SmithNephew

RALLY Bone Cement

Summit Medical
Cement Accessories

Distributed by **Smith-Nephew**

 The perfect mix of flexibility and consistency



The challenge



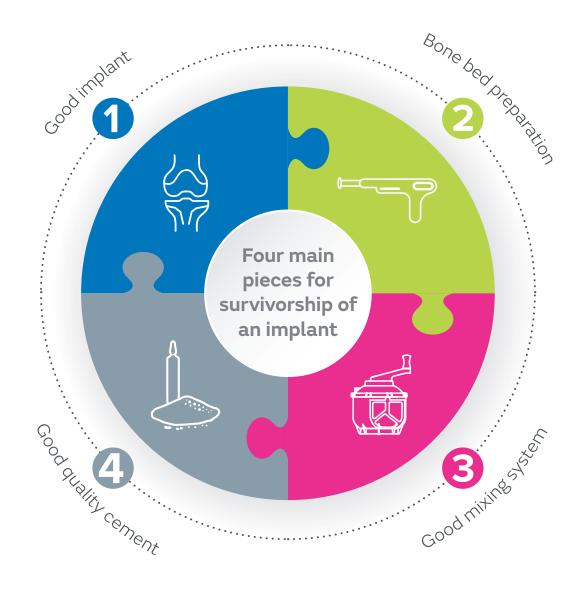
The solution

RALLYBone Cement

When you need a simple, comprehensive solution in the operating room, RALLY Bone Cement delivers. RALLY Bone Cement features options designed for reliability, visibility, and consistency to help achieve long-lasting implant survivorship for joint replacement procedures.

RALLY+Summit Medical Cement accessories

RALLY Bone Cement and Summit Medical Cement Accessories help simplify the OR experience when it comes to using mixing devices for bone cement. The goal and standard is to provide the best user experience by eliminating confusion with straight-forward techniques and mixing technology.



What is bone cement?

Bone cement is made from Polymethyl methacrylate (PMMA) which is usually supplied to hospitals in combination as a sachet of polymer powder and a glass ampoule of monomer liquid.

Bone cement mixing

When using bone cement in theatre it is important to understand the distinct phases that occur when the powder and liquid are mixed together, known as the polymerization process.

The polymerization process indicates to the user when the cement is ready to be placed and the length of time it then requires to set.

Although this process has four distinct phases, the length of each phase can vary from cement to cement. The four distinct phases are:



1. Mixing phase

The time to fully integrate the powder and liquid together.



2. Waiting phase

The time to achieve a suitable viscosity so that it can be handled without sticking to gloves. This time can be used to load the cement into the delivery device.



3. Working phase

The time during which the cement can be applied and the prosthesis implanted. The implant must be in place before the end of the working phase.



4. Setting phase

The time for the cement to harden and set completely.

Why do cements vary during the mixing process?

There are several factors that can contribute to the variation in behavior of bone cement seen during the polymerization process. A few of the factors include:

Composition – Can be influenced by the use of different copolymers, different powder-liquid ratio and the manufacturing or sterilization process of the cement.

Viscosity – High viscosity cement is relatively thick (dough like), and loses its stickiness quickly making the working phase longer whereas medium/low viscosity cement is more runny (liquid) and keeps its stickiness longer but has a shorter working phase.

Temperature – Higher temperatures within the OR speed up the process reducing the waiting phase and working time.¹

Humidity – Higher humidity accelerates all the phases of the polymerization process, whereas a dry atmosphere could lengthen the process.¹

RALLY All-in-One smith&nephew **RALLY° MV** smith&nephew RALLY° HV Radiopaque Bone Cement

RALLY^o Bone Cement offers surgeons flexibility and confidence in the operating room

Options for each surgeon's needs

- High viscosity
- Medium viscosity
- With Gentamicin
- Without Gentamicin
- 40g + 70g (All-in-One) size options

Reliability

- RALLY HV shows statistically higher compressive and bending strengths compared to Palacos[®] R²
- Long fatigue life and low porosity, even with hand-mixing²

Visibility

- Spearmint green color forms pigments for visibility
- Barium sulphate for radiopacity

Consistency

- Easy-to-mix, whether hand or vacuum mixing
- Smooth consistency from initial mixing to final implantation
- Unique All-in-One vacuum mixing device
 - 70g of cement components pre-loaded in a mixing and dispensing device



Let's RALLY[⋄] together

Smith+Nephew has partnered with Summit Medical to offer unique mixing devices for any orthopedic surgical cementing scenario.

Summit Medical is a global orthopaedic leader in cementation options. Through decades of research and development, Summit products combined with Smith+Nephew resources offer healthcare professionals confidence and simplistic options in treating complex clinical challenges.

Heads up:

When ordering RALLY Accessories **Always** order the amount needed based on the box quantities to ensure smoother transactions and inventory management.





Mixing systems

Summit Medical Mix In Syringe (with snap off nozzle)

Part Number: S727 Box Quantity: 10

Bone cement mixing + delivery

Mix In Syringe is a bone cement mixing and delivery device.

Mechanical mixing

Mechanically produces high quality mix of cement while reducing manual processing.³

Closed charcoal chamber

Featuring a closed system and charcoal filter allows for reduction in MMA fumes to levels below those set out in the HSE guidelines.⁴



Summit Medical Syringe Cement Gun

Part Number: H719 Box Quantity: 1

The Mix in Syringe delivery gun is a reusable device, composed of stainless steel and aluminum, for ejecting bone cement from a mixing/delivery syringe. Ratchet teeth allow the shaft to progress incrementally when the spring loaded trigger handle is pulled. The forward movement of the shaft forces the mixed bone cement to the opposite end of the delivery device and eventually out of the attached delivery nozzle.



Summit Medical MiniMix

Part Number: SMMM1 Box Quantity: 10

Bone cement mixing

MiniMix has been designed to mix 40g or less of PMMA bone cement, to support hip resurfacing, unicondylar knees, vertebroplasty, bone void filling and small joints procedures.

Rotational axis = Better mixing

MiniMix has a geared rotational axis mixing mechanism to ensure a high quality mix.⁵

Vacuum level of 550mmHg

Allows PMMA bone cement to be mixed at optimal levels to maximize the mechanical properties of the cement.^{6,7}

Transfer valve

8mm open bore transfer valve allows the mixed materials to be cleanly and precisely transferred into the delivery device or prosthesis.

200mm Catheter with 90 degree bend

Used with the delivery syringe, the catheter is ideal for vertebroplasty procedures, allowing the operator to inject the material whilst outside the X-ray field.

Summit Medical MiniMix Delivery Syringe

Part Number: SMDS1C Box Quantity: 10

The delivery syringe can be pushed for quick ejection, or screwed for more accurate delivery. The syringe has a 10cc capacity, ideally suited to assist with vertebroplasty or small joint surgery.

Note: This delivery syringe is required when using the MiniMix.





Summit Medical Open Bowl with Spatula

Part Number: B710 Box Quantity: 30

The open cement mixing bowl is a sterile, single-use plastic open bowl for mixing up to 80g of bone cement. Featuring a pouring spout, spatula, and scraping edge to allow for minimal waste and control of excess cement.



RALLY° Vacuum Mixing Bowl

Part Number: 71271801

Box Quantity: 20

RALLY Vacuum Mixing Bowl is a bone cement mixing device that uses a vacuum level of 550mmHg.

Rotational axis = Better mixing

The rotational axis design allows for higher quality mixing results in comparison to hand or fixed axis devices.⁷

Shaped spatula

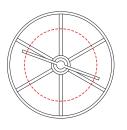
A specially designed spatula that precisely matches the bowl interior profile and helps minimize cement waste.

Visual mixing chamber

Offers a clear view of the cement during the mixing phase to view quality and composition prior to delivery.

High volume capacity

Bowl allows mixing of 40g to 120g of all types of cement.



Fixed Axis

Rotational Axis



Bone cement accessories

Summit Medical Pulsed Lavage

Part Number: WZ-WDS-01

Box Quantity: 5

Our **single-use** high pressure Pulsed Lavage system cleans bone and removes debris during total joint procedures. It is also a mechanical debridement system for cleaning wounds, removing dirt, necrotic tissue and debris.

Anatomy of the Pulsed Lavage:

1. Rocker switch

Provides high and low pressure control for bone bed cleaning and soft tissue debridement

2. Tip locking mechanism

Provides secure lock for attachments and tips

3. Separate suction and fluid tubes

4. Lightweight ergonomic design

For ease of use in a variety of procedures



Summit Medical Pulsed Lavage Femoral Brush

Part Number: WZ-PT-03

Box Quantity: 5

The Femoral Brush cleans bone and removes debris while drying the femoral canal.

Summit Medical Vacuum Foot Pump

Part Number: H550 Box Quantity: 1

The vacuum pump operates at a constant vacuum of 550mmHg and is used in conjunction with Summit Medical mixing devices only. To ensure the operator can see the vacuum is being applied, the foot pump has a vacuum dial to measure the vacuum being applied to the mixing system.



Summit Medical Spatula and Curettee

Part Number: SC01 Box Quantity: 40

Single-use spatula and curette used to deliver and apply bone cement to the orthopaedic joint. Delivery of the bone cement to the application site is carried out by a spatula which is used to collect bone cement from the mixing bowl and place it on the joint.

The Curette is used to facilitate the final forming of the cement and the cleaning of the prosthesis by removing excess bone cement from the orthopeadic joint after insertion. The plastic Curette reduces the risk of scratching the implant.



Summit Medical Femoral Pressurizer

Part Number: P721 Box Quantity: 10

Suitable for all femur sizes and easy to fit, giving maximum convenience.



BUCK Cement Restrictor

The BUCK Cement Restrictor plugs the intramedullary canal and provides complete cement support of the femoral prosthesis. Both 18.5 and 25mm are part of the Prep-IM™ Kit, but 13, 30 and 35mm are available individually for more options.



Prep-IM™ Total Hip Preparation Kit

The Prep-IM Kit sets the standard in femoral preparation kits. It comes complete with the necessary tools and implants to clean the osteotomized femur and plug the intramedullary canal.

Includes the following:

- 2 BUCK Cement Restrictors
- 1 Femoral Canal Brush
- 1 BUCK Disposable Inserter
- Femoral Canal Suction Absorber
- 2 CONCISE™ Cement Sculps
- 1 Medium Femoral Pressurizer



Catalog information

Bone Cement

Catalog Number	Catalog Number Description			
71271560	RALLY ^o HV Bone Cement, 40 grams			
71271570	RALLY HV AB Bone Cement, 40 grams			
71271580	RALLY MV Bone Cement, 40 grams			
71271590	RALLY MV AB Bone Cement, 40 grams			
71271600	RALLY HV AB All-in-One, 70 grams			
71271605	RALLY HV All-in-One System, 70 grams			
71271680	RALLY MV AB All-in-One, 70 grams			
71271685	RALLY MV All-in-One System, 70 grams			

Mixer Devices

Catalog Number	Description
71271801	RALLY Vacuum Bowl
S727	Summit Medical Mix In Syringe
SMMM1	Summit Medical Minimix - Mixer
SMDS1C	Summit Medical Minimix Delivery Syringe
B710	Summit Medical Open Bowl With Spatula

Cement Guns

Catalog Number	Description
71271610	RALLY All-in-One Cement Gun
H719	Summit Medical Syringe Cement Gun

Pulse Lavage and Cement Accessories

Catalog Number	Description			
110028	Vent Opening Tool			
111000	Concise Cement Sculps Kit			
110032	Acetabular Brush			
890095	RICHARDS Cement Hook			
110003	Femoral Canal Brush, Standard, 19mm			
110028	Vent Opening Tool			
110033	Femoral Canal Brush, Narrow, 12.5mm			
110037	Femoral Canal Suc Absorb, Standard			
110038	Femoral Canal Suc Absorb, Large			
WZ-WDS-01	Summit Medical Pulsed Lavage			
WZ-PT-03	Summit Medical Pulsed Lavage Femoral Brush			
H550	Summit Medical Vacuum Foot Pump			
SC01	Summit Medical Spatula With Curette			

BUCK Cement Restrictors

Catalog Number	Description
112428	BUCK Cement Restrictor Inserter
129418	BUCK Cement Restrictor, 18.5mm
129419	BUCK Femoral Cement Restrictor, 25mm
71279420	BUCK Cement Restrictor, 30mm
71279421	BUCK Cement Rest, 35mm
71279422	BUCK with Disp Insert, 18.5mm
71279423	BUCK with Disp Inserter, 25mm
71279424	BUCK with Disp Inserter, 30mm
914535	BUCK Cement Restrictor, 13mm

Cement Pressurizer

Catalog Number	alog Number Description			
111430	Acetabular Cement Compressor			
111431	Acetabular Compressor with Shd, Small, 54mmm			
111432	Acetabular Compressor with Shd, Medium, 62mm			
111433	Acetabular Compressor with Shd, Large, 70mm			
P721	Summit Medical Femoral Pressuriser			
111434	Femoral Cement Compressor			
111435	Femoral Cement Compressor Cap			
120709	Acet Cement Restrictor Pe, Large			

$\mathsf{PREP}\text{-}\mathsf{IM}^\mathsf{TM} \; \mathsf{Enhance} \; \mathsf{Total} \; \mathsf{Hip} \; \mathsf{Kit}$

Catalog Number	Description		
12-1010	PREP-IM Enhance Total Hip Kit		
Includes:			
12-9418	BUCK Cement Restrictor, 18.5mm		
12-9419	BUCK Cement Restrictor, 25mm		
11-2428	BUCK Disposable Inserter		
11-0003	Femoral Canal Brush, 19mm		
11-0037	Femoral Canal Suction Absorber, Standard		
71270027	Medium Femoral Pressurizer		
11-1000	CONCISE™ Cement Sculps		

Bone Cement Samples

Catalog Number	Description
71271700	RALLY [⋄] HV Bone Cement Sample
71271710	RALLY MV Bone Cement Sample
71271720	RALLY HV All-in-One System Sample
71271730	RALLY MV All-in-One System Sample

			and/or medical practices in individual markets. lability of Smith+Nephew products in your are	
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Data on file. 3. Eveleigh R, Dunne user technique. Journal of Advanc Management Systems, Plymouth, Arthroplasty. 1996;11(7):813-819	N, Orr J, Mushipe M, Beverland D. ed Perioperative Care. 2002:1(1) UK. 5. Kurdy NMG, Hodgkinson. 9. 6. Dunne NJ, Orr JF, Mushipe N 88-245. 7. Dunne NJ, and Orr JF,	. The fatigue life of bone cement: he :12-6. 4. Summit TR223: A compa JP, Haynes R. Acrylic bone-cement: IT, Eveleigh RJ. The relationship bet 2001. The effects of porosity on ac	nent surgery. Medicine. 2018;97(17):1-5. 2. To by it is affected by mixer design, vacuum level rison of fume levels using 4 cement systems. influence of mixer design and unmixed powde ween porosity and fatigue characteristics of burylic bone cement shrinkage after polymerisa	l and Vapour er. J oone