# **INCREDA**FILL®

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# TECHNICAL DATASHEET

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Monocure3D

INCREDAFILL

(350g)

AUSTRALIAN MADE

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# **PRODUCT DESCRIPTION**

IncredaFILL is a ready-mixed, urethane-polymer filler uses the advanced technology of UV (Ultra-Violet) light to cure in an instant! This highly versatile material will adhere to most surfaces, including plastics, glass & metal. Use the portable UV torch and watch it set rock hard! This 100% solid material was specially formulated using the latest microparticle technology.

# NAME: INCREDAFILL® SKU(s): M/3DI-3903 Sizes Available: 350 & 70gram Tubs | Starter Kit | Essentials Kit Suitable for: Residental | Commercial | Retail | Industrial | Automotive | Marine | Hobby

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# **INCREDAFILL® DESCRIPTION**

IncredaFILL® is a ready-mixed, urethane-polymer filler that cures instantly with Ultra-Violet (UV) light. This versatile material adheres to various surfaces including plastics, glass, and metal. It is resistant to moisture, UV rays, and water, and does not shrink or warp, making it a durable solution for filling, smoothing, and repairing, even under temperature variations.

# **PRODUCT FEATURES**

- Ready-Mixed No measuring, no waste, no mess.
- S Instant Curing

Cures rock hard in 5 seconds with 405nm UV light.

Multi-Surface

Adheres to plastic, timber, plaster, fibreglass, metal, and more.

Non-Shrinking

100% solid materials maintains volume and shape after curing.

Easy Sanding

Sand smooth with wet or dry sandpaper.

Spot Glow™

Unique identifier that glows under UV light to show where the product has been applied.

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Changes to purple under UV light, indicating full curing.

# QUICK APPLICATION GUIDE



#### Apply

Use a flexible applicator or a gloved finger to apply IncredaFILL<sup>™</sup> in thin, even layers. Applying thin layers ensures that the product cures all the way through, providing a strong and consistent fill.



#### Cure

Expose the applied filler to a 395-405nm UV light source for 5-10 seconds. The UV-Shift™ Technology will indicate the curing process by changing the filler colour, ensuring that the material is fully cured before proceeding.

#### Sand

Once cured, sand the area smooth by starting with coarse sandpaper and gradually moving to finer grades. This step can be done using either wet or dry sandpaper, depending on your preference and the desired finish.



#### Finish

For the best results, apply quality paints to the sanded area. To enhance durability and protection, finish with a clear coat. This final step ensures a professional and lasting finish.



# TECHNICAL DATASHEET



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# INCREDAFILL® AREAS OF USE

IncredaFILL<sup>®</sup> offers exceptional adhesion and durability across multiple surfaces, ensuring a reliable and professional finish for various repair and fabrication needs. This highly versatile filler is suitable for a wide range of applications, including but not limited to:

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Plastic Repairs

Ideal for filling gaps, cracks, and imperfections in various types of plastic surfaces.

#### ) Metal Fabrication

Excellent for smoothing, filling, and repairing metal components, providing a durable and long-lasting finish.

#### 🗑 Woodworking

Perfect for filling knots, cracks, and seams in timber, plywood, and other wood materials.

#### **Automotive Repairs**

Effective for bodywork repairs, fairing, and smoothing on vehicles, ensuring a professional finish.

#### Ceramics and Tiles

Suitable for repairing chips, cracks, and imperfections in ceramic tiles and other similar materials.



#### Fibreglass and Composites

Optimal for filling and fairing fibreglass components, ensuring a smooth, even surface.

#### Home Improvement

Versatile for general household repairs, including plaster and plasterboard filling, and other DIY projects.

#### Marine Applications

Resistant to moisture and UV rays, making it suitable for use in marine environments for repairs and maintenance.

# STARTER KIT CONTENTS

**1. IncredaFILL® Tub -** 350 grams of ready-mixed filler in a UV-safe black container.

**2. UV LED 395nm Torch -** Compact, powerful torch with optical zooming lens and 18650 rechargeable battery.

**3. Smart Recharger -** USB smart recharger for the 18650 battery.

**4. UV Safety Glasses -** High clarity yellow lens safety glasses.

**5. Plastic Filler Applicators -** Three flexible applicators for easy application.

# SAFETY GUIDELINES

#### Personal Protective Equipment (PPE)

Always wear gloves, UV safety glasses, and certified dust masks when sanding.

#### Handling

Wash hands and exposed skin thoroughly after handling. If skin contact occurs, wipe off with IPA and wash with soapy water.

#### Curing

Cure in a well-ventilated area. Use a certified mask if sensitive to odour. Never look directly at UV light.

#### Storage

Keep out of reach of children and animals. Store in a dark, cool, dry place away from direct sunlight.

### SAFETY TIPS

- Do not use in aquariums.
- Avoid contact with food or drink.
- Always wear gloves and UV protective glasses.
- Wear a dust mask when sanding.
- This product will heat (50-70°C) when curing.
- Coat with UV-resistant paint or varnish if exposed to sunlight.





# **TECHNICAL SPECIFICATIONS**

The technical specifications of IncredaFILL® reflect its high-quality formulation. This UV-cured filler offers a long pot life, ensuring that it does not dry out like others, thanks to its advanced curing process. Its high density and inclusion of micro particles provide exceptional strength and durability.

# PHYSICAL PROPERTIES

SKUs	M/3DI-3903
Colour(s)	Semi-Transparent Grey
Viscosity	70000 cps (25°C)
Odour	Negligible
Shelf Life	36 months
Flash Point (°C)	220°C (428°F) Non-flammable
Boiling Point (°C)	310°C (590°F)
Freezing Point (°C)	-50°C (-58°F)



Density	1.4 g/cm³ at 25°C
Evaportaion Rate	0.00
Solubility	Miscible with water
Surface Tension	35 mN∕m at 25°C
рН	7 (Neutral)
Storage	Dark, cool, dry place avoid direct sunlight
Wash Up	ResinAway®, or alcohol solvents
Safety	For further information – SDS

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# MECHANICAL PROPERTIES

Cross-Sectional Area (mm <sup>2</sup> )	25.34	F
Max Force (kN)	1.54	P
Tensile Strength (MPa)	51	P
Elongation at Break [%]	0.5	ι
Young's Modulus (GPa)	0.7	١
Shore Hardness (Scale D)	98.3	r
Temperature Resistance (°C)	310°C (590°F)	C
Max Load Applied (N)	160	S

Flexural Stress (MPa)	143
Max Flexural Strain (mm/mm)	0.05
Method Code	ASTM D790-10
UV Stability	Low degradation when exposed
Water Resistance	Resistant to water (wet sanding)
Non-Shrinking	High stability, no shrinkage or deformation over time
Chemical Resistance	High - once fully Cured
Safety	For further information – SDS

Disclaimer: The information provided here is intended for general guidance only and may be subject to change. For the most accurate and current safety details, please refer to the official product documentation and safety data sheets





# Key Glossary of Terms

#### UV Curing:

A process in which ultraviolet (UV) light is used to initiate a photochemical reaction that hardens or cures the material.

#### Pot Life:

The duration a mixed material remains usable. For IncredaFILL®, the pot life is extended because it cures only when exposed to UV light, preventing premature drying.

#### Shore Hardness (Scale D):

Indicates the resistance of the material to indentation. IncredaFILL® has a Shore D hardness of 94.5.

#### Viscosity:

A measure of a fluid's resistance to flow. 70,000 cps at 25°C, indicating a thick, paste-like consistency.

#### Chemical Resistance:

The ability of a material to withstand exposure to chemicals without degrading. IncredaFILL® is resistant to various chemicals, including methanol, isopropyl alcohol (IPA), and ethanol.

#### Temperature Resistance:

The range of temperatures within which the material can perform effectively without degradation.

Non-Shrinking:

A property indicating that the material does not reduce in volume or size during or after the curing process.

#### Water Resistance:

The ability of a material to repel water or withstand exposure to water without degradation.

#### UV Stability:

The ability of a material to resist degradation due to ultraviolet (UV) radiation exposure.

Density:

The mass per unit volume of a material. IncredaFILL® has a density of 1.4 grams per cubic centimetre (g/cm<sup>3</sup>).

#### SPOT GLOW™:

A unique feature of IncredaFILL® that causes the filler to glow under UV light, making it easier to see where the product has been applied.

#### Micro-Particle Technology:

The use of very small particles in the formulation of the filler to enhance its performance characteristics.

#### Tensile Strength:

The maximum stress a material can withstand while being stretched or pulled before breaking. IncredaFILL® has a tensile strength of 51 MPa.

#### Flexural Stress:

The stress in a material just before it yields in a flexure test.

#### Percentage Elongation at Break:

The percentage increase in length that occurs before a material breaks under tension. For IncredaFILL™, this value is 2.5%.

#### Young's Modulus:

A measure of the stiffness of a material. For IncredaFILL® , the Young's Modulus is 0.7 GPa.

#### Storage Conditions:

The recommended environment for storing to maintain its properties, which is a dark, cool, and dry place away from direct sunlight.





# **Technical Data Sheet Disclaimer**

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