

- The Sure Cap<sup>®</sup> delivery system emphasizes safety and simplicity
- Palladium enriched for high early strengths
- Exceptional compressive strengths
- Excellent handling characteristics





# Valiant<sup>®</sup> Family of Amalgams

The unequaled strength and handling characteristics of the Valiant brand of amalgams have repeatedly earned the highest praises from The Dental Advisor reports, and from dentists for over 25 years.

In an independent evaluation, Valiant received the highest rating among Spherical Alloys and Valiant Ph.D. received the highest rating among Admixed Alloys.<sup>1</sup>

# **Valiant**<sup>®</sup>



**Spherical Formulation** 

This original spherical amalgam formulation has been a proven champion for over 25 years. Palladium enriched for remarkably high early strengths and with a high copper content for added corrosion resistance, the spherical particles provide exceptionally smooth carving and burnishing.

Formulated to completely eliminate the corrosive Gamma II Phase, Valiant has a 1 hour compressive strength of 43,500 psi, which is 58% of its 24 hour strength. In addition, Valiant offers low creep and low dimensional change reducing the chance of marginal erosion.



**Fast Setting Spherical** Formulation

A true revolution among

dental amalgams! Valiant Snap-Set offers a 1 hour compressive strength of more than 43,000 psi and sets within 5 minutes saving valuable chair time. Palladium enriched for high strengths, long lasting performance and improved corrosion resistance, Valiant Snap-Set has all-spherical particles for smooth carving and burnishing.

# Valiant<sup>®</sup> Ph<sub>-</sub>D

Phase Dispersed Formulation

Carrying on the Valiant



Sure<sup>o</sup>Cap<sup>®</sup> The patented delivery



system sets Valiant® amalgam apart from the rest...

All Valiant formulations feature the advantages of the SURE-CAP ultrasonically welded capsule. The SURE-CAP is welded air-tight during filling to prevent mercury vapor contamination of the working environment during storage and trituration. As trituration begins the mercury containment pillow ruptures and the mercury is expelled into the mixing chamber of the capsule. After trituration is completed, the capsule top is removed using the accompanying opener.

- No manual activation prior to trituration
- No pestle
- Almost no risk of mercury leakage or mercury vapor contamination

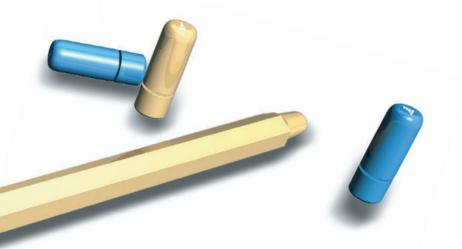
Gamma II compound completely. Palladium enriched to build early strength, Valiant Ph.D. resists corrosion, tarnishing and marginal deterioration. Plus, its fine particle size results in smoother carving, faster wetting, faster setting and a denser amalgam mass.

Valiant Ph.D. has one of the **lowest mercury** 

content of any dispersed phase system

and a high copper content that eliminates the

Valiant Ph.D. is also available in extended working time formulas: Valiant Ph.D. XT and Valiant Ph.D. EXT.



### PHYSICAL PROPERTIES

	Valiant <sup>®</sup>	Valiant Snap-Set <sup>®</sup>	Valiant <sup>®</sup> Ph.D.	Valiant <sup>®</sup> Ph.D XT	Valiant <sup>®</sup> Ph.D. EXT
Working Time	3'00" - 4'00"	2'00" - 3'00"	3'00" - 4'00"	5'30" – 6'30"	7'30" – 8'30"
Setting Time*	6'00" – 10'00"	6'00" – 10'00"	6'00" – 10'00"	7'00" – 10'00"	7'00" – 9'00"
1 hr compressive strength	43,500 psi	43,800 psi	41,900 psi	31,800 psi	2 7,400 psi
24 hr compressive strength	75,300 psi	67,300 psi	76,900 psi	75,700 psi	72,700 psi
24 hr dimensional change	-2.05 m/cm	-1.9 m/cm	-6 m/cm	03 m/cm	.04 m/cm
24 hr static creep	0.02%	0.08%	0.12%	0.01%	0.01%
Ratio (Alloy : Mercury)	1.3 : 1	1.3 : 1	1.1 : 1	1.1 : 1	1.1 : 1
*Setting times vary by spill size					

### MANIPULATIVE PROPERTIES

	Valiant <sup>®</sup>	Valiant Snap-Set <sup>®</sup>	Valiant <sup>®</sup> Ph.D.	Valiant <sup>®</sup> Ph.D XT	Valiant <sup>®</sup> Ph.D. EXT
Condense	3'	2'	3'30"	7'	10'
Begin	4'	3'	4'	8'	11′
Final Carve	7'30"	5′	7'30"	10'	13'
Burnish	9'	6'30"	8'30"	11'30"	14'30"

METALLURGICAL CONTENT						
	Valiant <sup>®</sup>	Valiant Snap-Set <sup>®</sup>	Valiant <sup>®</sup> Ph.D.	Valiant <sup>®</sup> Ph.D XT	Valiant <sup>®</sup> Ph.D. EXT	
Ag	49.5%	49%	52.5%	52.5%	52.5%	
Cu	20%	21%	17.5%	17.5%	17.5%	
Sn	30%	29%	29.7%	29.7%	29.7%	
Pd	0.5%	0.5%	0.3%	0.3%	0.3%	
TRITURATION / AMALGAMATION						
	Valiant <sup>®</sup>	Valiant Snap-Set <sup>®</sup>	Valiant <sup>®</sup> Ph.D.	Valiant <sup>®</sup> Ph.D XT	Valiant <sup>®</sup> Ph.D. EXT	
		Valiant Snap-Set <sup>®</sup>	Valiant <sup>®</sup> Ph.D.	Valiant <sup>®</sup> Ph.D XT	Valiant <sup>®</sup> Ph.D. EXT	

Silamat	6 ± 1	5 ± 1	6 ± 1		
Silamat Plus	P1	P1	P1		
Silamat S5	8 ± 1	6	8 ± 1		
Silamat S6	8 ± 2	8 ± 2	8 ± 2	8 ± 2	8 ± 2

NOTE: ONLY high-speed amalgamators are recommended. The preceding table gives approximate trituration times for various amalgamators. These suggested ranges are based on testing; however, clinical experience in obtaining a good plastic mix in a particular unit remains the best guide to trituration time. An amalgamator which monitors and corrects line voltage fluctuations is recommended.





PACKAGING							
	Valiant <sup>®</sup>	Valiant Snap-Set <sup>®</sup>	Valiant <sup>®</sup> Ph.D.	Valiant <sup>®</sup> Ph.D XT	Valiant <sup>®</sup> Ph.D. EXT		
No. 1 Spill - 50 Capsules	NA6050210	NA6050120	NA6050410	—	—		
No. 1 Spill - 500 Capsules	NA6050211	NA6050121	NA6050411	—	—		
No. 2 Spill - 50 Capsules	NA6050220	NA6050130	NA6050420	NA6050376	—		
No. 2 Spill - 500 Capsules	NA6050221	NA6050131	NA6050421	NA6050377	NA6050392		
No. 3 Spill - 50 Capsules	NA6050240	NA6050140	NA6050430	NA6050380	—		
No. 3 Spill - 500 Capsules	NA6050241	NA6050141	NA6050431	NA6050381	—		
RATIOS (Alloy powder : mercury)*							
	Valiant <sup>®</sup>	Valiant Snap-Set <sup>®</sup>	Valiant <sup>®</sup> Ph.D.	Valiant <sup>®</sup> Ph.D XT	Valiant <sup>®</sup> Ph.D. EXT		
	Optimum ratio:	Optimum ratio:	Optimum ratio	Optimum ratio:	Optimum ratio:		
	43% (1.3 : 1)	43% (1.3 : 1)	47.25% (1.1 : 1)	47.25% (1.1 : 1)	47.25% (1.1 : 1)		
No. 1 Spill	400mg / 308mg	400mg / 314mg	400mg / 368mg	_	_		
No. 2 Spil	600mg / 461mg	600mg / 471mg	600mg / 550mg	600mg / 562mg	580mg / 562mg		
No. 3 Spill	800mg / 612mg	800mg / 629mg	800mg / 731mg	800mg / 746mg	_		
*All measurements are approximate							

## Silamat<sup>®</sup> S6

Ivoclar Vivadent recommends the Silamat S6 Amalgamator for use with the Valiant Family of Amalgams

The Silamat S6 universal mixing device combines function with an attractive design. The patented and time-tested Silamat technology featuring the special "figure-eight mixing pattern" and above-average rotation speed of 4,500 rpm help to achieve reliable and homogeneous mixing results.



- Esthetic design
- Homogeneous mixing
- Works with all types of capsules
- Easy operation

#### 100% CUSTOMER SATISFACTION GUARANTEED!

### ivoclarvivadent.com

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#### **United States** 175 Pineview Drive Amherst, NY 14228 716.691.0010 800.533.6825 Fax: 716.691.2285 mail@ivoclarvivadent.com

#### Canada

2785 Skymark Avenue, Unit 1 Mississauga, Ontario L4W 4Y3 905.238.5700 800.263.8182 Fax: 905.238.5711 mail@ivoclarvivadent.com

