

REALITY

RATINGS & REVIEWS | practical • unbiased • trusted
39TH anniversary

The Ratings | Composites — Flowable – Light-Cured – Conventional

Clearfil Majesty ES Flow Universal

Manufacturer

Kuraray Noritake

<https://kuraraydental.com/product/clearfil-majesty-es-flow-universal/>

Prices

Kits

None

Refills

Syringes

\$83.36/2.7g (\$30.87/g)

Shelf Life

3 years



Raves & Rants

- ✓ Blends well with only two shades in posterior teeth
- ✓ Excellent handling with no slumping
- ✗ No bleach shade
- ✗ May be too translucent for through-and-through preps

2025

REALITY

RATINGS & REVIEWS

Four Star Award



★★★★☆ 4.4

Introduction/ Manufacturer's Claims

Conventional, light-cured flowable composite that is being marketed for basically all types of restorations including Class I and II and as a luting cement for veneers. It has the moniker Universal since it only comes in two shades: U which stands for Universal and UD which is Universal Dark. Regular Universal is designed for all Class I and II applications and for Class III, IV, and V when you are trying match the following shades: B1, A1, B2, D2, A2, C1, C2, D4, A3, and D3. On the other hand, UD will presumably match B3, A3.5, B4, C3, A4, and C3.

Just like its sculptable stablemate, Clearfil Majesty ES-2 Universal, Flow Universal incorporates Kuraray's Light-Diffusion Technology (LDT) that causes light to diffuse in a similar matter mimicking tooth structure. This presumably allows the material to blend seamlessly into the surrounding tooth structure.

In addition, it has Super Low as a tagline to its name. Even though at first glance you may think Super Low means it has super low viscosity, i.e., runny, it's actually just the opposite. Super Low means super low flow, aka very thick consistency. It is also stated to be easy polish due to its unique cluster and submicron fillers.

Concerning its recommendation that it can be used for all classes of restorations, most (61%) evaluators were not comfortable using it in that manner, preferring to use it for typical flowable applications, while the other 39% were ready to use it as recommended. Some comments:

- I don't put flowable on the occlusal surface.
- I used it in smaller class I & IIs.
- I did not feel comfortable using it for larger posterior restorations; mostly used for class V, sealants, liners.
- Used it for all types of composite restorations.
- I did use it for a few occlusal composites.
- Until I see more long term data, I am not using it on the occlusal surface.
- Did not use it for class 4 restorations.
- Maybe I am old fashioned but unless it was very small, I would want another layer that would wear

better on the occlusal.

Only one evaluator used it as a luting cement for veneers and, according to the evaluator, it worked well despite its rather thick viscosity.

Type

Nanohybrid.

Average Particle Size

0.18μ-3.5μ.

Filler Content (%)

Weight	78
Volume	51-64

Dispensing

Syringes.

Consistency and Handling

U shade Most (61%) evaluators really liked the way it handles, while the other 39% found it to handle similar to most other flowables in this category. Some comments:

- Viscosity allowed for easy placement and manipulation of material.
- It did not seem to slump like others.
- Handling was pretty good.

UD shade Most (53%) evaluators really liked the way it handles, while the other 47% found it to handle similar to most other flowables in this category.

Flow

5.0 (high viscosity or super low as Kuraray claims.)

U shade Most (78%) evaluators really liked its viscosity, while the other 22% found it to be too thick. Some comments:

- It was a little thicker than I am used to using. I used it in a sandwich application by placing the flow first



then packable injected, shaped, then cured. I didn't trust it to flow by itself into the bottom of a box, cure this layer, then place packable.

- Harder to flow into tiny nooks so not universally applicable like a sealant.
- No trouble with the flow.

UD shade Most (81%) evaluators really liked its viscosity, while the other 19% found it to be too thick. One evaluator felt it was too thick to use as a liner.

Volumetric Shrinkage

3.6% (per manufacturer at 24h). This value is relatively low for flowable composites.

Hardness (Barcol)

72 (high for a flowable).

Porosity

From a clinical perspective, most (62.5%) evaluators found virtually no voids after finishing and polishing, while the other 37.5% found only a few surface voids.

Depth of Cure (mm)

2 (per manufacturer).

Working Time under Dental Unit Light

30 seconds.

Film Thickness (if used as a resin cement)

60 μ .

Shades

2 U is a dead ringer for A2/B2, while UD matches A4/B4 very closely.

Concerning whether these two shades were able to match the entire Vita Classic range, most (67%) evaluators found the two shades could match most teeth, but needed additional shades to match all teeth, 22% thought the two shades matched all teeth, and 11% were only able to match a few shades. Some comments:

- It covers a good spectrum of shades but certainly not all shades.
- This goes with any "universal" type of material. Good for a lot, but never perfect.

Most (89%) evaluators also felt neither shade matched bleached teeth, while the other 11% thought it worked well for bleached teeth. One evaluator opined that it was a complete failure for bleached teeth.

Translucency/Opacity (T/O)

Shade	T/O rating (%)	Comment
U	68.3	Good for body shade
U (60 μ)	0.0	Virtually clear for resin cement
UD	67.2	Good for body shade

U shade Most (89%) evaluators found its T/O to be just right, while the other 11% found it to be too translucent. Some comments:

- You have to know the product. I wouldn't say it is too translucent, but it is a bit translucent, so you have to know when to use it for esthetics and when it will be a bit too grey.
- Mostly ok, but sometimes appeared a bit translucent in class V restorations.
- I feel the opacity/ translucency was ok for most situations.
- Well I should say that it was predictable to not block out and when used in more bulk, was lower in value, like you would expect.

UD shade Most (87.5%) evaluators found its T/O to be just right, while the other 12.5% were evenly split between

too translucent and too opaque. One evaluator felt it was fine, except when lesions were through and through in the anterior.

Concerning blocking out the darkness from the back of mouth when restoring through-and-through Class IIIs and IVs, most (67%) evaluators were not successful on a consistent basis, while the other 33% were able to accomplish this task consistently. In addition, most (80%) of the evaluators were not able to simulate incisal translucency when doing Class IV, while the other 20% could achieve this effect consistently.

For those evaluators who used it in combination with its sculptable brethren, Clearfil Majesty ES-2 Universal, most (64%) found the two materials to blend well, while the other 36% did not achieve this goal consistently.

Shade Guide

None.

Radiopacity

Most (92%) evaluators found it to be acceptable, while the other 8% did not think it was radiopaque enough.

Fluorescence

Both shades are very good, being just about a dead match compared to natural teeth under black light.

Finishing and Polishing

Polisher	Matches Enamel Gloss
Cotton roll soaked in alcohol	No
Pogo	Yes

Most (65%) evaluators considered it easy to polish to an enamel-like gloss, while the other 35% were only able to come close to an enamel-like shine.

Concerning using a cotton roll or gauze soaked in alcohol to wipe its surface to produce a high gloss, most (67%) evaluators could not create this gloss in this manner and still needed typical composite polishers, while the other 33% were able to accomplish this task.

Anterior Esthetics

Most (64%) evaluators considered the anterior esthetic results to be acceptable, but not outstanding, while the other 36% found it to be really nice with the restorations blending into the tooth structure well. Some comments:

- Worked great in anterior class 5s and posterior.
- It is work better esthetically in the posterior teeth.
- For class 5s in anterior, I still had to use Omnicroma Blocker or it was too low in value.
- Not ideal for bleach shades or lighter shades.
- For most anterior, I like to layer.

Posterior Esthetics

Most (92%) evaluators considered the posterior esthetic results to be really nice with the restorations blending into the tooth structure well, while the other 8% found it to be acceptable, but not outstanding.

Packaging

Since this is a two-shade product, there are no kits. It also only comes in syringes — no preloaded tips. The syringes come in sealed plastic bags that are difficult to store on a shelf. The bags are imprinted with the shade identification, i.e., U or UD, and the expiration date.

The black, push-type syringes have moisture-resistant labels with the expiration date embossed, while the shade is in a color-coded band near the tip. The shade is also found on a label on the end of the plunger for viewing in a composite caddy. The metal tips are fine gauge and bendable.

The syringe/tip assembly is stated to prevent void/air bubble formation during dispensing, although as noted previously, we did see a few bubbles. Nevertheless, the bubbles were minimal for a flowable, evidently due to its

specially designed syringe that decreases the risk of air bubbles by reducing unnecessary gaps inside.

Most (83%) evaluators reported having no bubbles, while the other 17% had a few. One evaluator noted that the bubbles were less than that with a typical flowable.

Additionally, the special design of the syringe and plunger limits the possibility of dripping during or after dispensing. The o-ring inside prevents the material from flowing after pressure is released, while preventing the plunger from retracting too much. We found virtually no dripping after dispensing.

Most (83%) evaluators reported having no dripping, while the other 17% had a few drips. Some comments:

- Dripping and stringiness are two of the most annoying issues with most flowables. This product did neither.
- Seemed better than other flowables I have used.
- I don't really remember that being an issue with other flowables.

Most (89%) evaluators found the packaging to be acceptable, while the other 11% thought it was exemplary.

Directions

The main directions come on a plain paper sheet in the annoying foldout format in English, French, and Spanish. There are no photos and illustrations, but the information itself is reasonably clear and easy to understand. There is also a coated paper insert only in English that is specific for shade selection.

Most (89%) evaluators found the directions to be acceptable, while the other 11% thought they were exemplary.

Strengths



- Liked opacity.
- Blended well where used and excellent viscosity w/out drip or stringiness.
- As advertised. You can eliminate most of the shade with Majesty universal.
- Virtually bubble free and did not run after application was complete.
- Excellent chameleon effect.
- It seems to be more filled and so I think I would trust this in an occlusal indication if needed but it does make it thicker.
- Good handling and polish.
- Simplicity of shade selection/matching; easy handling with higher viscosity.
- No voids, great polishing.
- Easy to use. No need to think much about shade selection.
- No slumping that you often run into.
- Handling is very good for small restorations as well as color match except when having through and through lesions (not enough opacity).
- I liked how it did seem to stay in place.
- The material's dispensing tip is very precise and allows for ideal control of the material.
- Good flow consistency, matches pretty good for a flowable.

Weaknesses



- Still had porosities.
- I still would not put any flowable on a surface that gets abraded. Either by another tooth or a toothbrush.
- Opacity.
- More shades would help.
- Maybe too thick, but could be a strength too depending on what application a dentist is trying to accomplish.
- Needs a bleach shade.
- I still want more shades to do cosmetic dentistry.
- Could use a "Universal Light" shade for lighter teeth.
- Does not cover the whole range of Vitapan shades.
- Adequate radiopacity but I prefer amalgam-like radiopacity myself.
- Flow into tight areas was not as I liked.
- Does not cover all shades in the anterior, especially when having through and through lesions. Almost too viscous to use as a liner in class 2 lesions.
- Shades — just not enough.
- Not ideal material for the esthetic zone and lighter shaded/bleach shaded teeth.
- I found it to be a bit too runny for anterior restorations.
- Maybe I am old fashioned but I don't feel comfortable not adding a hybrid layer on the occlusal to resist wear.

BOTTOM LINE

- Like other flowables.
- Excellent product for class 5s and posteriors.
- Great product from a great company.
- I would definitely buy this flowable, however I would only use it in limited applications, for example as a flowable in a class 2 followed by a packable composite or in Class 1 restorations.
- Overall excellent material.
- I could utilize this in my practice. I believe it could be good for certain applications.
- A good entry into the flowable market.
- Good product.
- Due to simplicity of use and shade selection and easy handling, I would recommend it.
- Good material if shade is not a priority.
- Good composite.
- Has unique properties that I would like but as far as a base to flow into hard to reach areas, it's not ideal.
- Good material.
- It is nice handling for restorations, blends well with most shades, and polishes nicely.
- Good product, stands out because of no slumping, otherwise, more of the same.
- This material is more ideal for posterior class Vs and non-esthetic areas, while the dispensing tip is very precise and provides the user with a lot of control, you have to exert an abnormal amount of pressure on the plunger to extrude the material.
- This is a good flowable composite.
- It is a good flowable in a very competitive market.



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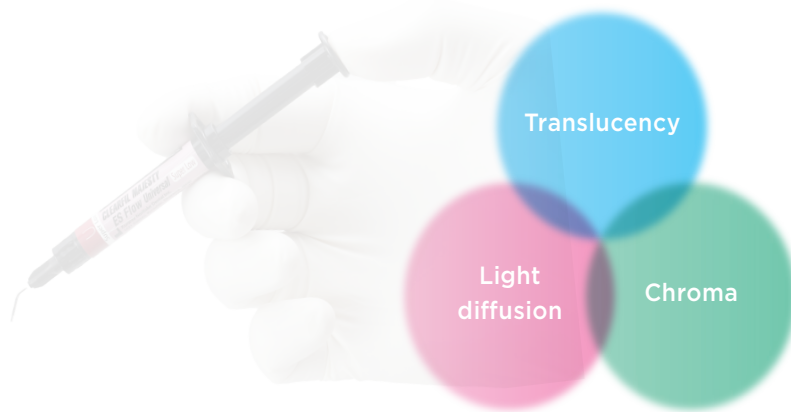
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CLEARFIL MAJESTY™ ES Flow Universal

CLEARFIL MAJESTY™ ES Flow Universal is high viscosity flowable composite (super low flow), 78 wt/%, filled flowable composite with physical properties equivalent to conventional paste type composite resins. With its unique "LIGHT-DIFFUSION" filler matrix, one universal shade covers* 16 VITA shades** & provides easy polishing with a long-lasting gloss finish.

* Class I, II cavities | ** VITA is a trademark of VITA Zahnfabrik, Bad Sackingen, Germany



Natural blending

Universal shades are designed to focus on the translucency of the enamel and chroma of dentin.

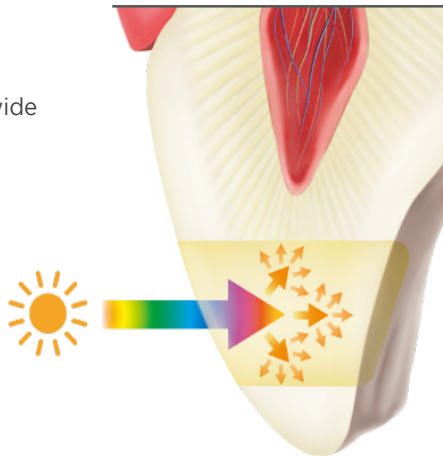
The light-diffusion effect of the dentin is focused to mimic natural teeth.

The magic of light-diffusion

Optical characteristics and wide shade blending.

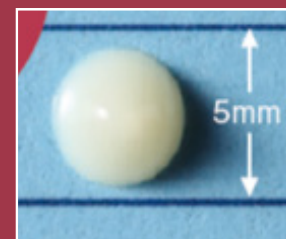
Light-Diffusion Technology (LDT) makes restorations diffuse light in a similar way to the tooth structure.

As a consequence, the material integrates easily and smoothly into the surrounding tooth structure.



Super low adapts to your needs

With its "high viscosity", the tooth shape can be retained making it suitable for building up molar cusps & ridges.



*Paste consistency 1 min. after dispensing horizontal and vertical.

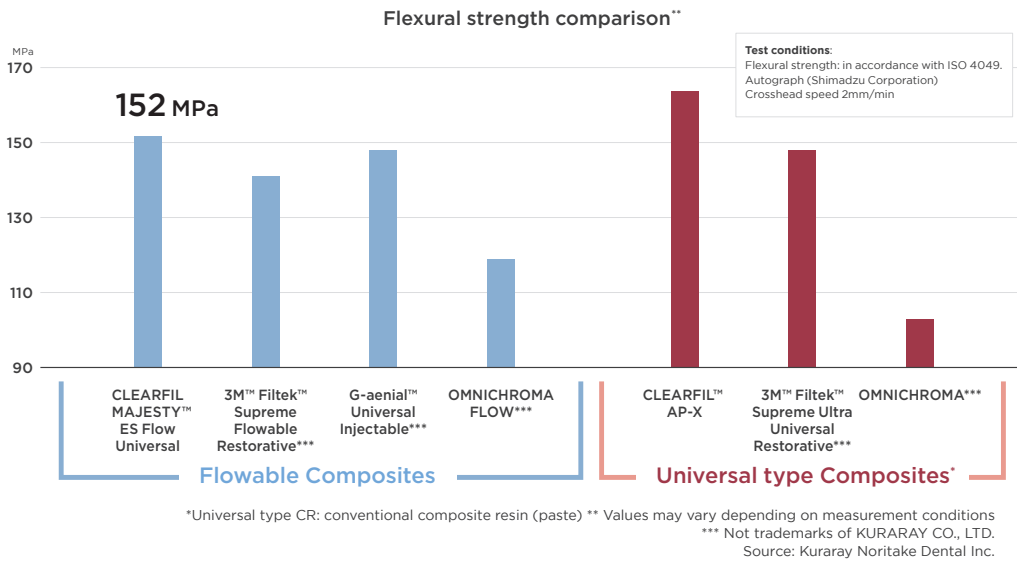
MANUFACTURER'S PAGE

Color matching with anterior and posterior restorations



Superior physical properties

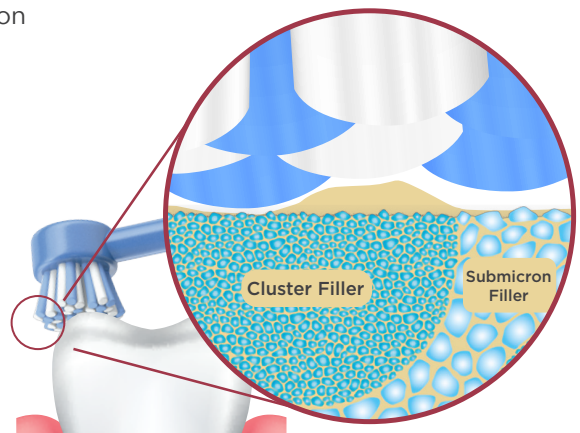
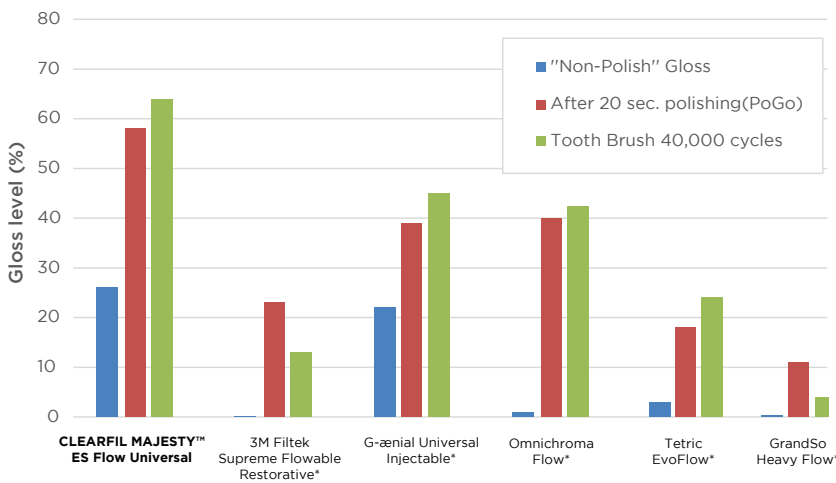
CLEARFIL MAJESTY™ ES Flow Universal (Super Low) has high physical properties due to its high filler loading (78 wt/%).



Easy polishing and long-lasting gloss

CLEARFIL MAJESTY™ ES Flow Universal's unique cluster and submicron fillers provide easy polishing & long-lasting gloss finish.

Test conditions: Specimen ø10 mm, thickness 2 mm. Surface roughened with #600 water-resistant abrasive paper. Gloss level of all the materials was measured below the conditions: Non-polish: After ethanol wiping. Polishing: Polished with composite resin finishing points PoGo (Dentsply Sirona) at 5000 rpm. Toothbrush wear: 40,000 strokes were worn by the toothbrush at a load of 250 g, 30 strokes/minute, and 10 wt% toothpaste.



The use of a filler with a small particle size prevents the formation of large irregularities on the surface of the cured product after toothbrush abrasion and is expected to maintain a smooth surface.