Technical Data Sheet LIQUIBOND

Surface Stabilisation Resin

DESCRIPTION

LiquiBond is a single-component, low-viscosity, liquid polymer, that penetrates the surface of substrates such as compacted road base, sand, clay or soil and binds the particles to form a tough, elastomeric, trafficable paving that can be returned to service within 48-hours. For extra protection and to prevent chemicals or fuels entering the ground, such as in secondary containment areas, Tufflon-P80 polyurea can be applied directly to the cured LiquiBond.

Unlike cement and lime, commonly used for this purpose, Liquibond won't shrink, is not brittle and cures fast. It won't react with sulphates in clay and does not swell or heave when exposed to water.

ADVANTAGES

- Non-DG
- Low viscosity
- Very low shrinkage
- Tough and Elastomeric
- Won't swell or heave
- Single Component no mixing required
- Fast return to Service
- Trafficable

APPLICATIONS

Used mainly for stabilising compacted road base, sand and clays to quickly form trafficable and impermeable pavements.

Once cured, Liquibond can be left as is or it can be coated with Tufflon-P80, to form a tough, elastomeric, chemical resistant lining.



TYPICAL LIQUID PROPERTIES

Appearance	clear liquid
Solids	100%
Viscosity	< 200 Cps
Specific Gravity	1.17
Boiling Point	120°C
System	Modified MDI
Flammability	Non-Flammable

SUBSTRATE PREPARATION



Use a vibrating roller or similar to compact loose surfaces to form an even and stable substrate. If the moisture content of the substrate is less than 10%, apply 1 - 2L of water per square meter to the surface 5 - 12 hours before the application of LiquiBond. Treat the compacted substrate carefully to avoid disturbing its surface and remove all loose stones and foreign objects prior to application of LiquiBond. A push-behind vacuum sweeper may be used to ensure a uniform surface free of foreign objects.

USAGE RATES

Liquibond is designed for use at an application rate of 1 - 2 litres per square meter however usage rates will vary depending on the porosity and texture of the substrate. Liquibond can be thinned with up to 10% Liquisol to aid in penetration of the substrate.

APPLICATION GUIDELINES



Apply LiquiBond at a rate of 1 - 2L per square meter to the compacted and prepared substrate. Avoid ponding. Once Liquibond has been applied and allowed to cure, a compacting roller can be run over it to generate an even and uniform surface free of loose stones followed by a vacuum sweeper to remove dust and debris. LiquiBond may be over-coated with Tufflon-P80 as soon as it is dry to create a tough, flexible, chemical resistant, trafficable seal. The cure rate is greatly increased by high temperatures and high humidity. The cured LiquiBond will yellow upon exposure to UV. This does not affect the performance properties of the system.

APPLICATION EQUIPMENT

LiquiBond may be applied by a Husky drawing out of an IBC and feeding a spreader bar behind a truck with 3mm holes. Use a broom to help spread it evenly. It can also be applied through an airless sprayer with a pump ratio of 30:1 and fluid pressure of 1200 - 2500 psi. Air-assisted spray guns can also be used. Spray tips which give a wide spray area and of relatively large diameter (0.017"- 0.025") are recommended.

PROTECTING SPRAY EQUIPMENT

Protect equipment from moisture as it reacts with Liquibond to form a gel and could block pumps, hoses and guns. Flush the equipment with Liquisol after each use and fill all wet components with clean engine oil for long-term storage. Using Teflon lined or Moisture-Lock hoses will help minimise equipment failure.



OVERSPRAY

Protect vehicles and equipment from overspray. Remove overspray immediately using Liquisol.

PACKAGING

Liquibond is supplied in 225 kg metal drums, 22.5kg metal pails and 5kg metal cans.

STORAGE

12 months shelf life is expected in unopened containers kept out of the weather. WARNING:-If contact with moisture or water occurs, the drums should not be resealed. Reaction with water leads to gas evolution, with possible pressure build-up.

HEALTH AND SAFETY ADVICE

Refer to LiquiMix Safety Data Sheets for individual products. Liquibond is safe to use under normal working practices and if proper application equipment is used. Whilst the Liquibond is classified as non-flammable, naked flames and smoking should not be permitted in the working area. Good industrial hygiene should be observed at all times - impervious gloves should be worn when handling the adhesive. This product contains diphenylmethane diisocyanate derived polymers. Further information on handling isocyanate products is available on request.

Important Notice

The information contained herein is offered without charge and is for use by technically qualified personnel at their own risk. All statements, technical information and recommendations contained herein are based on tests and data which we believe to be reliable, but the accuracy or completeness thereof is not guaranteed and no warranty of any kind is made with respect thereto.

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