

## INSTRUCTIONS FOR USE

**Indications for use:** Filling material as a treatment for dental caries.**Permite**: The non-gamma 2 admix alloy unsurpassed by any other with its high strength, high polishability and superior handling qualities. The alloy to mercury ratio varies between 1/0.86 and 1/0.96 depending on the size and setting time.**Lojic+**: The platinum modified, high silver, non-gamma 2 spherical amalgam. Lojic+ has exceptional early strength, smooth handling and excellent polishability. The alloy to mercury ratio varies between 1/0.73 and 1/0.77 depending on the size and setting time.**GS-80**: The technically advanced, non-gamma 2 admix amalgam at an affordable price. GS-80's high strength ensures longevity and patient satisfaction. The alloy to mercury ratio varies between 1/0.86 and 1/0.94 depending on the size and setting time.

The coloured plunger denotes the spill size, whilst the coloured base indicates the setting time:

Spill	Plunger	Alloy (mg)	Mercury (mg)			
			Fast (blue)	Regular (grey)	Slow (cream)	ECT (green)
<b>• Permite</b>						
1	pink	400	344	364	380	372
2	purple	600	522	552	576	564
3	yellow	800	696	736	768	752
5	dark green	1200	-	1128	-	-
<b>Condensing time (minutes)</b>			2.5	3.5	4.5	5
<b>Carving time (minutes)</b>			5.5	5.5	5.5	7

**• Lojic+**

1	orange	400	292	304	308
2	cream	600	438	456	462
3	brown	800	584	608	616
5	cerise	1200	-	936	-
<b>Condensing time (minutes)</b>			2.5	3	4
<b>Carving time (minutes)</b>			4.5	6	6

**• GS-80**

1	grey	400	346	360	376
2	light green	600	510	540	564
3	burgundy	800	680	720	752
5	gold	1200	-	1116	-
<b>Condensing time (minutes)</b>			3.5	4.5	5.5
<b>Carving time (minutes)</b>			5.5	5.5	5.5

**INSTRUCTIONS:**

- Select the appropriate size capsule according to colour coding.
- With the capsule inverted, SLOWLY press the plunger end of the capsule against a flat surface (see figure 1) until the flange of the plunger is flush with the capsule body (see figure 2). THIS IS MOST IMPORTANT. Initially, resistance will be felt, then suddenly released as the plunger pierces a diaphragm allowing the mercury to enter the mixing chamber.
- Slightly spread the amalgamator clips and carefully insert the capsule. Ensure that the capsule is securely anchored between the clips. (see figure 3).
- Select the appropriate mixing time from the suggested mixing times (see table 1). A range of mixing times is given to accommodate mixing variations that can occur due to machine type, age and line voltage. Correctly triturated amalgam will form into a bright homogeneous plastic mass. A hot, shiny, sticky mass indicates over trituration whilst a dull, dry or powdery mass is under triturated.

5. After trituration has been completed, **carefully** remove the capsule from the clip.

6. Tap the base end of the capsule sharply on the bench to ensure that the mixed amalgam is located in the base of the capsule (see figure 4).

7. Separate the base from the body and remove the prepared amalgam from the capsule. If the small separating diaphragm has come away from the capsule wall during activation and mixing, it will separate cleanly from the amalgam.

**8. CONDENSATION:**

Moisture contamination: If moisture has introduced into the amalgam before it has set, properties such as strength and corrosion resistance may be affected adversely. If the alloy contains zinc, such contamination may result in an excessive expansion (delayed expansion). Whenever it is possible, use a dry field.

Insertion of the amalgam should commence immediately after trituration. It is not necessary to express mercury prior to insertion. Traditional condensation techniques are recommended. Pack angles and undercuts with a small-faced plunger, using sufficient pressure to ensure good adaptation. Build the restoration with additional portions until cavity is slightly over filled. Remove any mercury rich amalgam from the surface, that may develop during condensation.

**9. FINISHING:**

Trimming and carving can be commenced immediately condensation has been completed. Light burnishing can be used to advantage and if the restoration is polished, this procedure should be carried out after 24 hours. Avoid overheating by ensuring adequate water cooling and low speed polishing.

**WARNING:****DANGER - POISON**

Harmful if vapours are inhaled. Avoid breathing.

Keep container closed. Use with adequate ventilation.

Do not open capsules prior to trituration. Do not remove the coloured plunger from the capsule. The wearing of gloves, glasses and protective clothing is recommended for all dental procedures. **Dispose of used capsules in accordance with national regulations.**

- Ingestion:** Mercury may cause neurotoxic effects and renal damage.
- Inhalation:** Mercury may cause respiratory disorders including inflammation and fluid retention.

- Eyes & Skin:** Mercury may cause irritations and allergic reactions.

- Acute Exposure:** Mercury may cause irritations and allergic reactions including dermatitis, digestive and respiratory disorders.

**California Prop 65 Warning:** This product contains mercury, a chemical known to the State of California to cause birth defects or other reproductive harm.

**CAUTION:** Federal law restricts this device to sale by or on the order of a dentist.

**Keep out of the reach of children.**

**Spillages:** Mercury presents a health hazard if incorrectly handled. Spillages of mercury should be removed immediately, including from places which are difficult to access. Use a plastic syringe to draw it up. Smaller quantities can be covered by sulfur powder and removed. Avoid inhalation of the vapour.

The information provided herein is given in good faith, but no warranty expressed or implied is made. MSDS available at [www.sdi.com.au](http://www.sdi.com.au) or contact your regional representative.

**STORAGE:** It is recommended that this product be stored at temperatures below 25°C.

**Composition of alloys:**

Permite: Ag 56%, Sn 27.9% Cu 15.4%, In 0.5%, Zn 0.2%

**THIS ALLOY CONTAINS ZINC; THE AMALGAM MADE THEREFROM MAY SHOW EXCESSIVE EXPANSION IF MOISTURE IS INTRODUCED DURING MIXING OR CONDENSING.**

Lojic+: Ag 60.1%, Sn 28.05%, Cu 11.8%, Pt 0.05%

GS-80: Ag 40%, Sn 31.3%, Cu 28.7%

Permite, Lojic+ and GS-80 capsules conform to ISO 24234 and ANSI/ADA Specification No.1.

## AMERICAN DENTAL ASSOCIATION MECHANICAL AMALGAMATION REQUIREMENT

**AMALGAMATOR**

Cycles per second

Time of Mixing (Seconds)

Plastic Capsules

**SDI ULTRAMAT 2**

75

8

(2 spill regular setting time)

Made in Australia by SDI Limited

Bayswater, Victoria 3153

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USA & Canada 1 800 228 5166

Brazil 0800 770 1735

Germany 0800 100 5759

France 00800 022 55 734

United Kingdom 00800 022 55 734

Spain 00800 022 55 734

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Italy 800 780625

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Figure 1, Abbildung 1, Figura 1, 图 1

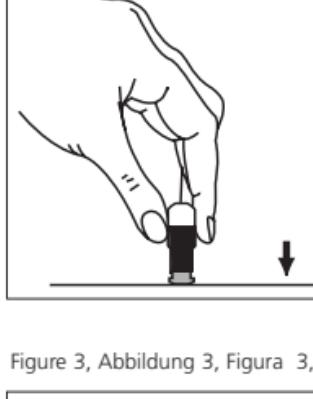


Figure 2, Abbildung 2, Figura 2, 图 2

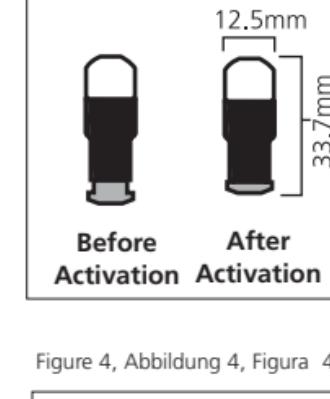


Figure 3, Abbildung 3, Figura 3, 图 3



Figure 4, Abbildung 4, Figura 4, 图 4



Table 1, Tabelle 1, Tabela 1, Tabla 1, Tabella 1, Tableau 1, 表1:

Recommended amalgamator settings / Valores recomendados / Empfohlene Mischzeiten für verschiedene Mischgeräte/ Tempi di miscelazione suggeriti / Réglages recommandés de l'amalgamateur/ Tiempo recomendado de mezcla / 推荐的银汞调拌机设置

amalgamator	speed setting	permite 1,2, 3 spill	5 spill	lojic+ 1,2,3 spill	5 spill	gs-80 1,2,3 spill	5 spill
Ultramat 2 (SDI)	Fixed	7±1	6±1	6±1	6±1	8±1	7±1
Capmix (ESPE)		8±1	7±1	8±1	7±1	8±1	7±1
Vari-Mix II (Caulk)	M2	8±2	7±2	8±2	7±2	8±2	7±2
Vari-Mix III (Caulk)	M	8±2	7±2	8±2	7±2	8±2	7±2
Silamat (Vivadent)	Fixed	7±1	6±1	6±1	6±1	8±1	7±1
<b>Wig-L-Bug</b> (Crescent):							
LP-60	Medium	10±2	9±2	9±2	8±2	10±2	9±2
SC-40		20±5	18±5	20±5	18±5	20±5	18±5
S2000	Low	10±2	9±2	9±2	8±2	10±2	9±2
DS80	Low	20±2	18±2	20±2	18±2	20±2	18±2
<b>Spirit</b> (Pelton Crane)	3500 CPM	10±2	9±2	9±2	8±2	10±2	9±2
<b>Executive</b> (Pelton Crane)		10±2	9±2	9±2	8±2	10±2	9±2
<b>Torit</b>	Fixed	12±2	10±2	11±2	10±2	12±2	10±2
<b>Duomat</b> (Degussa)	3800 CPM	10±2	9±2	8±2	7±2	10±2	9±2
<b>Zenith</b>	M	10±2	9±2	8±2	7±2	10±2	9±2
<b>AutoMix</b> (Kerr)	3600 CPM	10±1	9±1	9±2	8±2	10±1	9±1

NOTE: The ESPE Rotomix is not recommended for mixing SDI amalgam capsules. Capmix, Vari-Mix II, Vari-Mix III, Silamat, Wig-L-Bug, Spirit, Executive, Torit, Duomat, Zenith, AutoMix and Rotomix are not the registered trademarks of SDI Limited.

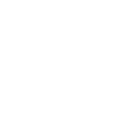
WICHTIG: Der ESPE Rotomix wird nicht zum Anmischen von SDI Kapseln empfohlen. Capmix, Vari-Mix II, Vari-Mix III, Silamat, Wig-L-Bug, Spirit, Executive, Torit, Duomat, Zenith, AutoMix und Rotomix sind keine geschützten Produkte der Firma SDI Ltd.

OBSERVAÇÃO: O Rotomix ESPE não é recomendado para misturar as cápsulas de amálgama da SDI. Capmix, Vari - Mix II, Vari - Mix III, Silamat, Wig - L - Bug, Spirit, Executive, Torit, Duomat, Zenith, AutoMix e Rotomix não são marcas registradas da SDI Limited.

NOTA: El ESPE Rotomix no está recomendado para mezclar las cápsulas de amalgama SDI. Capmix, Vari - Mix II, Vari - Mix III, Silamat, Wig - L - Bug, Spirit, Executive, Torit, Duomat, Zenith, Automix y Rotomix no son marcas registradas de SDI Limited.

NOTE: Le ESPE Rotomix n'est pas recommandé pour mélanger les capsules d'amalgame SDI. Capmix, Vari-Mix II, Vari-Mix III, Silamat, Wig-L-Bug, Spirit, Executive, Torit, Duomat, Zenith, AutoMix et Rotomix ne sont pas des marques déposées de SDI Limited.

NOTA: Il miscelatore Rotomix ESPE non è adatto per la miscelazione delle capsule di amalgama SDI. Capmix, Vari-Mix II, Vari-Mix III, Silamat, Wig-L-Bug, Spirit, Executive, Torit, Duomat, Zenith, AutoMix and Rotomix non sono marchi registrati da SDI Limited.



The ADA Council on Scientific Affairs' Acceptance of Permite, Lojic+ and GS-80 pre-encapsulated amalgam alloys is based on its finding that the product is effective for use in the preparation of dental amalgam.

Die Akzeptanz der ADA Kommission von vordosierte Amalgamkapseln für Permite, Lojic+ und GS-80 gründet sich auf ihrer Annahme, dass diese Kapseln effektiv in der Verarbeitung von Dentalamalgamen sind.

A aceitação do Conselho da ADA para assuntos científicos dos amálgamas pré-encapsulados Permite, Lojic+ e GS-80 é baseada no resultado que o produto é eficaz para ser usado na preparação de amálgama dental.

El ADA Council on Scientific Affairs' Aceptación de las aleaciones de amalgama pre-capsulada de Permite, Lojic+, y GS - 80 está basado en su hallazgo de que el producto es efectivo para el uso en la preparación de amalgama dental.

L'ADA commission des affaires scientifiques : L'acceptation du Permite, Lojic+ et GS-80 en tant qu'amalgames en capsule. Le produit est efficace pour utilisation dans la préparation de l'amalgame dentaire.

L'approvazione delle amalgame pre-incapsulate Permite, Lojic+, GS-80 da parte del Comitato Scientifico ADA, è basata sulla dimostrata efficacia di questo prodotto nella preparazione dell'amalgama dentale.



美国牙医协会(ADA Council)基于发现Permite、Lojic+、GS-80有效用作牙科合金材料，因而接受这些胶囊式银汞合金产品。