

Polyurethane Resin Pigments

Range of Pigments for use with Polyurethane Resins

1. Introduction

Mouldlife Polyurethane Resin Pigments are blends of organic and inorganic pigments finely milled and dispersed in a polyurethane compatible carrier.

The key benefits of Mouldlife Polyurethane Resin pigments are:-

- Compatibility with a wide range of Polyurethane materials
- Solvent free/Non-flammable
- Easy to mix and use low viscosity
- Can be blended to vary the colour range

2. Applications

Mouldlife Polyurethane Resin Pigments can be used to pigment and colour a wide range of polyurethane materials such as fast-cast resins, foams and spray coatings etc.

The materials are used in a range of applications:-

- Tooling and prototyping/Mould-making
- Film, TV and Stage props and Special effects
- Foam mouldings
- General Mould-Making

3. Typical Properties – Liquid Materials

Property	Units	Mouldlife Polyurethane Pigment
Appearance	-	Slightly to very viscous liquid
Specific Gravity	g/cm ³	~1.1 - 1.7
Viscosity	Cps	500 - 5000
Particle Size	μ	<10

4. Usage

Polyurethane Resin Pigments can separate or clump together over time and should be agitated or stirred to re-disperse/re-mix the colourant before use.

	Polyurethane Base	Polyurethane Resin Pigment
By Weight	100 parts	1 - 3 parts

Polyurethane Resin Pigments should be added to the polyurethane polyol before blending with the isocyanate. Remember to ensure that the mix ratio of the system is not affected.

Care should be taken if using with moisture curable (1-part) polyurethane adhesives as the incorporation of pigment could cause premature cure.

Note – in foamed materials (particularly low density foams such as ProCell S3 and ProCell S4, the amount of pigment to be added may need to be increased as otherwise a pale colour will result. Speak with your Mouldlife representative for more information and guidance.

Description

Inorganic/Organic Pigments dispersed in Polyurethane Polyol

Form

Liquid Additive

Addition Ratio

1-3 percent by weight

Basic Colour Range

White Black Blue Green Brown Red Yellow

(Other colours can be produced to request)

5. Working safely with Mouldlife Polyurethane Resin Pigments

All chemicals present certain hazards, and due care must be taken to ensure safe working practises are followed when using the materials. Failure to follow safe working practise when dealing with chemicals can result in injury.

Some sensible guidelines for working safely with Mouldlife Polyurethane Resin Pigments include, but are not limited to the following.

- i) You must carry out an appropriate risk assessment for the process you are carrying out. Useful guidance can be found at www.hse.gov.uk/risk/index.
- ii) You must read and understand the MSDS for the materials, ensuring that you follow the guidelines as indicated.

If in doubt, contact your Mouldlife representative who can put you in touch with experts who can assist.

6. Packaging, Storage and Shelf-life

Mouldlife Polyurethane Resin pigments are available in a range of kit sizes; speak to your Mouldlife representative for further information.

Mouldlife Polyurethane Resin Pigments should be stored between 5°c and 25°c. Under these conditions, shelf-life in the original, unopened containers is two years.

Mouldlife Polyurethane Resin Pigments will separate or clump-together over time, and should be thoroughly mixed prior to use.

7. Cautionary Note

As with all Mouldlife products, this material not been tested for all applications, and it is strongly recommended that customers carry out adequate evaluation work to determine the suitability for the intended use.

No liability will be accepted for any losses, whether direct or consequential, arising from use of this material.