S.p.A. | Via Bovazecchino, 100 | 45021 Badia Polesine (RO) ITALY
T +39 0425 597611 | F +39 0425 53596 | info@zhermack.com | www.zhermack.com



Zhermack