Candles & Wax Melts – Bioglitter® Application Guide

EU Regulation 2023/2055 (EU Microplastic Legislation)

Following the amendments to EU Regulation 2023/2055 published 1st June 2026 ((EU) 2026/1168), products such as candles and wax melts with an intended use period of less than 12 months are now within the scope of the legislation.

Consequently, as of 22nd June 2028, polymer particles intentionally added to these products **must** comply with the requirements of the Regulation. Products containing non-compliant glitter can no longer be placed on the EU market for these applications.

Bioglitter® is fully compliant with EU Regulation 2023/2055 and provides manufacturers with a future-proof, plant-based alternative to non-compliant glitter, delivering outstanding sparkle and effects while meeting the world's most stringent legislation governing synthetic microplastic particles.

Why Choose Bioglitter®?

- **Fully compliant with EU Regulation 2023/2055** governing synthetic microplastic particles.
- **Made from Plants and biodegrades quickly and safely in natural environments**
- **Patented Bioglitter® technology**, manufactured in Germany exclusively by Sigmund Lindner GmbH.
- **Exceptional sparkle, colour and effect intensity**, providing a premium alternative to non-compliant glitter.
- **Available in a wide range of colours, particle sizes and optical effects**, including metallic, holographic, opaque, opalescent and neon finishes.
- **Suitable for candles, wax melts soap applications and many other applications.**

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Using Bioglitter® in Candles & Wax Melts

Bioglitter® can be incorporated into candles and wax melts in much the same way as conventional glitter. Although it delivers the same high visual impact, Bioglitter® is manufactured primarily from natural, freshwater biodegradable materials. As a result, it should be processed slightly differently, particularly where elevated temperatures are involved.

Prolonged exposure to elevated temperatures, particularly above **50°C**, can reduce the brilliance of **Deco Bioglitter® SPARKLE 60** and **SPARKLE PF**. To maximise sparkle retention, minimise both the processing temperature and the length of time Bioglitter® is exposed to molten wax wherever possible.

Recommended Product Ranges

Metallic & Holographic Effects

- **Deco Bioglitter® SPARKLE 60** – Most economical option
- **Deco Bioglitter® SPARKLE PF** – Highest sparkle and coverage
- **Deco Bioglitter® SPARKLE V3** – Highest heat resistance

Non-Metallic Effects

- **PURE V2 products** produce a unique glitter effect unlike any glitter effect see before, even in conventional glitters.
  - The Color & Opal produce attractive – translucent / pearlescent / opalescent effects.
  - The Opaque and Neon produce matte and vivid day glow effects.
- **Deco Bioglitter® PURE V2 Color & Opal** – – translucent / pearlescent / opalescent effects
- **Deco Bioglitter® PURE V2 Opaque** – Solid matte colours
- **Deco Bioglitter® PURE V2 Neon** – Bright fluorescent colours

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Recommended Bioglitter® Particle Sizes

The particle sizes used in candles and wax melts are typically:

- **008** (approximately 0.2 mm)
- **015** (approximately 0.4 mm)
- **040** (approximately 1.0 mm)

The optimum particle size will depend upon the desired decorative effect.

In general

- Smaller particles provide a subtle shimmer.
- Larger particles create brighter sparkle and greater visual impact.

Wax Melt Manufacturing

1. Melt the wax according to the wax supplier's recommendations (typically **50–65°C**).
2. Add colourants and fragrance as required.
3. Sprinkle the desired quantity of Bioglitter® into the mould.
4. If using **Deco Bioglitter® SPARKLE 60** or **SPARKLE PF**, allow the wax to cool as much as practical (ideally below **50°C**) before pouring into the mould.
5. Allow the wax to cool and solidify.

Candle Decoration & Manufacturing

Bioglitter® can be applied to candles in several ways:

- Apply a suitable adhesive to the candle surface before sprinkling or rolling the candle in Bioglitter®.
- Lightly soften the candle surface using heat before applying Bioglitter®.
- Incorporate Bioglitter® into molten wax to create decorative surface coatings.

When adding Bioglitter® directly into molten wax, **Deco Bioglitter® SPARKLE 60** and **SPARKLE PF** should ideally be added below **50°C** to maximise sparkle retention.

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Product Evaluation of Deco Bioglitter® SPARKLE 60 and **SPARKLE PF.** As these are temperature sensitive than other Bioglitter® products, when evaluating these grades, we recommend initially testing the **Silver** shade, as this generally provides the best indication of heat stability in each application before progressing to coloured products.

Typical Processing Guidelines

The table below provides general processing guidance for the Bioglitter® ranges most commonly used in candles and wax melts.

Product	Typical Processing Guidance	Comments
Deco Bioglitter® SPARKLE 60	Add to wax below 50°C where practical. Minimise residence time.	Brightest, most economical grade.
Deco Bioglitter® SPARKLE PF	Add to wax below 50°C where practical. Minimise residence time.	Brightest, highest coverage.
Deco Bioglitter® SPARKLE V3	Can tolerate higher processing temperatures than SPARKLE® 60 and PF. Minimise unnecessary heat exposure.	Recommended for metallic effect when maximum heat resistance is required.
Deco Bioglitter® PURE V2	Can tolerate higher processing temperatures than SPARKLE® 60 and PF. Minimise unnecessary heat exposure.	Non-metallised products generally exhibit greater heat stability.

Important: The recommendations above are intended as a guide only. Actual performance will depend on factors including wax type, processing temperature, residence time, mixing conditions, fragrance loading and colourants. We strongly recommend carrying out production trials under your own manufacturing conditions before commercial use.

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Safety

As with all glitter products, appropriate care should be taken when incorporating Bioglitter® into candles.

Under normal conditions, the glitter is unlikely to come into direct contact with the flame because it typically settles within the molten wax pool and, unlike molten wax, cannot be drawn up the wick. However, because Bioglitter® is manufactured primarily from natural organic materials, it is inherently combustible, as would be expected for materials derived primarily from natural organic sources. This should be considered during product design and safety evaluation.

Customers should always carry out thorough testing to confirm both product performance and fire safety before commencing commercial production.

Use of the Bioglitter® Logo

Bio·glitter® bioglitter.com

The **Bioglitter®** name and logo are registered trademarks of Sigmund Lindner GmbH and are recognised throughout the industry as a mark of authentic Bioglitter® technology.

Customers using genuine Bioglitter® products are encouraged to promote this fact by using the official Bioglitter® logo on their packaging, websites and marketing materials, subject to approval from Sigmund Lindner GmbH and in accordance with our Brand Guidelines.

The logo provides consumers with confidence that genuine Bioglitter® has been used, distinguishing products made with authentic Bioglitter® technology from those simply marketed as "biodegradable glitter". It also demonstrates that the product has been manufactured using patented Bioglitter® technology that is fully compliant with EU Regulation 2023/2055.

Please contact your Sigmund Lindner representative to obtain approval, the appropriate logo files and the latest Brand Guidelines before using the Bioglitter® logo.

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Disclaimer

The information contained in this document is based on our current knowledge of Bioglitter® products together with practical feedback from candle manufacturers and is provided for guidance only.

As manufacturing methods, wax formulations, fragrances, colourants and processing conditions vary considerably, product performance may differ between applications. Customers are therefore responsible for carrying out their own trials to determine the suitability, performance and safety of Bioglitter® for their specific application before commercial production.

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