

# **GALAXIE PU Flex**

Semi Flexible Polyurethane Grout

### **Description**

Galaxie PU Flex is a single-shot hydrophobic polyurethane based on MDI in combination with polyether polyols and an amine-based catalyst. The system only reacts when it comes into contact with moisture, producing a semi-flexible polyurethane. Galaxie PU Flex has a low viscosity and will penetrate fine cracks when injected under pressure.

### **Benefits**

- Can withstand high hydrostatic pressures
- Variable reaction times
- Semi-flexible
- Foaming ratio of up to 30 times
- Reacts with saline and mineral water
- Medium viscosity
- Solvent free, environmentally safe

### **General Application**

- Soil stabilisation
- Underpinning foundations
- Consolidation for ground anchors
- Water cut off barriers
- Injection into saturated ground

# **Application Guidelines**

Galaxie PU Flex is a used for the permanent sealing of water leaks to concrete or masonry structures. Galaxie PU Flex has the advantage of being semi flexible so can cater for a small amount of movement within the structure.

Adaptable reaction time is possible by varying catalyst ratio between 2% to 10%. Reaction with water results in the formation of a semi flexible polyurethane, which forms a hydrophobic and chemically resistant solid mass with good physical properties. The end product formed is harmless to the environment and resistant against biological attack.

The pre-mixed resin can be pumped by means of a single component injection pump.

Cleaning of the injection equipment thoroughly using Galaxie PU Clean after use. The table (reaction times) shows the relation between the dosage of Galaxie FlexCat and the reaction time.

#### **Technical Data**

| GALAXIE PU Flex |              |  |
|-----------------|--------------|--|
| Appearance      | Brown Liquid |  |
| Viscosity       | 200-350 Cps  |  |
| Density         | 1.18         |  |
| Flash point     | >150°C       |  |

| GALAXIE PU FlexCat |                  |  |
|--------------------|------------------|--|
| Appearance         | Yellowish Liquid |  |
| Viscosity          | 25-45 Cps        |  |
| Density            | 0.98             |  |
| Flash point        | >140°C           |  |

| GALAXIE PU Flex Reaction Times    |            |                |  |
|-----------------------------------|------------|----------------|--|
| 100gm sample with 10% water added |            |                |  |
| FlexCat addition                  | Cream Time | Final Set Time |  |
| 2.0%                              | 35 seconds | 30 minutes     |  |
| 5.0%                              | 25 seconds | 15 minutes     |  |
| 10%                               | 20seconds  | 3 minutes      |  |

All technical data stated Above is based on tests carried out under laboratory conditions at  $25^{\circ}\text{C}$ 

# **Packaging**

Galaxie PU Flex is supplied in 20 KG drums and 200kg drums. Galaxie PU FlexCat is supplied in 2kg bottles and 20kg drums. Packaging size may vary subject to local regulations and requirements.

### **Storage**

Galaxie Pu's and Cat's should be stored at room temperature (min 10°C and max 35°C), kept dry and out of direct sunlight. If these conditions are maintained and the product packaging is unopened, then a shelf life of 1 year can be expected.

# Health & Safety

Galaxie PU Flex and Galaxie PU FlexCat should only be used as directed. We always recommend that the Safety Data Sheet is carefully read prior to application of the material. Our recommendations for protective equipment should be strictly adhered to for your personal protection. Please contact Galaxie or your local representative for the current SDS.

