

DATA SHEET

PU238 is a two part polymer resin system primarily designed for electrical insulation and encapsulation e.g cable jointing kits and the potting of electronic / electrical components.

The resin and hardener are mixed in the ratio: 6.4 : 1 By weight

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| Colour of mixed system | Beige or Black |
| Density of resin | 1.44 |
| Density of hardener | 1.23 |
| Density of mixed system | 1.41 |
| Viscosity of resin | 2900 cps spindle 6 @ 25°C |
| Viscosity of hardener | 180 - 240 cps spindle 6 @ 25°C |
| Viscosity of mixed system | 2400 cps spindle 6 @ 25°C |
| Pot life | 15 - 20 minutes 0.5 litre @ 25°C |
| Gel time | 20 - 25 minutes 0.5 litre @ 25°C |
| Full Cure | 48 hours @ 25°C |
| Peak Exotherm | 60-65°C (0.5 litre) |
| Shore A Hardness after 24hrs at room temp. | A: 70 B: 80 |

Gel time is very much dependent upon ambient temperature and mixing time.

Characteristics of Mixed System

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|--|---|
| Tear Strength | 10 N/mm ² |
| Tensile Strength | 12 N/mm ² |
| Ultimate Elongation | 3% |
| Volume Resistivity | 10 ¹⁰ Ohms mm |
| Surface Resistivity | 10 ¹⁰ Ohms mm |
| Thermal Conductivity | 0.96W/(m°C) |
| Maximum Continuous Operating Temperature | 80°C |
| Dielectric Strength | 10 KV/mm |
| Water absorption rate | 10 mg @ 24 hrs, 25°C 1000 mg @ 42 days, 50°C |
| Adhesive Strength to PVC | 4 N/mm ² |
| Adhesive Strength to XLPE | 2 N/mm ² |
| Adhesive Strength to Lead | 10 N/mm ² |
| Adhesive Strength to Aluminium | 11 N/mm ² |
| Adhesive Strength to Copper | 11 N/mm ² |

Cleaning Equipment

All equipment should be cleaned before the compound has hardened.

Storage

The resin and hardener should be stored separately in tightly sealed metal containers until required for use. The shelf life on this material is 24 months unless otherwise stated on the label.

Preferred storage temperature is below 35°C but must not be allowed to reach freezing.

CAUTION

Polyurethane systems are generally quite harmless to handle, provided that certain precautions normally taken when handling chemicals are observed. The uncured materials must not, for instance, be allowed to come into contact with foodstuffs or food utensils, and measures should be taken to prevent the uncured materials from coming into contact with the skin. The use of barrier creams or impervious gloves is advised. The skin should be thoroughly cleansed at the end of each working period, either by washing with soap and warm water or by using a resin removing cream - use of solvents is to be avoided. Disposable paper towels - not cloth towels should be used to dry the skin. Adequate ventilation of the working area is recommended.

Polyurethane hardeners are moisture sensitive. Containers of both resin and hardener should be kept tightly closed when not in use to prevent ingress of atmospheric moisture.

The information given is derived from test and/or extrapolations believed to be reliable. However, the product is offered for evaluation on the understanding that the customer will satisfy himself that the product is suitable for his intended use.

Advice on specific applications will be given on request.

In order that potential users may satisfy themselves by experiment that the material meets their requirements, free of charge samples are readily available.

None of the data and/or recommendations contained herein are to be assumed as an inducement to infringe any patent.

The Company's liability is limited to the replacement of materials shown to be defective as delivered, or to a cash refund. We accept no liability for loss or damage brought about by the use of unsuitable or defective material, or by subjecting viable material to inappropriate conditions.

NOTE:-

Before handling any material supplied, users should familiarize themselves with the Health & Safety information provided by the company, both in written correspondence and the information sources listed hereunder.

- a) The product applications / performance details.
- b) The labels on the product packages and containers.
- c) The product Health & Safety Data Sheets.

These results do not constitute a specification and are quoted for guidance use only.

