LOCKWELL

TECHNICAL DATA SHEET

LOCKWELL SPF 100

High Density Polyurethane Spray Foam

Product Description

Lockwell SPF100 is a 100% water-blown high density rigid polyurethane spray foam.

Lockwell SPF 100 is used to provide additional strength to a range of plastic materials, including abs, polystyrene, polycarbonate etc.

Application Area

Lockwell SPF 100 is used for the thermal insulation of building walls, roofs, tanks, vessels and pipes. In roofing systems uses, Lockwell SPF100meets the requirements of UL 790 (ASTM E-108 in Class A and Class B configurations on combustible and non-combustible decks when covered with approved coatings. For additional information, on UL ratings, please contact Lockwell technical representative. Note a minimum of 40 kg per m³ density foam is recommended for roofing applications.
Please consult with Lockwell for other foam densities, applications and high temperature fire rated foams.

Features

Structural Strength
This product adheres strongly to the prepared substrate, improving structural integrity of fragile substrates.

For best adhesive results, please consult with your Lockwell sales representative.

Processing Properties

Appearance	Light amber liquid
Specific Gravity @ 20˚C	1.1g/mL
Cream time	2 to 3 seconds
Gel Time	10 to 12 Seconds
Free Rise Core Density	96-100 kg/m^3
Insulation Value (k Value)	0.038-0.040 W/m-K (aged)
Compressive Strength	700 KPa

Application Guideline

This product is designed for application by heated plural airless spray equipment.

Pre-Conditioning
The materials should be maintained prior to application at an optimum temperature of 25°C. This may require the use of band heaters.

Equipment Operation
Typical processing conditions:
i) Operating pressure at 1600-2000 psi
ii) Primary heaters and hose heaters at 50-60°C depending on ambient conditions.

Application Temperatures
This product in combination with Lockwell SPF100 Part A is suitable for spraying on substrates with temperatures in the range of 15-50°C with good foam rise and surface texture.

Cure Time and Recoat Time
This product shall generally be applied in one or more passes at no more than 10mm and no less than 5mm thickness per pass.

Recommended Equipment
Recommended spray application equipment: Graco Reactor plural component E-XP1 or E-XP2 electric proportioner or H-P2 hydraulic proportioner with 2:1 mix ratio capability and Graco XTR 5 airless spray gun incorporating in-line static mixer and solvent flush.

Typical set up: Graco Reactor E-XP1 with up to 200-foot hose length (up to 300 foot with the E-XP2 and H-XP2 proportioners), recircula tion system, Graco XTR 5 airless spray gun and Graco T2 drum pumps supplying proportioners. Spray tips 0.025" for low output and up to 0.065" for high output.

Surface Preparation
Concrete - For new concrete allow 28-day cure. Decontaminate per ASTM D-4258, then abrasive blast clean per ASTM D-4259 to produce surface profile resembling coarse sandpaper. Eliminate leaks and infiltrations and remove standing water. Resurface areas with excessive cavities (bug holes) or exposed aggregate using a high-strength, rapid-cure, zero-shrinkage resurfacing product. Wherever possible, fibreglass screen or geotextile fabric may be embedded within the coating to "bridge", rather than resurface cavities, thereby eliminating resurfacing compounds.

Concrete may be damp to the touch, however, surfaces must be free of condensation and visible moisture. Vacuum to dust free condition before priming.

Carbon Steel- For direct-to-metal application, decontaminate surface per SSPC-SP-1 "Solvent Cleaning" if needed, then abrasive blast clean per SSPC SP-10 "Near-White Condition" to produce nominal 3.5 ml (88).l) surface profile. Remove flash rust for SSPC SP-7 "Brush- off Blast Cleaning". Substrate must be dry and dust-free before coating. Application to wet surfaces is not recommended.

Storage and Handling Precautions

Storage - KEEP DRY! This product has a storage stability of approximately 6 months. For prolonged storage it is recommended that the temperature should not exceed 25ºC.

Do not place drums directly over concrete or earth; store on top of wood slats or pallets. Blanket partial drums with nitrogen gas to prevent moisture contamination. Avoid freezing. Do not open until ready to use. Rotate Part B drums regularly if stored for long term.

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LOCKWELL ASIA +662-136-3868

Packaging

380 liter sets shipped in metal drums of 190 liters each of side A and side B or 38 liter kits shipped in plastic pails of 19 liters of side A and 19 liters of side B.

General Information

This product is for industrial use only. Avoid contact with eyes and skin; do not inhale or ingest. When working with this material wear goggles, rubber gloves and a respirator. When spraying in a confined area, also wear a fresh air hood and make provision for forced ventilation. Regarding individual components and for safe handling information on this product, please refer to the Material Safety Data Sheet (MSDS).

Provide forced air ventilation for confined spaces. Workers must use carbon monoxide filtered breathing air-line respirators. If flammable vapours are present, use only non-sparking tools and equipment. Comply with pertinent local and OSHA regulations relative to work in confined spaces.

Additional Information – Disclaimer

The information provided herein, especially recommendations for the usage and the application of our products, is based upon our knowledge and experience. Due to different materials and equipment used, as well as varying working conditions and environments beyond our control we strictly recommend carrying out intensive trials to test the suitability of our products with regard to the required processes and applications. This data sheet is provided free of charge and we do not accept any liability with regard to the above information or with regard to any verbal recommendation, except for cases where we are liable of gross negligence or false intention.

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