

## **Technical Data Sheet**

# PUF3401

**Two-part Polyurethane Foam for Electronic Devices** 

PUF3401 is a two-component polyurethane foam which is suitable for various applications in electronics, such as sealing, encapsulating, potting and casting. PUF3401 is ideally used for sealing and protecting various outdoor communication, electronic and lighting equipment cabinets, shock absorption, cushioning, sound insulation, protection, insulation, heat insulation and fire prevention in power batteries.

#### FEATURE

- Good fluidity, good operation performance.
- Non-toxic, non-dangerous.
- After curing, the foam density distribution is uniform and the thermal conductivity is low.
- Good elasticity after curing. Good bonding strength to metals such as Aluminum.

#### **TYPICAL UNCURED PROPERTIES**

Properties	PUF3401-A	PUF3401-B
Appearance	Liquid	Liquid
Color	Light Green	Light Yellow
Viscosity @25°C, GB/T 2794, cps	1,800 ~ 2,200	150 ~ 250

#### TYPICAL CURING PROPERTIES

Properties	PUF3401
Mix Ratio (A:B) by Weight	1:1
Pot Life @ 25°C, GB/T 7123.1, min	5~10
Start Foaming Time, min	0~4
Complete Foaming Time, min	10~30
Molding Time, min	60~120

#### **DIRECTION OF USE**

1. This product should be applied to a clean surface which is free of dirt, grease or mold release. In many cases, a simple solvent wipe is sufficient.

2. Accurately weigh A and B, and fully mix them according to the ratio of 1:1 by weight.

3. A small amount of potting can be mixed at a high speed and then poured and foamed quickly, or the adhesive should be poured quickly at the sizing position with a pressure plate pump dispensing machine. 4. General room temperature curing, keep the environment ventilated.

5. The density, hardness, mechanical properties and other properties of the product change with the change of the foaming ratio.

#### TYPICAL CURED PROPERTIES\*

Properties	PUF3401
Hardness, GB/T531, Shore D	20~30
Shear Strength Al-Al, GB/T 7124, MPa	4.0
Tensile Strength, GB/T528, MPa	6.0
Elongation at Break GB/T528, %	13
Thermal Conductivity, ASTM D5470, W/mK	<0.2
Density, GB/T 13354, g/cm <sup>3</sup>	0.3~0.5
Dielectric Constant @ 50Hz, GB/T1694	≤4.0
Foaming Ratio @ different process conditions, time	2~4

(\*) Test environment: 25°C, 65% R.H; Curing conditions: 168h @ Room temperature.

### PACKAGING, STORAGE AND SHELF LIFE

Packaging: 40kg/set (A 20kg+B 20kg) or 20kg/set (A 10kg+B 10kg).

The container should be stored in cool and dark place, avoid humidity, water sources and sun exposure. Replace the lid immediately after use. It is recommended to fill the container with nitrogen after opening the seal

Shelf life of this product is 12 months when stored below 25°C in original, unopened containers.



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### CAUTION

Some findings indicate a lack of potential for carcinogenicity with the compositions of this product by long term recurrent application to the skin. However, contact with skin is likely to produce mild transient reddening. It is important to remove adhesive from skin with soap and water thoroughly. DO NOT use solvents for cleaning hands. This resin is of moderate acute toxicity by swallowing. If swallowed, call a physician. Avoid contact with eyes. In case of contact, flush with water for at least 15 minutes and get medical attention immediately. For specific information on this product, consult the Material Safety Data Sheet.

The data contained in this bulletin is provided only as a guide for evaluation/consideration. These material characteristics are typical properties that are based on a limited number of samples tested in the laboratory. We cannot assume responsibility for results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any product or method. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide.