# A – Silicone Impression Materials: Instructions For Use

maxill Putty: Very high viscosity impression material recommended for use as a tray material in single step (sandwich) or double step techniques.

maxill Heavy: High viscosity impression material recommended for use as a tray material in single step (sandwich) or double step techniques and in implantology.

maxill Monophase: Medium viscosity impression material recommended for use in the monophase technique.

maxill Alginate Free: Medium viscosity impression material suitable for use as an alternative for all alginate applications.

maxill Light: Low viscosity impression material recommended for use as a wash (correction) material in single step (sandwich) or double step techniques.

maxill Light HTS: Low viscosity impression material recommended for use as a wash (correction) material in single step (sandwich) or double step techniques. It is characterized by its very high tear strength values thus quaranteeing superior resistance to tear upon removal from the mouth

maxill Super Light: Extra Low viscosity impression material recommended for use as a wash (correction) material in single step (sandwich) or double step techniques.

Material Properties	Putty		Heavy			Monophase		Alginate Free	Light		Light HTS	Super Light
ISO 4823 Classification	Type 0 Putty consistency		Type 1 heavy-bodied consistency			Type 2 medium-bodied consistency		Type 2 medium-bodied consistency	Type 3 light-bodied consistency		Type 3 light-bodied consistency	Type 3 light-bodied consistency
Mixing ratio	1:1		5:1	1:1		1:1		1:1	1:1		1:1	1:1
Mixing time	30s hand mix		Auto mixing system	Auto mix	ing system	Auto mixing system		Auto mixing system	Auto mixing system		Auto mixing system	Auto mixing system
Setting	Fast	Regular	Regular	Fast	Regular	Fast	Regular	Fast	Fast	Regular	Fast	Fast
Total working time*	1m 00s	2 m 00s	1m 30s	1m 00s	2m 00s	1m 00s	2m 00s	1m 00s	1m 00s	2m 00s	1m 15s	1m 00s
Time in mouth	2m 00s	2m 30s	3m 00s	2m 00s	2m 30s	2m 00s	2m 30s	2m 00s	2m 00s	2m 30s	3m 00s	2m 00s
Total setting time*	3m 00s	4m 30s	4m 30s	3m 00s	4m 30s	3m 00s	4m 30s	3m 00s	3m 00s	4m 30s	4m 15s	3m 00s
Strain in compression min - max (%)	1-3		3-5	3-5		3-5		3-5	3-5		3-5	3-5
Elastic recovery (%)	>99.0		>99.5	>99.5		>99.5		>99.5	>99.9		>99.9	>99.9
Dimensional change (%)	<0.2		<0.2	<0.2		<0.2		<0.2	<0.2		<0.15	<0.2
Shore A hardness	68±2		75±2	75±2		60±2		45±2	50±2		62±2	47±2
*Application is at 23°C ± 2/73°F ± 4, 50 ± 5% relative humidity. Higher temperature reduces working and setting times and lower temperature prolongs them												

#### MIXING PROCEDURE

Handmix Putty - 1:1 Remove equal amounts of base and catalyst from the relevant tubs using the colour coded scoops. Attention: Do not use the same scoop for both materials. Knead the two components at room temperature, according to the recommended mixing time, until a homogenously coloured mixture is formed. Be sure to close containers immediately after use. Do not interchange container caps. Follow the chosen technique and leave the material to set for the recommended setting time.

**Automix - Cartridges- 1:1** Load the cartridge onto the appropriate handheld dispenser following the manufacturer's instructions. Once loaded remove cap and extrude material until it exits both chambers at the same rate and then mount the appropriate mixing tip. An intraoral tip may be placed on the mixing tip. To avoid air bubbles always keep tip of the mixing tip immersed in the impression material. Follow the chosen technique and leave the material to set for the recommended setting time. After use, either leave the used mixing tip as a cap until the following application or carefully remove mixing tip and place cap immediately taking care not to cross contaminate the materials. Intraoral tips and mixing tips are for single use only.

Automix - Cartridges 5:1 Remove cap of cartridge and load onto the appropriate automatic mixing machine following the manufacturer's instructions. Once loaded extrude material until it exits both chambers at the same rate and then mount the appropriate mixing tip and bayonet ring. To avoid air bubbles always keep tip of the mixing tip immersed in the impression material. Follow the chosen technique and leave the material to set for the recommended setting time. After use either leave the used mixing tip as a cap until the following application or carefully remove mixing tip and place cap immediately taking care not to cross contaminate the materials. The mixing tips are for single use only.

# **TECHNIQUES (Impressions)**

# One step technique (sandwich):

Place the ready mixed tray material onto the impression tray creating a trough. Syringe wash material directly onto preparation and apply additional material along the occlusal side of the tray material. Immediately position the impression tray in mouth. Hold immobile for the recommended time and carefully remove the impression tray after setting.

## Two step technique:

Preliminary Impression - Load the ready mixed tray material onto a perforated impression tray. Ample space must be allowed for the correction material. It is recommended to place a polyethylene spacer (separating) sheet on the tray material during the first step of impression taking in order to improve detail quality in the next step. Position the impression tray in mouth and hold immobile for the recommended time. Carefully remove the impression tray after setting. Rinse well under tap water and blow dry thoroughly. Flow channels must be formed so that excess correction material can flow away.

**Corrective Impression** - Syringe wash material onto first impression or directly around the preparation and the gingival margins. Reinsert the

impression tray in mouth and hold immobile for the recommended time. Carefully remove the impression tray after setting.

# One step technique (monophase):

Load the mixed monophase material onto a non perforated impression tray and syringe round the preparation. Position the impression tray in mouth and hold immobile for the recommended time. Carefully remove the impression tray after setting.

#### DISINFECTING:

Once impression is removed from mouth, rinse under lukewarm water. The impression can then be disinfected with appropriate disinfecting solutions or sprays.

#### **CASTING:**

The dry and clean impression should be cast at least 30 minutes after removal from the mouth. All class III and IV dental plasters and standard model-casting acrylics can be used.

#### **ELECTROPLATING:**

The impression can be electroplated using copper or silver baths.

#### **PRECAUTIONS**

- Putty: Avoid contamination of the base paste with the catalyst paste in the containers as the materials will become unusable. The scoops and the lids of the containers must only be used with the materials of the corresponding colours
- Contact with latex gloves may impair the setting reaction. Vinyl gloves are recommended
- · Do not combine with condensation curing silicones
- Avoid contact of material with eyes. In case of contact rinse eyes with plenty of water and consult a physician immediately
- Avoid spillage of material on clothing as it cannot be removed chemically
- Do not use after the expiry date

#### **STORAGE**

Store material between 10 - 25°C (50 - 77°F). Store impression at room temperature (max. 25°C/77°F)

#### PROFESSIONAL DENTAL USE ONLY

These materials have been developed for use exclusively by dentists and must be handled according to the instructions of use. The recommendations included in the instructions correspond to the actual state of knowledge regarding dental techniques. The manufacturer cannot be held responsible for damages caused by other uses or incorrect handling.

Caution: Federal US law restricts this device to sale by or on the order of a dental professional.



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Revision 1: 23 SEP 2016