

Description

Galaxie PU Soil 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 rigid polyurethane.

Galaxie PU Soil has an extremely low viscosity enabling it to penetrate very fine soil and sand and thus restoring structural integrity to the sub-straight.

Benefits

- High expansion ratio > 20 times
- Low viscosity Solvent-free,
- Environmentally friendly
- Reacts with saline and mineral water
- Good chemical resistance

General Application

- Soil stabilisation
- Underpinning foundations
- Light weight filling of voids
- Consolidation for ground anchors
- Water cut off barriers
- Injection into saturated ground

Application Guidelines

Galaxie PU Soil is used for the underpinning of foundations and concrete constructions to help prevent any further movement and to improve bearing capacity. Galaxie PU Soil can also be for soil stabilization in water saturated ground to form tieback anchors in loose soils giving high strength in a short period of time.

Adaptable reaction time is possible by varying catalyst ratio between 0.5% to 10%. Reaction with water results in the formation of a rigid polyurethane, which forms in combination with the substrate, a hydrophobic and chemically resistant solid mass with good compressive and shear strength. 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 SoilCat and the reaction time.

Technical Data

GALAXIE PU Soil	
Appearance	Brown Liquid
Viscosity	15-40 Cps
Density	1.1
Flash point	>150°C

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

GALAXIE PU Soil Reaction Times		
100gm sample with 1% water added		
Soil Cat addition	Cream Time	Final Set Time
0.5%	>10 Minutes	24 hours
2.0%	<3 Minutes	15 minutes
10%	<1 minute	3 minutes

All technical data stated herein is based on tests carried out under laboratory conditions at 25°C

Packaging

Galaxie PU Soil is supplied in 20 KG drums and 200kg drums. Galaxie PU SoilCat 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 Soil and Galaxie PU SoilCat 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.

