

## PRODUCT OVERVIEW

**Glow Worm®** phosphorescent powders can be added to Smooth-On liquid plastics, rubbers and foams to create castings that glow in the dark after being charged with light. Choose from either green or blue.

**What sets Glow Worm® powders apart from other glow-in-the-dark powders?** Used as directed and after being light charged as recommended, castings made with Glow Worm® powders will glow in the dark **at least 10 times longer** than other glow powders.

Glow-in-the-dark castings are used for Halloween theming displays, home hobby projects, aquariums, store displays and more. These materials are also used for industrial marking, municipal safety applications and more.

## PROCESSING RECOMMENDATIONS

**For best results,** use Glow Worm® powders with a **fast-curing translucent resin such as Smooth-Cast® 325**. The fast curing resin allows uniform filler dispersion throughout the finished casting. If the resin system is too slow, fillers may settle unevenly in the finished casting. Glow Worm® powders can also be added to translucent / clear silicone rubbers such as **Dragon Skin® or EcoFlex® Series** for glow in the dark props that are soft and flexible. Glow Worm® powders can also be blended to create additional finished effects.

**Directions for Use** – Pre-mix all liquid resin, rubber or foam before dispensing. Store and use all materials at or near 73°F/23°C. Glow Worm® powders must be kept dry (see 'Guarding Against Moisture' section). Use with adequate ventilation. Read and follow directions for material used to mix with Glow Worm® powders. The following example features Smooth-Cast® 325 (A+B) mixed with Glow Worm® powder. The powder must be thoroughly dispersed into a two component liquid resin or rubber to a uniform consistency.

## MEASURING, MIXING & CASTING

### Recommended Mix Ratio by Volume;

1A + 1B + 1 Part Glow Worm® powder.

### By Volume Mixing & Casting Procedure;

1. Dispense **1 cup** of Smooth-Cast® 325 Part B into a clean mixing container.
2. Dispense **1 cup** Glow Worm® powder into mixing container.
3. Mix thoroughly.
4. Dispense **1 cup** of Smooth-Cast® 325 Part A into mixing container.
5. Mix for 30 seconds until all filler particles are dispersed and pour into rubber mold.

**Lower Your Cost Per Casting - Glow Worm Powders are Expensive;** Mix small amounts as directed above and brush layers into a mold to coat the mold cavity (known as a face coat or gel coat).

**Optional:** Combine Smooth-Cast®/Glow Worm® mixture with 1 part Ure-Fil® 11 to increase brushability of gel coat. Follow by backfilling with straight resin or foam.

The glow effect will be the same vs. a solid casting and material cost will be greatly reduced.

**Guarding Against Moisture** – All powders will absorb atmospheric moisture over time which will react with urethane resins. If you notice a moisture reaction between resin and powder or suspect that your Glow Worm® powder contains moisture, you can remedy by spreading powder evenly over a metal cookie sheet at ¼" (0.6 cm) thickness and bake in oven for 4 hours at 150° F/60° C. Allow to cool before mixing powder with resin. **Store powder in a tightly closed container** in a cool, dry environment with a desiccant pouch (available at your local hobby/arts and crafts store). Replace used desiccant pouches every other time you open container.

## Safety First!

The material safety data sheet (MSDS) for this or any Smooth-On product should be read before using and is available on request. All Smooth-On products are safe to use if directions are read and followed carefully. Avoid contact with skin and eyes. Avoid dust formation. Do not breathe dust. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Keep containers tightly closed in a dry, cool and well-ventilated place. Do not store together with volatile chemicals as they may be absorbed onto product. Approved respirator may be necessary if local exhaust ventilation is not adequate. Wear eye/face protection. Wear suitable protective clothing. No special protective equipment required. Handle in accordance with good industrial hygiene and safety practice.

### Keep Out Of Reach Of Children.

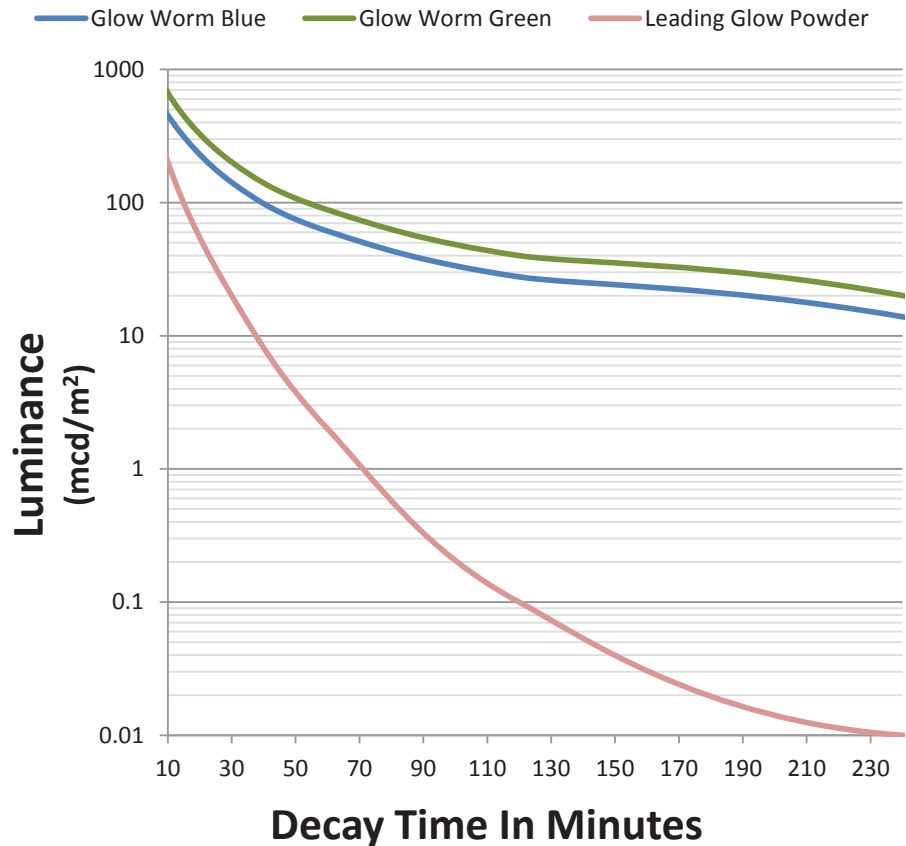
**IMPORTANT:** The information contained in this bulletin is considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data, the results to be obtained from the use thereof, or that any such use will not infringe upon a patent. User shall determine the suitability of the product for the intended application and assume all risk and liability whatsoever in connection therewith.

## PERFORMANCE

Glow Worm® Powders are up to 50% brighter than the competition

Decay Time In Minutes	Luminance (mcd/m <sup>2</sup> )		
	Glow Worm® Blue	Glow Worm® Green	Competitors Green
1	1481.0	2792.0	2136.5
10	452.5	667.2	198.7
30	141.9	201.7	20.0
60	61.1	88.3	2.1
120	27.7	40.0	0.3
240	13.9	20.0	0
720	0.1	0.3	0

## Glow Worm® Luminance



**Call Us Anytime With Questions About Your Application**

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[www.smooth-on.com](http://www.smooth-on.com) is loaded with information about mold making, casting and more.