

Impression Solutions

# Imprint™ 4

VPS Impression Material



Fast | Precise | Innovative  
Active Self-Warming

**3M** ESPE

# Imprint™ 4



Why will you be so enthusiastic about Imprint™ 4?

The reason is simple: top precision, time-saving processes and comfortable handling can help you to increase the efficiency of your dental practice. As a world leader in the field of impression solutions, 3M™ ESPE™ gives you the right product for the job: Imprint 4.

See for yourself!

# Convincing time savings and precision

**Imprint™ 4: the innovative VPS precision impression material.**

With Imprint™ 4 VPS Impression Material, you get the newest product for extraordinarily precise impression results. Thanks to active self-warming, this innovative VPS features an extremely short intra-oral setting time and thus ensures noticeable time savings in the impression process – for you and for your patients.

**Imprint 4 VPS material offers you:**

**Active self-warming**

For accelerated setting

**Shortest intra-oral setting time\***

For real time savings and patient comfort

**Sufficient working time**

For a stress-free procedure

**Super-hydrophilicity**

For excellent flow and the finest detail reproduction

**Fresh material colours**

For enhanced readability

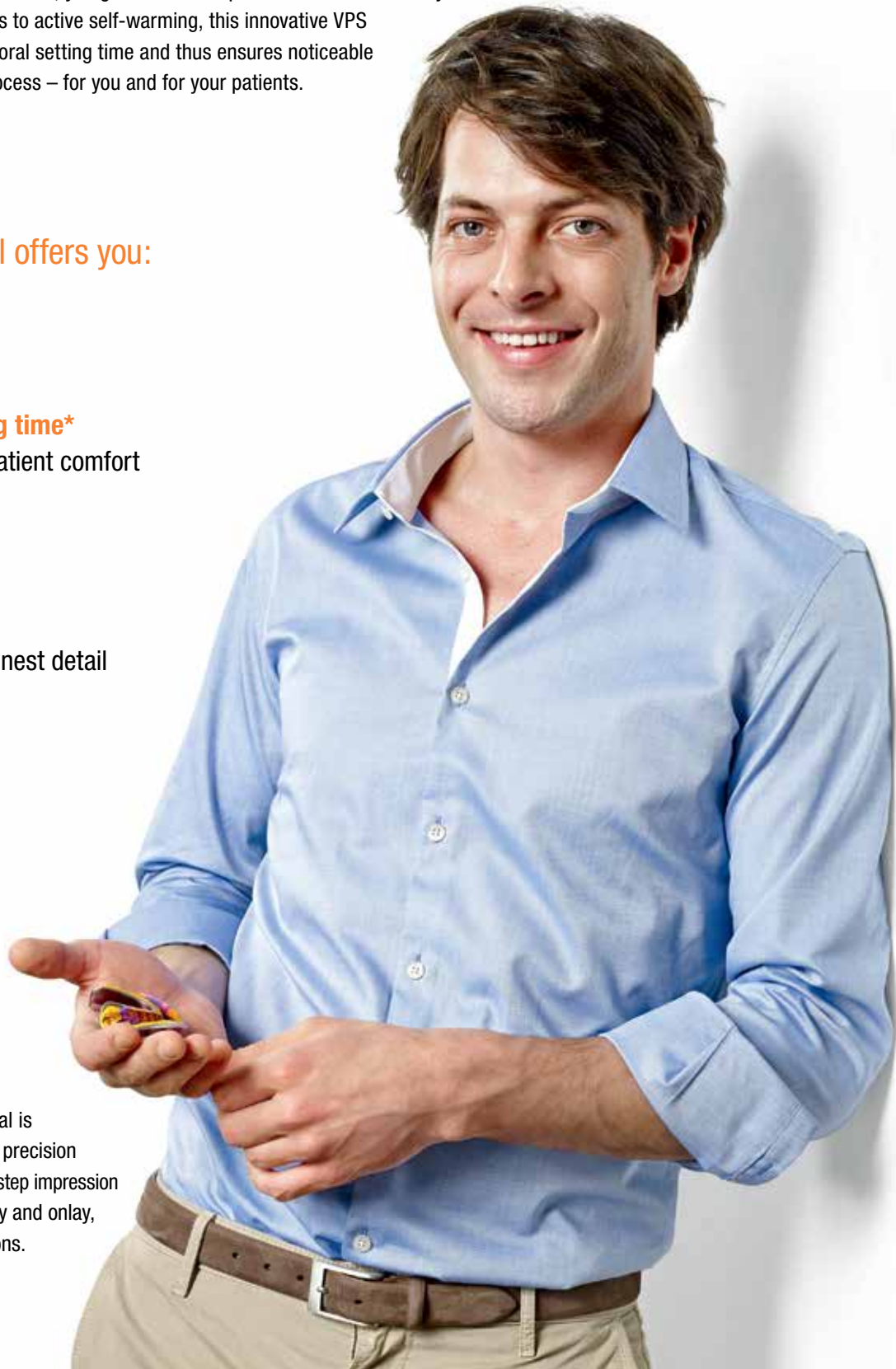
**Pleasant minty taste**

For more patient comfort

\*Data on file

**Indications:**

Imprint™ 4 VPS Impression Material is especially designed for all kinds of precision impressions using the 1-step and 2-step impression techniques: crown and bridge, inlay and onlay, implant, and orthodontic impressions.



# The fastest route to stress free impressions\*

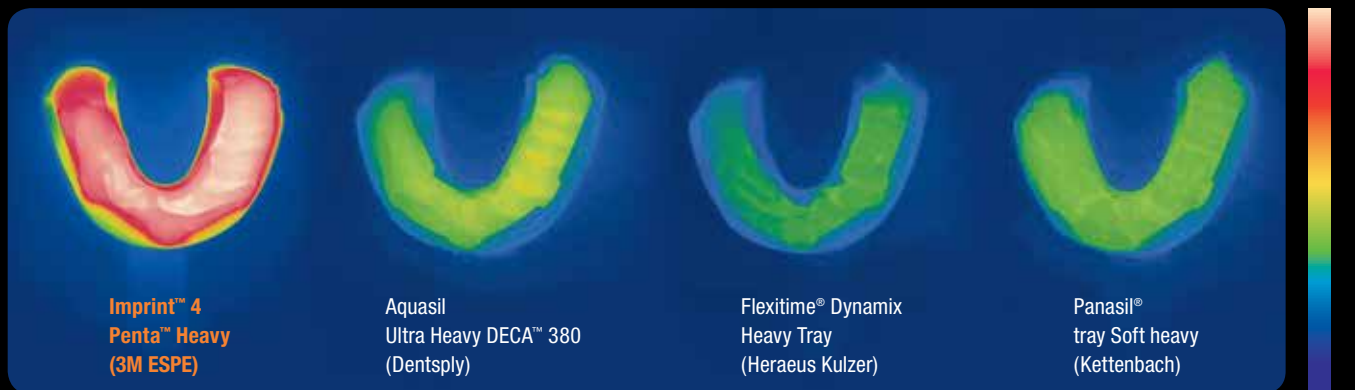


The impression material with active self-warming.

Imprint™ 4 VPS Material features the shortest intra-oral setting time of all precision impression materials on the market. This is achieved by active self-warming, which 3M ESPE developed exclusively for Imprint 4. A unique chemical reaction causes the material to actively and quickly warm up to body temperature after the working time, substantially accelerating the intra-oral setting. The usual working time is not affected so the impression process will be stress-free for you. The result - you gain time and efficiency and your patient is more comfortable.

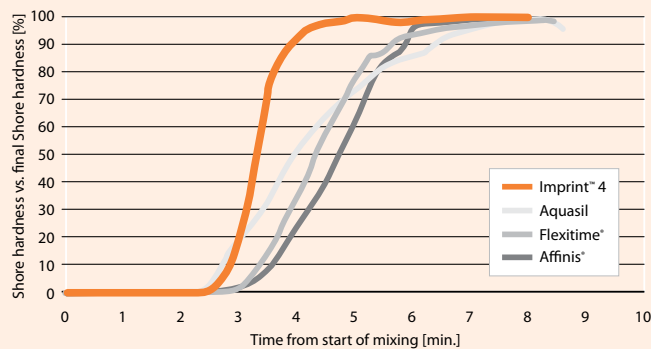
\*Data on file

These images, taken with a thermographic camera, demonstrate Imprint 4's unique active self-warming: among competing products, only Imprint 4 material reveals a significant temperature rise to body temperature.



Infrared images of Imprint™ 4 Penta™ Heavy VPS Material (3M ESPE), Aquasil Ultra Heavy DECA™ 380 (Dentsply), Flexitime® Dynamix Heavy Tray (Heraeus Kulzer) and Panasil® tray Soft heavy (Kettenbach). Only Imprint™ 4 Material shows a significant temperature increase. All images were taken at room temperature (23 °C/73.4 °F).

Images above show the materials at the time of their maximum temperature. Source: 3M ESPE internal tests



Progression of setting reaction characterized by increase in Shore hardness measured in different quick setting heavy bodies. Intra-oral setting times are shorter than those measured at room temperature (23°C/73.4°F). Materials tested: Imprint™ 4 Super Quick Heavy (3M ESPE), Aquasil Ultra Heavy Fast Set (Dentsply), Flexitime® Heavy Body (Heraeus Kulzer), Affinis® heavy body fast (Coltene). Source: J.C. Farr, H. Hoffmann, A. Maurer, P. Osswald, E. Wanek, Shore Hardness Increase of Tray Materials during Setting, CED IADR 2012, #674

Imprint 4 material's active self-warming leads to a steep increase in Shore hardness which can be equated with accelerated setting. The graph demonstrates that Imprint 4 shows the fastest setting compared to competing VPS materials, making the short intra-oral setting time possible.

# Super hydrophilicity even in the unset state

## Highly precise impressions

A new and unique feature of Imprint™ 4 VPS Impression Material is its extremely hydrophilic behaviour – even in the unset state. With its optimal flow, Imprint 4 captures even the finest details.

A simple test demonstrates this feature: If you put a water droplet on the interface of two unset impression materials, it will flow to the material with the higher hydrophilicity – i.e. with the higher affinity for water or another aqueous solution.

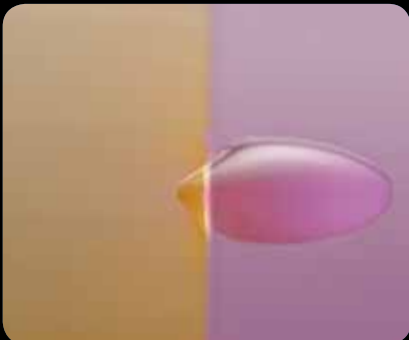
In a direct comparison with competing VPS impression materials, the water droplet always flows to the more hydrophilic Imprint 4 material (shown right).



A water droplet is applied ...



... to the interface of two unset light body VPS impression materials (40 seconds after start of mixing).



Aquasil Ultra XLV (Dentsply) vs.  
**Imprint™ 4 Light (3M ESPE)**



Flexitime® Light Flow (Heraeus Kulzer) vs.  
**Imprint™ 4 Light (3M ESPE)**



Panasil® initial contact Light (Kettenbach) vs.  
**Imprint™ 4 Light (3M ESPE)**




Source: 3M ESPE internal data. Data available on request at 3M ESPE. Contact see back side.

# Imprint™ 4

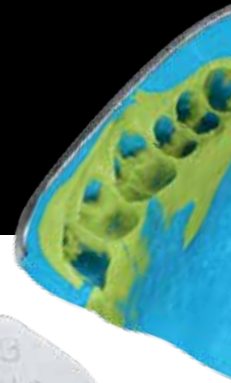
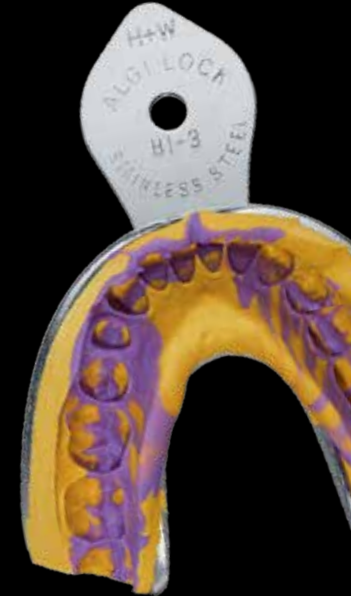
## versatile and unique

Imprint™ 4 VPS Impression Materials are available in perfectly coordinated contrasting colours, viscosities and different working/setting times. Whatever your requirements may be and whichever techniques you favour – the Imprint 4 family provides an optimal solution. Just choose your preferred material combination. All tray materials – including putty – are available for automatic mixing in the Pentamix™ System from 3M ESPE.

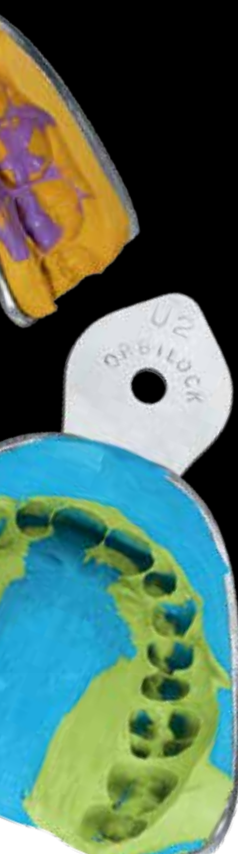
A unique feature of Imprint 4 is that the Intra-oral set times given below are the true maximum set times "independent" of working time used, in other words - The total set time = Actual working time used plus the designated intra-oral set time of either 2.30, 2.00 or 1.15.

	Maximum working time (23 °C) 	Maximum intra-oral syringing time (37 °C) 	Constant intra-oral setting time (37 °C) 
<b>PENTA™ TRAY MATERIALS</b>			
Imprint™ 4 Penta™ Putty	1:30	–	2:30
Imprint™ 4 Penta™ Heavy	2:00	–	2:00
Imprint™ 4 Penta™ Super Quick Heavy	1:15	–	1:15
<b>GARANT™ WASH MATERIALS</b>			
Imprint™ 4 Super Quick Ultra-Light	1:15	<b>0:35</b>	1:15
Imprint™ 4 Light	2:00	<b>1:00</b>	2:00
Imprint™ 4 Super Quick Light	1:15	<b>0:35</b>	1:15
Imprint™ 4 Regular	2:00	<b>1:00</b>	2:00
Imprint™ 4 Super Quick Regular	1:15	<b>0:35</b>	1:15
<b>VPS PRELIMINARY IMPRESSION MATERIAL - ALGINATE SUBSTITUTE</b>			
Imprint™ 4 Preliminary Penta™ Super Quick	1:00	–	1:30
Imprint™ 4 Preliminary Penta™	1:30	–	2:00

Imprint 4 materials are available in two setting regimes: The **"Super Quick" setting materials** are the ideal solution for impressions for 1 to 2 units. Imprint 4 Light & Regular Body offer longer working / setting times and thus are perfectly suited for larger and more complex cases offer longer working times and thus are perfectly suited for larger units.



# Recommended material combinations



Tray materials	Recommended wash materials
<b>1-STEP TECHNIQUE</b>	
Imprint™ 4 Penta™ Heavy	Imprint™ 4 Light Imprint™ 4 Regular
Imprint™ 4 Penta™ Super Quick Heavy	Imprint™ 4 Super Quick Light Imprint™ 4 Super Quick Regular
Imprint™ 4 Penta™ Putty	Imprint™ 4 Regular
<b>2-STEP TECHNIQUE</b>	
Imprint™ 4 Penta™ Putty	Imprint™ 4 Super Quick Ultra-Light Imprint™ 4 Light
Imprint™ 4 Penta™ Super Quick Heavy	Imprint™ 4 Super Quick Light Imprint™ 4 Light



## Ordering Information

Item No.	Product Information	Item No.	Product Information
<b>Trial/Intro Kits for Pentamix™ 3</b>		<b>Refills – Wash Materials</b>	
71499	<b>Imprint™ 4 Penta™ Putty Trial Kit</b> 1 base paste – 300 ml, 1 catalyst – 60 ml, 1 Imprint™ 4 Super Quick Ultra-Light cartridge – 50 ml, 10 Penta™ Mixing Tips red, 5 Garant™ Mixing Tips yellow, 5 Garant™ Intra-Oral Tips yellow	71491	<b>Imprint™ 4 Super Quick Ultra-Light Refill</b> 4 Imprint™ 4 Super Quick Ultra-Light cartridges – 50 ml each, 5 Garant™ Mixing Tips yellow, 5 3M™ ESPE™ Intra-Oral Syringes green
71497	<b>Imprint™ 4 Penta™ Heavy Trial Kit</b> 1 base paste – 300 ml, 1 catalyst – 60 ml, 1 Imprint™ 4 Light cartridge – 50 ml, 10 Penta™ Mixing Tips red, 5 Garant™ Mixing Tips yellow, 5 Garant™ Intra-Oral Tips yellow	71488	<b>Imprint™ 4 Light Refill</b> 4 Imprint™ 4 Light cartridges – 50 ml each, 5 Garant™ Mixing Tips yellow, 5 3M™ ESPE™ Intra-Oral Syringes green
71498	<b>Imprint™ 4 Penta™ Super Quick Heavy Trial Kit</b> 1 base paste – 300 ml, 1 catalyst – 60 ml, 1 Imprint™ 4 Super Quick Light cartridge – 50 ml, 10 Penta™ Mixing Tips red, 5 Garant™ Mixing Tips yellow, 5 Garant™ Intra-Oral Tips yellow	71490	<b>Imprint™ 4 Super Quick Light Refill</b> 4 Imprint™ 4 Super Quick Light cartridges – 50 ml each, 5 Garant™ Mixing Tips yellow, 5 3M™ ESPE™ Intra-Oral Syringes green
71496	<b>Imprint™ 4 Penta™ Putty Intro Kit</b> 1 base paste – 300 ml, 1 catalyst – 60 ml, 1 Imprint™ 4 Super Quick Ultra-Light cartridge – 50 ml, 1 Imprint™ 4 Regular cartridge – 50 ml, 1 Imprint™ 4 Penta™ Putty cartridge, 10 Penta™ Mixing Tips red, 5 3M™ ESPE™ Intra-Oral Syringes green, 5 Garant™ Mixing Tips yellow, 5 Garant™ Intra-Oral Tips yellow, 1 VPS tray adhesive	71487	<b>Imprint™ 4 Regular Refill</b> 4 Imprint™ 4 Regular cartridges – 50 ml each, 5 Garant™ Mixing Tips yellow, 3M™ ESPE™ Intra-Oral Syringes green
71494	<b>Imprint™ 4 Penta™ Heavy Intro Kit</b> 1 base paste – 300 ml, 1 catalyst – 60 ml, 1 Imprint™ 4 Light cartridge – 50 ml, 1 Imprint™ 4 Regular cartridge – 50 ml, 1 Imprint™ 4 Penta™ Heavy cartridge, 10 Penta™ Mixing Tips red, 5 3M™ ESPE™ Intra-Oral Syringes green, 5 Garant™ Mixing Tips yellow, 5 Garant™ Intra-Oral Tips yellow, 1 VPS tray adhesive	71489	<b>Imprint™ 4 Super Quick Regular Refill</b> 4 Imprint™ 4 Super Quick Regular cartridges – 50 ml each, 5 Garant™ Mixing Tips yellow, 5 3M™ ESPE™ Intra-Oral Syringes green
71495	<b>Imprint™ 4 Penta™ Super Quick Heavy Intro Kit</b> 1 base paste – 300 ml, 1 catalyst – 60 ml, 1 Imprint™ 4 Super Quick Light cartridge – 50 ml, 1 Imprint™ 4 Super Quick Regular cartridge – 50 ml, 1 Imprint™ 4 Penta™ Super Quick Heavy cartridge, 10 Penta™ Mixing Tips red, 5 3M™ ESPE™ Intra-Oral Syringes green, 5 Garant™ Mixing Tips yellow, 5 Garant™ Intra-Oral Tips yellow, 1 VPS tray adhesive	<b>Single-Use Syringe for VPS – For Wash Delivery</b>	
<b>Refills – Tray Materials</b>		71505	<b>3M ESPE Intra-Oral Syringe - Green Refill Pack – 20 Syringes</b>
71486	<b>Imprint™ 4 Penta™ Putty Refill</b> 2 base pastes – 300 ml each, 2 catalysts – 60 ml each	71506	<b>3M ESPE Intra-Oral Syringe - Green Value Pack – 50 Syringes</b>
71484	<b>Imprint™ 4 Penta™ Heavy Refill</b> 2 base pastes – 300 ml each, 2 catalysts – 60 ml each	<b>Cartridges for Pentamix™ 3</b>	
71485	<b>Imprint™ 4 Penta™ Super Quick Heavy Refill</b> 2 base pastes – 300 ml each, 2 catalysts – 60 ml each	77786	<b>Imprint™ 4 Penta™ Putty</b>
71492	<b>Imprint™ 4 Heavy Refill</b> 4 Imprint™ 4 Heavy cartridges – 50 ml each, 10 Garant™ Mixing Tips green	77784	<b>Imprint™ 4 Penta™ Heavy</b>
71493	<b>Imprint™ 4 Super Quick Heavy Refill</b> 4 Imprint™ 4 Super Quick Heavy cartridges – 50 ml each, 10 Garant™ Mixing Tips green	77785	<b>Imprint™ 4 Penta™ Super Quick Heavy</b>
<b>NEW Imprint™ 4 Preliminary Refills – Tray Materials</b>		<b>Cartridges for Pentamix™ LITE</b>	
71521	<b>Imprint™ 4 Preliminary Penta™</b> 2 base pastes – 300 ml each, 2 catalysts – 60 ml each	77944	<b>Penta™ Cartridge for Pentamix™ Lite</b>
71522	<b>Imprint™ 4 Preliminary Penta™ Super Quick</b> 2 base pastes – 300 ml each, 2 catalysts – 60 ml each	<b>3M™ ESPE™ Astringent Retraction Paste</b>	
<b>NEW Imprint™ 4 Bite - Bite Registration Material</b>		56944	<b>Refill Pack – 25 capsules</b>
71529	<b>Imprint™ 4 Bite Refill</b> 2 Imprint™ 4 Bite cartridges – 50 ml each, 5 Garant™ Mixing Tips green, 5 Garant™ Intra-oral Tips Bite	56945	<b>Value Pack – 100 capsules</b>
		<b>Pentamix™ Automatic Mixing Units &amp; Accessories</b>	
		77874	<b>Pentamix™ 3 Automatic Mixing Unit</b>
		77901	<b>Pentamix™ Lite Automatic Mixing Unit</b>
		77949	<b>Penta™ Mixing Tips – Red, 50 each</b>
		77580	<b>Garant™ Dispenser 1:1/2:1, 1 each</b>
		71452	<b>Garant™ Mixing Tips yellow, 50 each</b>
		71462	<b>Garant™ Intra-oral Tips yellow, 50 each</b>
		71460	<b>Garant™ Intra-oral Tips Bite, 50 each</b>
		<b>3M™ ESPE™ Impression Tray Refills (each containing 10 trays)</b>	
		71615	<b>Size S, upper jaw</b>
		71616	<b>Size M, upper jaw</b>
		71617	<b>Size L, upper jaw</b>
		71618	<b>Size S, lower jaw</b>
		71619	<b>Size M, lower jaw</b>
		71620	<b>Size L, lower jaw</b>

**3M ESPE**

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