



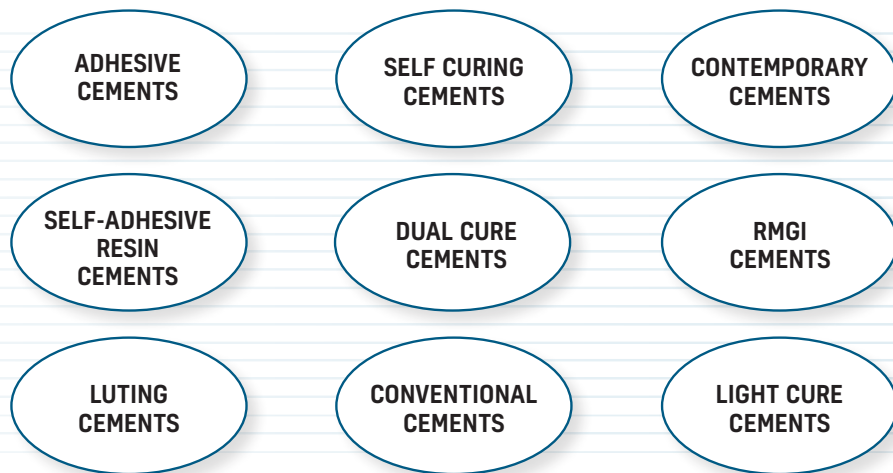
CEMENTS

50 YEARS OF CEMENT INNOVATION




CEMENTS ARE ONE OF THE MOST CONFUSING TOPICS FOR DENTISTS

When you look at the categorisation of cements, it is no wonder that cements are one of the most confusing topics for dentists. They are grouped under many different types.



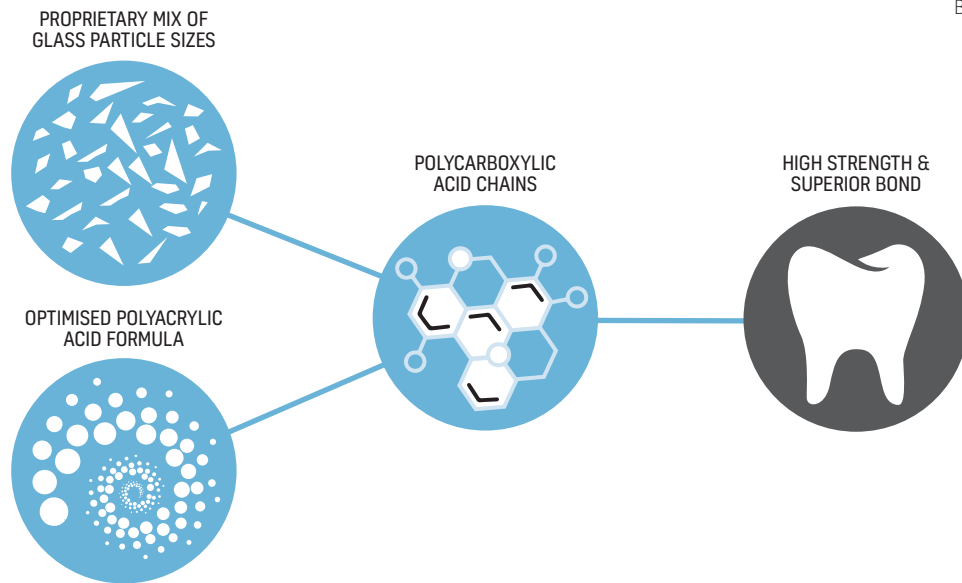
CATEGORISE A CEMENT BASED ON ITS MAIN COMPONENTS

We can categorise cements into three main categories:

TYPE OF CEMENT	NAME	DISPENSING SYSTEMS
Conventional glass ionomer cements These cements chemically bond to the tooth. They have low film thickness and a high fluoride release and are excellent for patients at a high caries risk.	Riva Luting	Capsule 
		Powder liquid 
Resin modified glass ionomer cements (RMGIs) These cements bond to dentine and must only be used in preparations that have high retention and strength. In addition, these cements release fluoride and are excellent for patients at a high caries risk. RMGIs can also be used in cases where isolation is difficult to achieve.	Riva Luting Plus	Capsule 
		Powder liquid 
	Riva Cem Automix	Automix syringe 
Self-adhesive resin cements (also called self-adhesive cements). These cements do not require pre etching or bonding. Full isolation is required.	seT PP	Automix syringe 

REVOLUTIONARY *IONGLASS*TM TECHNOLOGY

SDI's revolutionary *ionglass*TM technology comprises of the proprietary *ionglass*TM filler developed by our glass technologists. This *ionglass*TM is a radiopaque, high ion releasing and reactive glass used in SDI's range of dental cements.



THE RIGHT CEMENT FOR THE RIGHT CLINICAL SITUATION

Dentists will generally use 1-2 luting cements, depending on the clinical requirements.

	Moisture tolerant	Fluoride	Aesthetic	Retention needed*
RMGI [Riva Cem Automix]	✓	✓✓	✗	Yes
Resin based [seT PP]	✗	✓	✓	Minimal

*Requires sufficient tooth structure for maximised cementation

CEMENT PRODUCTS INDICATIONS



RIVA LUTING
[Self Curing GI Cement]



RIVA LUTING PLUS
[Resin Modified GI Cement]



RIVA CEM AUTOMIX
[Resin Modified GI Cement]



SET PP
[Self Etching, Self Adhesive Resin Cement]

METAL/METAL BASED				
Crowns	✓✓	✓✓	✓✓	✓
Bridges		✓✓	✓✓	✓
Inlays	✓	✓	✓✓	✓
Orthodontic bands	✓ [needs conditioner]	✓ [needs conditioner]	✓✓	
Posts and screws	✓	✓	✓✓	✓
RESIN BASED				
Posts (fibre reinforced)		✓	✓	✓✓
HIGH STRENGTH CERAMICS [e.g., Zirconia, Alumina]				
Crowns		✓	✓✓	✓
Bridges		✓	✓✓	✓
Inlays/Onlays		✓	✓✓	✓
LOW STRENGTH CERAMICS [e.g., Porcelain, Glass ceramic, Feldspar]				
Crowns				✓
Bridges				✓
Inlays/Onlays		✓	✓	✓✓
OTHER INDICATIONS				
Base/liner	✓			

✓ Indication.

✓✓ High performing indication.

SDI CEMENTS AT A GLANCE

CEMENT	FEATURES	SHADES	MIXING TIME (MIN' SEC'')	WORKING TIME (MIN' SEC'')	EXCESS REMOVAL STAGE (MIN' SEC'')	SETTING TIME (MIN' SEC'')
Riva Luting Conventional Glass Ionomer Luting Cement	<ul style="list-style-type: none"> • High fluoride release • Low film thickness • High flexural strength • BPA & HEMA free 	Universal light yellow	Capsule: 10"	2'15"	At first formation of gel stage, remove excess cement	4'30" - 10'00" ~
			Powder/Liquid: 20"	3'15"		4'30" - 10'00" ~
Riva Luting Plus Resin-modified Glass Ionomer Luting Cement	<ul style="list-style-type: none"> • High fluoride release • Clinically insoluble • High bond strength • High flexural strength • Low film thickness • BPA free 	Universal light yellow	Capsule: 10"	2'10"	At first formation of gel stage, remove excess cement	4'00" - 7'30" ~
			Powder/Liquid: 20"	2'30"		4'00" - 7'30" ~
seT PP (Syringe) Self adhesive Resin Cement	<ul style="list-style-type: none"> • Fast and easy • Minimal to no post operative sensitivity • Dual cure option • BPA & HEMA free 	A1, A2, OA3, translucent, white opaque	Automix: None	2'00"	Tack light cure: 2" per surface or Self-cure gel removal after 2'00"	Non-translucent restorations: 5'00". Composite and all ceramic materials: light cure 20" per surface
			Mixing by hand: 30"			
Riva Cem Automix Resin-modified Glass Ionomer Luting Cement	<ul style="list-style-type: none"> • Automix syringe • High bond strength • Light tack cure option • High colour stability • BPA free • Greater stain resistance • Sustained fluoride release • Radiopaque 	Universal light yellow	Automix: None	1'30"	Tack light cure: 5" per surface or Self-cure gel removal after 1'30"	5'00"

~ Note: working and setting time vary with temperature and mixing time, powder/liquid ratio used, and slow with repeated opening. Data are at 23±1 °C. Intra-oral times will be faster.

RIVA LUTING



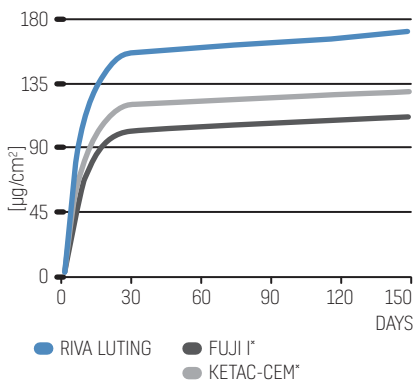
SELF-CURING GLASS IONOMER LUTING CEMENT.

Riva Luting is a conventional, self curing, glass ionomer luting cement designed for final cementation of metal based restorations. It chemically bonds to metal substrates and the tooth.

HIGH FLUORIDE RELEASE

Due to Riva Luting's *ionglass™* filler, it releases substantially higher fluoride to assist with remineralisation of the natural dentition.

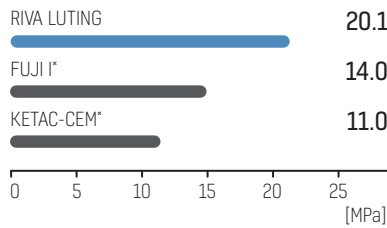
CUMULATIVE FLUORIDE RELEASE [1]



HIGH FLEXURAL STRENGTH

High flexural strength enhances longevity of a glass ionomer luting cement by withstanding mastication forces. Riva Luting's high flexural strength increases its durability in the oral environment and long term ability to retain indirect restorations.

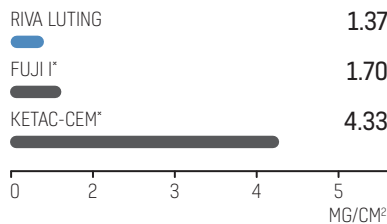
FLEXURAL STRENGTH [MPa]**



LOW SOLUBILITY

Riva Luting has low solubility in the oral environment. This increases the material's ability to resist disintegration and wear caused by oral acidity.

WATER SOLUBILITY [7 MINUTES AFTER MIXING]**



ADVANTAGES

Chemically adheres to tooth structure and metal substrates

BPA & HEMA free

Very low film thickness - flows easily between restoration and tooth

Easy to clean up

Low water solubility - increased longevity and aesthetics

High bond strengths

High fluoride releasing and recharging ability

Bioactive proprietary *ionglass™* technology - high ion exchange

Great for PFM crowns, metal posts, orthodontic bands, implants

Light yellow shade

INDICATIONS

Cementation of metal or porcelain fused to metal inlays, onlays and crowns

Cementation of stainless steel crowns

Cementation of posts and screws

Attachment of metal orthodontic bands

Lining



**Not a registered trademark of SDI Limited. **Published and SDI Test Data. [1] McCabe JF, Al-Naimi OT. Fluoride release into water for the Riva GIC products compared with competitor products. University of Newcastle [UK]; February 2005.

RIVA LUTING PLUS



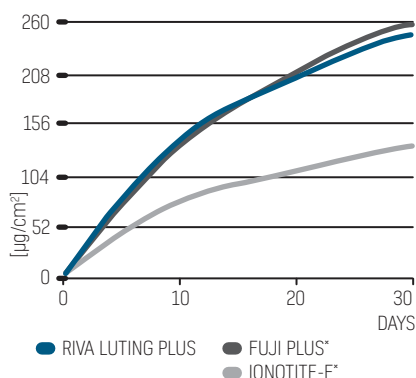
SELF-CURING RESIN MODIFIED GLASS IONOMER LUTING CEMENT.

Riva Luting Plus is a resin modified, self curing, glass ionomer luting cement, designed for final cementation of metal, PFM and resin crowns, bridges, inlays and onlays plus ceramic inlays and crowns. Riva Luting Plus chemically bonds to dentine, enamel and all types of core material.

HIGH FLUORIDE RELEASE

Due to Riva Luting Plus's *ionglass™* filler, it releases substantially higher fluoride to assist with remineralisation of the natural dentition.

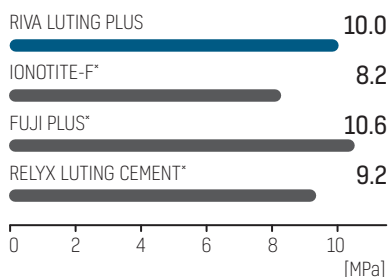
CUMULATIVE FLUORIDE RELEASE**



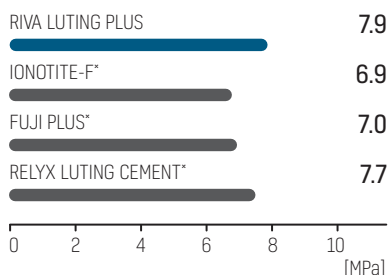
HIGH BOND STRENGTHS

Adequate adhesion to human tooth structure is important for long term retention of restorations. Riva Luting Plus has excellent adhesion to dentine and zirconia. It is great for luting ceramic crowns and inlays.

DENTINE - SHEAR BOND STRENGTH**



ZIRCONIA - SHEAR BOND STRENGTH**



ADVANTAGES

Chemically adheres to tooth structure and metal substrates

BPA & HEMA free

Very low film thickness - flows easily between restoration and tooth

Easy to clean up

Low water solubility - increased longevity and aesthetics

High bond strengths

High fluoride releasing and recharging ability

Bioactive proprietary *ionglass™* technology - high ion exchange

Great for PFM crowns, metal posts, orthodontic bands, implants

Light yellow shade

INDICATIONS

Cementation of resin, metal, or porcelain fused to metal inlays, onlays, bridges and crowns

Cementation of ceramic inlays and crowns

Cementation of pins, posts and screws



*Not a registered trademark of SDI Limited.
**Published and SDI Test Data.

RIVA CEM AUTOMIX



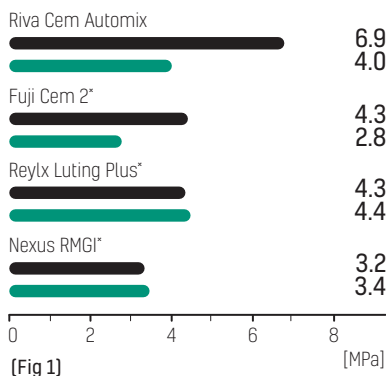
SUPERIOR BOND, HIGH STRENGTH AND LESS WASTE

Riva Cem Automix features SDIs revolutionary *ionglass™* technology. This unique blend of different sized reactive glass particles harnesses ion-release to cross-link polycarboxylic acid chains. This focused ion release gives Riva Cem Automix a clinically higher strength, superior bond and more stable aesthetic properties.

SUPERIOR BOND (ENAMEL AND DENTINE)

Reliable adhesion to tooth structure is important for long term retention of cement restorations. Riva Cem Automix shows excellent bond strength to enamel and dentine in an external study conducted over a 6 month period (Fig 1). In this study, Riva Cem Automix showed superior enamel/dentine bond strength compared to other cements.

ENAMEL & DENTINE - BOND STRENGTH AFTER 6 MONTHS



Study: In vitro properties of different resin-modified glass-ionomer cements - Prof. Dr. Alessandro Loguercio and Alessandra Reis (Brazil)

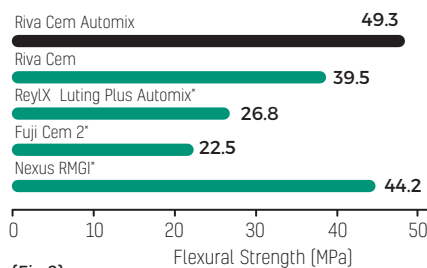
LIGHT TACK CURE

Riva Cem Automix has a light tack cure option for easy removal of excess cement. Simply light tack cure any excess material for 5 seconds with an LED curing light. Gently remove excess material. Alternatively, excess material can be removed after the self-curing phase [1 min 30 seconds].

HIGHEST FLEXURAL STRENGTH

A high flexural strength enhances the longevity of a cement restoration by better withstanding mastication forces. Riva Cem Automix has high flexural strength which increases its durability in the oral environment. (Fig 2).

FLEXURAL STRENGTH



ADVANTAGES

Superior bond (enamel & dentine)

Highest flexural strength

More tips/less tip waste

The best long term aesthetics

Light tack cure option

Sustained fluoride release

BPA free

Shade: light yellow

INDICATIONS

It is indicated for permanent cementation of metal-based and strengthen-core ceramic restorations and orthodontic appliances.

INDICATED MATERIAL	TYPE OF RESTORATIONS
PFM	Crowns & bridges
Prefabricated/Cast	Posts
Metals	Crowns, bridges, inlays & onlays, orthodontic appliances & posts
Ceramics (high strength)	Crowns & bridges, inlays & onlays
Ceramics (low strength)	Inlays



Source: Internal SDI Test Data.
*Not a registered trademark of SDI Limited.

SET PP



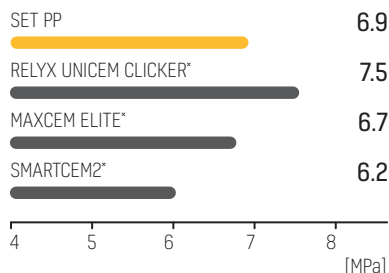
SELF ETCHING, SELF ADHESIVE RESIN CEMENT

seT PP is a self etching, self adhesive, resin cement designed for final cementation of metal, resin, all ceramic and ceramic based restoratives. seT PP chemically bonds to tooth structure and all types of core materials. seT PP is an all in one luting cement. It etches, bonds and fills with just the one component. seT PP is available in a paste/paste automix syringe system.

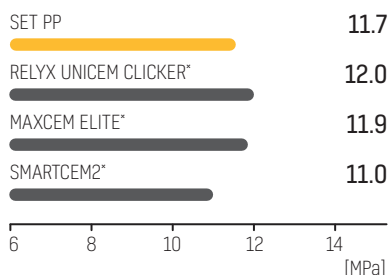
HIGH FLUORIDE RELEASE

Due to seT PP's *ionglass™* filler, it releases substantially higher fluoride to assist with remineralisation of the natural dentition.

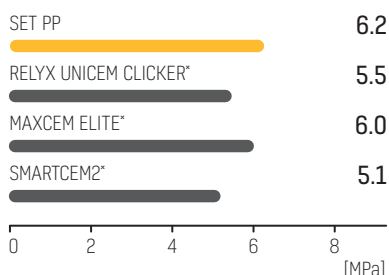
ZIRCONIA - SHEAR BOND STRENGTH [SELF CURE] [1]



DENTINE - SHEAR BOND STRENGTH [SELF CURE] [1]



REXILLIUM - SHEAR BOND STRENGTH [SELF CURE] [1]



ADVANTAGES

BPA & HEMA free

High bond strength

5 shades in capsules & automix syringes

Easy clean up

No need to etch - minimises post operative sensitivity

Sets in 5 minutes by itself or 20 seconds with an LED curing light

Good radiopacity

Near zero dimensional change

Proprietary *ionglass™* technology - High fluoride release

Good water resistance

INDICATIONS

Cementation of metal, resin, all ceramic and ceramic based inlays, onlays, bridges and crowns.

Cementation pins, posts and screws



*Not a registered trademark of SDI Limited.
[1] SDI Test Data.

APPLICATION GUIDES

ANTERIOR CROWNS

INDICATED CEMENTS

- seT PP



Photos courtesy:
Prof. Raphael Monte Alto [BRAZIL]



ANTERIOR CROWNS USING SET PP



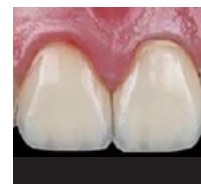
1. Initial presentation



2. Final preparation for total crown of 11 and 21



3. Applying Set PP for final cementation



4. Final restoration

Aesthetic rehabilitation of maxillary central incisors with zirconia crown using seT PP: During dental check up it is common to find patients with endodontically treated teeth that are severely darkened, adversely affecting the patient's smile. The correct treatment plan, in addition to bringing about the restoration of functional aesthetics, has the ability to restore the patient's smile.

ZIRCONIA CROWNS

INDICATED CEMENTS

- Riva Cem Automix
- Riva Luting Plus
- seT PP



Photos courtesy:
Dr Yassine Harichane [FRANCE]



ZIRCONIA CROWN USING RIVA CEM AUTOMIX



1. Initial presentation.



2. Riva Cem Automix showing ideal consistency after dispensing.



3. Seat the zirconia crown. Excess cement removed easily by light tack cure.

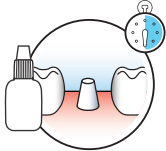



4. Final restoration.

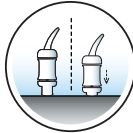
INSTRUCTIONS

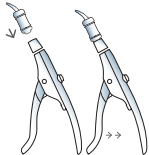
RIVA LUTING / RIVA LUTING PLUS

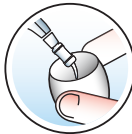
- 1 Prepare tooth using standard techniques.



- 2 Ensure the internal surface of the restoration to be seated is cleaned, dried and prepared according to manufacturer's instructions.



- 3 If using a capsule, activate the capsule and immediately mix in a triturator. Do not click before you mix.

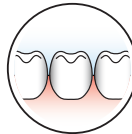

- 4 Immediately place into capsule applicator and click trigger until paste is seen through the nozzle.


- 5 Gently extrude approximately 1mm of cement onto the bonding surface.


- 6 Seat restoration within 30 seconds of completing mix.

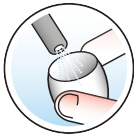

- 7 Remove excess cement at the first formation of the gel stage (approx. 2 min from start of mixing).



- 8 Maintain isolation until set is verified.





RIVA CEM AUTOMIX

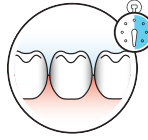
- 1 Ensure the internal surface of the restoration to be seated is cleaned, dried and prepared according to manufacturer's instructions.


- 2 Apply cement to the restoration. Seat the restoration within 30 seconds of completion of mixing before any light curing is carried out.


- 3 Light tack cure any excess material for 5 seconds per surface using a high power LED curing light.


- 4 Gently remove excess material using a scaler or explorer.

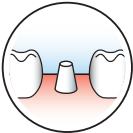

- 5 Seat the restoration for 5 min.

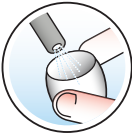



Note: Excess can also be removed during self-curing gel stage (when cement feels rubbery), after 1 min 30 seconds.


SET / SET PP


- 1 Remove temporary cement residue and rinse thoroughly. Remove excess water, keep moist.

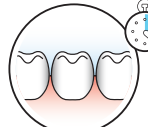

- 2 Prepare restoration according to manufacturer's instructions, and check fit.


- 3 Extrude cement evenly onto all bonding surfaces of the restoration and tooth.


- 4 Seat restoration, and leave for 30 seconds. Tack cure excess for 2 seconds or wait 2 minutes.


- 5 Trim excess material away.


- 6 Maintain isolation until set is verified (approximately 5 minutes), or light cure through translucent restoration for at least 20 seconds.



ORDER DETAILS

RIVA LUTING / RIVA LUTING PLUS



CAPSULES, POWDER AND LIQUID

Riva Luting Capsules 50 x Riva Luting Capsules	8650008
Riva Luting Powder/Liquid Kit 35g Riva Luting Powder 25g Riva Luting Liquid Accessories	8650508
Riva Luting Powder/Liquid Triple Pack 3 x 35g Riva Luting Powder 3 x 25g Riva Luting Liquid Accessories	8650510
Riva Luting Powder Refill 35g Riva Luting Powder Accessories	8650108
Riva Luting Liquid Refill 25g Riva Luting Liquid	8650900



CAPSULES, POWDER AND LIQUID

Riva Luting Plus Capsules 50 Riva Luting Plus Capsules	8651008
Riva Luting Plus Powder/Liquid Kits 10g (8.95 mL) Liquid 25g Powder Accessories	8651508
Riva Luting Plus Liquid Refill 10g (8.95 mL) Bottle	8651900
Riva Luting Plus Powder Refill 25g Powder	8651108



EQUIPMENT

Ultramat 2 High speed multi-use triturator	5546052
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ACCESSORIES

Riva Conditioner 10mL bottle refill	8620011
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APPLICATOR

Riva Applicator 2	5545013
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RIVA CEM AUTOMIX



RIVA CEM AUTOMIX SYR KIT

2 x Riva Cem Automix syringe (4gm) 16 Mixing Tips	8800703
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TIPS

50 X Riva Cem Automix tips	8800704
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SET PP



SYRINGES

seT PP Automix Syringe Refill 2 x seT PP 7g Automix Syringes 28 Automix Syringe Mixing Tips	
A1	8805101
A2	8805102
OA3	8805103
Translucent	8805105
White Opaque	8805104
seT PP Assorted 5 x Automix Syringe Kit 1 each of A1, A2, OA3, Translucent and White Opaque seT PP 7g Automix Syringes 70 Automix Syringe Mixing Tips	8810002



TIPS

50 x seT PP Mixing Tips - Normal	8810003
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TIPS

10 x seT PP Mixing Tips - Wide	8810004
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EXTENSION TIPS

10 x seT PP Oral Tips (To be used in conjunction with seT PP Mixing Tips - Wide)	8810005
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EXTENSION TIPS

10 x seT PP Endo Tips (To be used in conjunction with seT PP Mixing Tips - Wide)	8810006
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NEW ZEALAND 0800 808 855
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