

# The Ratings Composites — Universal

# Luna 2

### **Manufacturer**

SDI

https://www.sdi.com.au/au/

#### **Prices**

#### Kits

Syringe Intro \$507.38/20g (\$25.37/g)

#### **Refills**

Complet Tips (20) \$120.50/5g (\$24.10/g or \$6.03/tip) Syringes \$107.10/4g (\$26.03/g)

#### **Shelf Life**

3 years

# SAMULI DI LUNA 2 ANTERIOR / POSTERIO NANO-HYBRID COMP

# Raves & Rants

- Dentin/opaque and body shades have appropriate translucency/opacity
- Polishes easily
- Incisal shade is too opaque
- Fluorescence could be improved



# Introduction/ Manufacturer's Claims

Second generation of the universal composite system with presumed "improved unique blend of fillers" to "deliver enhanced handling, very high radiopacity and reliable mechanical properties." It is also BPA-free and contains fluoride, while claiming to be color and gloss stable and possessing lifelike fluorescence and opalescence.

# Type

Nanohybrid.

# **Average Particle Size**

40nm-1.5µ

# Filler Content (%)

Weight	76
Volume	56

# **Consistency and Handling**

Body shades Most (56%) evaluators really liked the way it handles, while the other 44% found it to handle similar to most other composites in this category. Some comments:

- Liked the handling.
- Really like it.
- Nice handling.
- Staff really liked it too, polish and shade.
- Adapt reasonably well to cavity walls and floor without pulling away. Not really packable though.
- Loved it.
- Very convenient material during condensation at posterior region in box shaped cavities or root filled teeth or in approximate cavities with a tight matrix band. In anterior, while creating layers, the working time seems limited. No head light was used normally but it starts to set very quickly if you try to build a big anterior restoration.
- I did a lot of restorations with this material. It was a bit too sticky for my liking.

- Handles beautifully!
- Some of the Complets felt a bit too dry. Had to inject very slowly, so it didn't have the dry toffeelike effect.
- Handles well.
- The body material was a little bit too sticky, but was nonetheless fairly sculptable and did not slump.

Dentin/opaque shades Most (56%) evaluators really liked the way it handles, while 39% found it to handle similar to most other composites in this category and 5% found it to be too sticky and not sculptable enough. Some comments:

- Good.
- Can be sculpted.
- Really opaque, masks well and adequate.
- Not sticky, easily sculptable.
- Basically the same as the body shades.
- The dentin material was only slightly sticky and was more sculptable and did not slump, compared to the body material.

*Incisal shade* Most (53%) evaluators really liked the way it handles, while the other 47% found it to handle similar to most other composites in this category. Some comments:

- Layering resulted in nice results.
- I found it too grayish. Changed the color from yellow to gray.
- Same as body shades.
- Maybe slightly more sticky.
- Could be even more translucent.
- Of the four Luna 2 materials, the incisal material had the best handling properties. It was nicely sculptable and not too sticky.

Bleach shades Most (53%) evaluators found it to handle similar to most other composites in this category, while the other 47% really liked the way it handles. Some comments:

- Good.
- I used only one time. Seems adequate.

• As with the body material, I found the bleach material a bit too sticky, although it was fairly sculptable.

## **Viscosity**

Most (78%) evaluators thought it was really nice with virtually no slumping, while the other 22% found it to be just OK with minimal slumping. Some comments:

- Really nice characteristics.
- Expressed well from the capsule smooth and does not crumble.
- I loved the consistency of the product.
- Just a bit too soft for me.
- Very easy to sculpt.
- To me a bit too dry.

# Volumetric Shrinkage

**2.88%** (per manufacturer). This value is moderate for universal composites, but it is not in the low shrink territory.

# Hardness (Barcol)

58 (average for a universal composite).

# **Porosity**

From a clinical perspective, most (78%) evaluators found virtually no voids after finishing and polishing, while the other 22% found only a few surface voids. Some comments:

- The voids occurred according to the restoration type.
   In molars, I just condensed the material and noticed no voids. While creating anterior build-ups, during layering, several voids occurred. This material seems acceptable for posterior region but needs attention while creating anterior restorations.
- I saw a little bubble once but I felt like this was an outlier.

# Depth of Cure (mm)

2 (per manufacturer).

# Working Time under Dental Unit Light

30 seconds.

#### **Shades**

**12** 7 Vita body shades (A1, A2, A3, A3.5, B1, B2, and C2), 2 Vita dentin/opaque shades (OA2 and OA3), Incisal, and 2 bleach shades (XB and 2XB). We found A2 to be a close match to Vita A2, OA2 to be close to Vita A2, XB to be lighter than Vita B1, and 2XB to be slightly lighter than XB.

Body shades Most (89%) evaluators thought the selection was adequate, while the other 11% wanted more shades. In addition, most (67%) evaluators found the shades closely matched the Vita shade guide, while the other 33% were either not sure or thought some shades matched but others did not. Some comments:

- Would like to see D2 and D3 shades.
- I have a large adult and elderly patient population, so I would really like to see more darker shades, like C3, A4 and C4.
- Remarkably close shade matching and, even when I used A3.5 when I really needed A4, apparently the chameleon effect occurred, so the shade blended nicely with that of the tooth shade.

Dentin/opaque shades Most (94%) evaluators thought the selection was adequate, while the other 6% wanted more shades. One evaluator would have liked an OA1 shade. In addition, 44% of the evaluators found the shades closely matched the Vita shade guide, while the other 56% were either not sure or thought some shades matched but others did not.

*Incisal shade* Most (78%) evaluators thought one was enough, while the other 22% wanted more shades. Some comments:

- Depends on who you are marketing this to. I use more incisal shades for cosmetics. If this is for posterior teeth and some anterior work, it's fine with one incisal shade.
- Can't have too many shades.
- For what I did, one shade was enough.
- A purplish one would be nice when the appearance of more translucency is needed.
- More shades for incisal make my mind confused.
   Therefore, one is enough.

- One is just right.
- Would be nice to have medium or darker incisal.
- Given the material's characteristic of controllable translucency based on the thickness of the material, one incisal shade suffices.

Bleach shades Most (89%) evaluators thought the selection was adequate, while the other 11% wanted more shades. In addition, most (89%) evaluators found the bleach shades were light enough to match lighter-than-B1 bleached teeth, while the other 11% needed even lighter shades. Some comments:

- I like the two current shades.
- Today's patients want super white shades.
- Although I did not use it, 2XB seems white enough.
- I only needed to use bleach shades twice and found the availability of two shades to be sufficient.

# Translucency/Opacity (T/O)

Shade	T/O rating (%)	Comment
A2	65.3	Good for body shade
OA2	73.5	Good for dentin shade
Incisal	57.5	Good for enamel shade, too opaque for incisal
XB	69.2	Good for body shade
2XB	67.1	Good for body shade

Body shades Most (89%) evaluators thought the translucency/opacity of the body shades to be just right, while the other 11% found them to be too translucent.

Dentin/opaque shades Most (83%) evaluators thought the translucency/opacity of the dentin/opaque shades to be just right, while 11% found them to be too opaque and 6% considered them to be too translucent.

Incisal shade Most (72%) evaluators thought the translucency/opacity of the incisal shade to be just right, while 17% found it to be too opaque and 11% considered it to be too translucent.

Bleach shades Most (93%) evaluators thought the translucency/opacity of the bleach shades to be just right, while the other 7% found them to be too opaque.

Concerning blocking out the darkness from the back of mouth when restoring through-and-through Class IIIs and IVs, most (85%) evaluators were successful, while the other 15% were not able to accomplish this task consistently. In addition, most (87.5%) evaluators were able to simulate incisal translucency when doing Class IV or veneers, while the other 12.5% could not achieve this effect consistently.

#### Shade Guide

None.

# Radiopacity

All evaluators found it to be acceptable.

### **Fluorescence**

Fluorescence for A2 is fair to good (more purplish) compared to natural teeth under black light.

# Finishing and Polishing

Polisher	Matches Enamel Gloss
Astropol	Close
Pogo	Yes

Most (72%) evaluators considered it easy to polish to an enamel-like gloss, 17% were only able to come close to an enamel-like shine, and 11% were not able to come close to an enamel-like gloss. Some comments:

- Polished very well.
- The material needs to be polished by polishing disks by strictly following the steps.
- Really nice.
- Polishes beautifully!
- I was quite impressed with the high gloss I was able to achieve.

#### **Anterior Esthetics**

Most (59%) evaluators considered the anterior esthetic results to be really nice with the restorations blending into the tooth structure well, 35% found it to be acceptable, but not outstanding, and 6% were not impressed. Some comments:

- Voids, short working time during build ups, polishing, incisal color and weak polishing properties.
- I did multiple restorations and if I hit the color right, it was invisible.
- Looks very natural!

## **Posterior Esthetics**

Most (65%) evaluators considered the posterior esthetic results to be really nice with the restorations blending into the tooth structure well, while the other 35% found it to be acceptable, but not outstanding. Some comments:

- It was a bit soft for me. I try to put my anatomy in the restoration before I cure. This was hard because it wouldn't keep a shape.
- Inconsistent. Sometimes seemed a bit too opaque, occasionally too translucent. May have been due to depth of layers.

# **Packaging**

While the promotional material indicates there is an intro kit with 5 syringes and accessories, we only received the refills. The syringes come in sealed, white plastic pouches with the product name, a photo of the syringe, and the shade on the front, while the manufacture and expiration dates are on the back.

The syringes have a typical, screw-type plunger with a label displaying the shade repeatedly around the tip and the curing time and expiration date. The cap has two projections that make it easier to twist and remove it.

Most (78%) evaluators found the tips to be about the same as the competition, while the other 22% thought they had a nice design. Some comments:

- Ergonomically friendly.
- I like the color of the syringe. (Unique color)
- No big problems found.

The tips, which are called Complet, come is small, unsealed cardboard boxes with the product name printed on the top and front, and a label on one side displaying both the manufacture and expiration dates. A label on the front prominently indicates the shade. Inside are the tips in a recloseable plastic bag.

The product name, shade, and expiration date are imprinted on each black tip, and the color of the printing is white, which makes it very easy to read. The nose of each tip is reasonably long and the orifice is medium, which should allow for easy entry into the deep reaches of all but the most narrow preps.

Most (83%) evaluators found the tips to be about the same as the competition, while the other 17% thought they had a nice design. Some comments:

- Pretty much the same as all the rest.
- Material expresses easily.
- One of the best tips available, nose size nice.
- I found it a little more hard to extrude than ideal.

Note: Even though the promotional material indicates the shelf life is 5 years, the manufacture and expiration dates on the syringe pouches and Complet boxes state it is 3 years, which was confirmed by the manufacturer.

Most (83%) evaluators found the packaging to be acceptable, while the other 17% thought it was exemplary.

## **Directions**

Plain paper sheet in the annoying foldout format. There are no photos and illustrations, but the information itself is clear and easy to understand, although they are specific to other SDI products.

Note: The directions were only supplied in the syringe pouch. There were no directions whatsoever in the box of Complet tips.

Most (83%) evaluators found the directions to be acceptable, while the other 17% thought they were exemplary. One evaluator noted that it is interesting that the directions suggest etching for 90-120 seconds for enamel

"subjected to fluoridation" without further explanation. In other words, since there are many types of fluoridation (water, topical gels, etc), what type(s) is (are) included in this directive?

# Strengths



- Easy to use.
- Wear resistance.
- Ease of use, allowed nice esthetics, layering worked well.
- Very nice shade selection in every category.
- Not too sticky. Moderately sculptable.
- The variety of available body, dentin/opaque, and translucent shades gives you several options to adequately match shades.
- I loved the handling of the composite and its blendability into the adjacent tooth structure.
- Good handling. Body shades (especially A1 and A2) are aesthetically suitable for most teeth. Unique syringe color. Many shade options.
- The condensability of the material is perfect. The colors are nice. The opaque colors are just working well. Easily used material. In the anterior, it blocks the darkness from the back of the mouth.
- I thought the strength of this material was its polishability. I thought the blending was exceptional.
- All colors available. Color matching and polishability are good.
- Very versatile, handles very well, polishes beautifully. Nice that it's BPA free.
- Syringes worked well for larger direct laminates,
   Complets are well finished and I liked the size of the
- Handles very well, polishes very well and very radiopaque.
- Achieved very nice esthetic results when I had the time to control variable thicknesses of the opaque, body and incisal materials. The effortless and nice polishability of the cured material was excellent. The material provided a nice chameleon effect, blending well with tooth structure.

### Weaknesses



- Fluorescence could be improved.
- Not enough shades for high end cosmetics.
- Slightly too soft.
- If you prefer a less sticky or firmer feel to your composite handling, this may not be your go to composite.
- Not white enough shades available.
- The translucency of the incisal composite is inadequate. The luster after polishing is inferior to enamel.
- Voids occur during build up creation when using it anteriorly. Getting hard very easily in anterior teeth.
   Polishing problems become a problem in anterior.
   Incisal color is not appropriate and needs to be more clear.
- When restoring a large prep, I thought the material
  was a little soft. I was not able to put my anatomy
  in the occlusal because it was not stiff enough and it
  would not hold its shape. I also thought it was a bit
  too sticky.
- Few shades are lousy and sticky.
- Would like to see a few more shade options.
- To me, a bit too dry. If syringed too fast, the material had a tear effect.
- Packaging.
- The materials, especially the body and bleach shades, were a bit too sticky. My only real concern is that, with Luna 2 being a BPA-free material, would there be any concern with effecting a good bond to previously existing composite materials in cases where a large, otherwise well-bonded and esthetic restoration requires only a slight repair? Since I was only provided with the Luna 2 composite materials, but did not have the Luna Flow material, might there be a problem with bond strength of the final restoration, since I used a flowable liner of a BPA-containing material under the restoration. Does SDI require that Luna restorations use exclusively SDI products for all phases of a restoration?

#### **BOTTOM LINE -**

- Nice to have.
- I really like this material and I've already purchased more of it.
- Great product.
- OK composite material for daily use.
- Nice staff liked and will order more.
- One more material on the market...
- Would purchase like the array of shades in every category.
- Good addition to a whole bunch of composites already available on the market.
- If you prefer a firmer feel to your composite, handling may be an issue for you.
   This composite is sticky and works well for posterior class II, similar to a bulk fill handling, however the stickiness is not ideal in my hands for free hand composite veneers. Nice selection of shades and opacities though.
- Loved it.
- I recommend the use of Luna 2 especially in the posterior region and also as a post-endodontic restoration.
- This is a nice product. Seems suitable in anterior region. Adequate esthetics and function can be obtained in posterior teeth. Should be used with caution in anterior teeth. The polishability of the material can be improved.
- Do we really need another composite? Luna 2 is jumping into water that is already flooded. And being that they are late to the game, they are going to have a hard time breaking in because some of the other materials have established themselves as the gold standard. Even though I thought it was a good material and they put a lot of time and effort into making a special product... I don't know if it stands out enough to break in.
- A very good product with variety of shades in syringe and tips.
- Excellent product. Highly recommended!
- My choices in handling are still Filtek Supreme and Estelite Sigma. The shades
  cover nicely most of the common use in dentistry and the system is logical to use
  by an average dentist.
- Best composite from SDI.
- Luna 2 is an excellent restorative composite material. Allowing control over the
  amount of translucency based on varying the thickness of the dentin, body and
  incisal materials, helps the dentist achieve optimal esthetics. Despite slight
  stickiness of some of the component composite materials, Luna 2 handled nicely,
  did not slump, and was nicely polishable.



Michael B. Miller, D.D.S. - President/Editor-in-Chief

Ingrid R. Castellanos, C.D. - Vice President/Publisher

Editorial Team: M. Bilge Akbulut, D.D.S., Ph.D., Konya, Turkey; Leslie C. H. Ang, B.D.S., M.Sc.; Sema Belli, D.D.S., Ph.D., Konya, Turkey; Nathan S. Birnbaum, D.D.S., Wellesley, MA; Alan A. Boghosian, D.D.S., Chicago, IL; Sonia Regina Bordin-Aykroyd, D.D.S., M.Sc., Sao Paulo, Brazil; Matthew Brock, D.D.S., C.A.G.S., M.S.D., Chattanooga, TN; Richard L. Brown, D.D.S., Tulsa, OK; Mitch A. Conditt, D.D.S., Fort Worth, TX; Simona Cuevas, D.D.S., San Antonio, TX; Marvin A. Fier, D.D.S., Pomona, NY; George A. Freedman, D.D.S., Toronto, Ont., Canada; John Gammichia, D.M.D., Orlando, FL; Fay Goldstep, D.D.S.; Toronto, Ont., Canada; Gary Henkel, D.D.S., Horsham, PA; David S. Hornbrook, D.D.S., San Diego, CA; Timothy F. Kosinski, M.S., D.D.S., Bingham Farms, MI; Hannu O. Laamanen, D.D.S., M.S., Turku, Finland; Carole Landman, D.D.S., Chicago, IL; Clarence C. Lindquist, D.D.S., Washington, D.C.; Edward Lynch, M.A., B.D.Sc., Ph.D., London, UK; Hans Malmstrom, D.D.S., Rochester, NY; Robert C. Margeas, D.D.S., Des Moines, IA; Sandesh Mayekar, M.D.S., Mumbai, India; Steven McGowan, C.D.T., Seattle, WA; Michael K. McGuire, D.D.S., Houston, TX; Elaine Mo, B.D.S., London, UK; Aikaterini Papathanasiou, D.D.S., Boston, MA; Christopher Pescatore, D.M.D., Danville, CA; Stephen D. Poss, D.D.S., Brentwood, TN; Robert G. Ritter, D.M.D., Juniper, FL; Joseph Sabbagh, D.D.S., M.Sc., Ph.D., Beirut, Lebanon; Andrew T. Shannon, D.D.S., Vancouver, BC, Canada; Todd Snyder, D.D.S., Laguna Nigel, CA; Liviu Steier, D.M.D., Ph.D., Needham, MA; Franklin Tay, B.D.Sc.(Hons), Ph.D., Augusta, GA; Stephanie Tilley, D.M.D., Pensacola, FL; Brian Toogood, D.D.S., Lewisville, TX; Thomas G. Wilson, Jr., D.D.S., Dallas, TX; David Winkler, D.D.S., Odense, Denmark; Tyler Wynne, D.D.S., Clemmons, NC.

To become a member of REALITY RATINGS & REVIEWS, please visit our Web site at www.realityratings.com.

#### NO COMMERCIALIZATION POLICY

We accept no advertising and are not beholden to any commercial interest. Product evaluations and ratings are intended only to guide our readers to make wise and informed purchases. The unauthorized use of product evaluations and ratings in advertising or for any other commercial purpose is strictly forbidden.

REALITY RATINGS & REVIEWS (ISSN#1041-8253) is an online information service from Revera, Inc., 1322 Eagle Point Dr., Georgetown, TX 78628, U.S.A., 512-688-3423, Fax 512-489-9225. A one-year membership includes access to the online database plus periodic PDF issues of REALITY NOW. Call for membership and publication rates or access our Website for enrollment information. Payments by check must be in U.S. funds drawn on a U.S. bank, or by Visa, MasterCard, or American Express. All rights reserved. No part of REALITY RATINGS & REVIEWS or REALITY NOW may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system without the written permission of the Publisher, except where permitted by law. Copyright ©2022 by Revera, Inc. GST #898-896-659. POSTMASTER: Send address changes to Revera, Inc., 1322 Eagle Point Dr., Georgetown, TX 78628.

# CELEBRATING THE 50<sup>TH</sup> ANNIVERSARY OF SDI

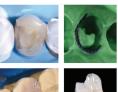
#### LUNA 2

Luna 2 is the next generation Luna universal composite. Luna 2 has an improved unique blend of fillers that were researched and developed at SDI to deliver enhanced handling, very high radiopacity and reliable mechanical properties. Luna 2 is BPA free for health-conscious patients. Luna 2 makes placing a composite easier than ever.





Images courtesy of Dr Neus Sancho Lecina - Spain





Indirect onlay with Luna 2. Images courtesy of Dr Giuseppe Lacona - Italy





Images courtesy of Prof Dr Marco Aurélio Chaves da Silva - Brazil





Images courtesy of Dr Michael Chan - Australia











➤ "LUNA 2 is an extremely versatile composite, with excellent viscosity that ensures efficient handling and success in primary anatomy." 

(()

PROF DR LEONARDO UBALDO - BRAZIL



DR BILL GERGIS - AUSTRALIA



"LUNA 2 is a great simplified and aesthetic approach to both anterior and posterior restorations."

📆 DR SAM KOH - AUSTRALIA



>> "LUNA 2 is certainly the material that I want in my clinical routine and recommend to my students."

PROF DR CRISTIANE DE MELO ALENCAR - BRAZIL



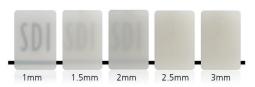
>> "LUNA 2 is spectacular!" **《** 

DR GIUSEPPE IACONA - ITALY



# FASTER, MORE ACCURATE SHADE MATCHING

Luna 2 offers innovative Logical Shade Matching Technology and the Chameleon Effect for easier and more precise shade selection. Shades were developed prioritizing value (lightness), while pigments were arranged in a logically increasing way, for a simpler and faster match to the Vita Classical Shade Guide®. Patients will enjoy more accurate aesthetic results, including polishing and wear resistance for long lasting restorations.





Translucency in different thicknesses of Luna 2 shade A2

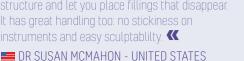
Scan the QR code for free download of complete Luna 2 Translucency Clinical Guide and for more Luna 2 content.





Images courtesy of Dr Jiovanne Neri - Brazil

Luna 2 has beautiful optics that mimic tooth instruments and easy sculptablilty. «







Most mastication forces are compressive in nature, making this an important mechanical property for posterior restorations to support the occlusal load without fracturing.



Luna 2 withstands masticatory forces in a similar way to dentin. This reduces failure risk either in areas of high stress, as Class V, or in less supported areas, such as cusp replacement or proximal boxes.





#### NATURAL TOOTH-LIKE PROPERTIES **ACROSS ALL LIGHT**

Luna 2 technology mimics the natural properties of teeth across all light sources. Your patients will enjoy lifelike translucency, opalescence, and fluorescence, with outstanding clinical performance.



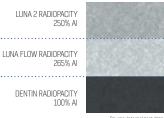
#### PERFECT CREAMY HANDI ING

Luna's handling has been further improved. Luna 2 has non-stick, non-slump handling. Dentists conducting clinical trials of Luna 2 have praised its outstanding handling and ease of packing and sculpting.



#### RADIOPACITY 250% AL

With dentin/enamel at 100/170% Al radiopacity, Luna 2's outstanding radiopacity allows clear differentiation, providing easy and precise visualization for diagnosis assistance.



Source: Internal test data



#### **BPA FREE**

Luna 2 is formulated without BPA derivatives, perfect for healthconscious patients.



The Luna 2 filler formulation is primed for excellent polishing results, wear resistance and longevity.





SEM before finishing and

SFM after finishing and polishing

SOURCE: Independently tested by Unité de Recherches Biomatériaux Innovants et Interfaces (URB2i-EA 4462 Paris Descartes). Chairman: Dr. Jean-Pierre Attal