

ALCHEMIX® PU 3588

*Two Component, High Density PU Elastomeric Foam System
Formulated For Use in Air Filters*

ALCHEMIX PU 3588 is a two component polyurethane foam system, that when mixed gives a high density, elastomeric foam. The foam is self skinning, durable and has excellent physical properties. Typical free rise density is between 460 – 540 kgm⁻³.

Mix Ratio

PU 3588A : PU 3588B
By Weight 100 : 26

Product Data

Property	Units	PU 3588A	PU 3588B	Mix
Material	-	Formulated polyol blend.	Isocyanate	polyurethane
Appearance	-	Black Liquid	Brown liquid	Flexible Black foam
Viscosity (25 °C)	mPa.s	1000 – 1500	150 – 250	-
Density (25 °C)	g/cm ³	1.00 – 1.05	1.20 – 1.25	-
Cream Time (133g, 25 °C)	seconds	-	-	50 – 60
Rise Time (133g, 25 °C)	seconds	-	-	160 – 170
Free Rise Density	kgm ⁻³	-	-	460 – 540

Method of Use

Mould Preparation

ALCHEMIX PU 3588 should be cast into a strong, rigid mould with a silicone rubber coating. Alternatively, a mould release agent such as ALCHEMIX R6 should be used. Ensure that the entire mould surface has been coated. The mould should be warmed to 25°C. If using a closed mould, it is important to allow some small bleed holes to allow any gas generated to escape.

Mixing and Pouring

It is recommended that ALCHEMIX PU 3588 be processed using a foam mixing machine. Please contact Alchemie Ltd for more details. However, the product can be mixed manually if required. Once the mould has been prepared, accurately weigh out the required quantity of ALCHEMIX PU 3588A into a clean mixing vessel. Weigh the required amount of ALCHEMIX PU 3588B into the mix vessel and immediately mix the two components until they are homogenized. Poor mixing will result in poor quality foam. Immediately pour the mixed material into the mould. It is important that the mixing/ pouring operation is completed before the cream time of the foam (55 seconds).

Demould

ALCHEMIX PU 3588 is a fast curing system. Depending on mould volume and shape, the product can be demoulded after as little as 5 minutes. Full cure can take up to 72 hours.

Trials

When using ALCHEMIX PU 3588 for the first time, or when using new mould shapes or volumes, trials must be carried out to determine the appropriate shot size.

Storage

ALCHEMIX PU 3588A and B should be stored in original, unopened containers between 20 and 25°C. ALCHEMIX PU 3588B may crystallise partially or completely if not stored at above 20°C. Like all polyurethanes, both components are moisture sensitive. Moisture absorption will cause excessive aeration in cast parts. KEEP THE PACKING TIGHTLY SEALED WHEN NOT IN USE.

If stored under the above conditions, ALCHEMIX PU 3588A and B will have a shelf life of 6 months, from the date of production.

Packaging

ALCHEMIX PU 3588A is supplied in 1kg, 5kg and 25kg containers.
ALCHEMIX PU 3588B is supplied in 260g, 1.3kg and 6.5kg containers.

(Please contact Alchemie Ltd for bulk supply)

Further Information

Please contact our Technical Department for any further advice on the use of this product.

All data listed relates to typical values. This data should not be considered a product specification.

Our technical advice, whether verbal, or in writing is given in good faith, but without warranty – this also applies where proprietary rights of third parties are involved. It does not release you from the obligation to test the products supplied by us as to their suitability for the intended process and use.

Before using this product users should familiarize themselves with the relevant MSDS provided by Alchemie Ltd.

Alchemie Limited

Alchemie Ltd develop, formulate and distribute Epoxy Resins, Polyurethane Resins, Silicones, Model Boards and Sheet Wax for use in the following applications:

- Electrical encapsulation
- Rapid Prototyping
- Prototypes
- Casting
- Gel Coating
- Laminating
- Model Making
- Master Models
- Flexible and rigid mould making

We offer fast service, technical support, development expertise, innovative products, diverse knowledge and experience. We are a well-established company, with a high level of investment and experience. We implement BS EN ISO 9001.

Alchemie® and Alchemix® are registered Trademarks of Alchemie Ltd, Warwick Road, Kineton, Warwick, England, CV35 0HU, England, United Kingdom. Ph: +44 (0)1926 641600; FAX: +44 (0)1926 641698