



TECHNICAL DATA SHEET - STYROTHANE 5321FR

Revised: 05/2018

PRODUCT DESCRIPTION

A fast cure 100% solids hot spray applied coating system designed to produce a tough, impact resistant surface designed for expanded polystyrene (EPS) and polyurethane foam.

RECOMMENDED APPLICATIONS

Internal and external protection of EPS and PU foam especially where FR performance is essential. Various FR certification available.

FEATURES

- No primer required onto EPS or PU foam.
- Fast cure for increased productivity
- Zero VOC's

PACKAGE SIZE

Volume 10 & 110 US Gallons
37.8 & 416.4 Litres

Weight 43.62 & 479.8 Kg

PRODUCT DATA

PHYSICAL PROPERTIES	
COLOUR	A Component is Amber ISOCYANATE B Component is Neutral POLYOL Mixed product is Neutral
MIX RATIO BY VOLUME A : B	1 : 1
MIX RATIO BY WEIGHT A : B	1 : 1.03
SG	1.15
% SOLIDS BY VOLUME	100
FLASH POINT, °C	149
GEL TIME AT 60°C/ SECONDS	5-20
RECOMMENDED DFT, MM	~0.75-2.50mm in one multi pass coat

PERFORMANCE PROPERTIES	
TENSILE STRENGTH, MPA	15-20
ELONGATION, %	20-30
TEMPERATURE RESISTANCE, °C	Maximum 65
THEORETICAL COVERAGE	1.0 L/m ² /mm dft
HARDNESS, SHORE D	65-70

APPLICATION INFORMATION
SURFACE PREPARATION

EPS or PU foam should be clean, dry and free from any loose particles etc.

Product should only be applied in conditions where the Temperature is 3°C above the dew point and Relative Humidity is <85%.

MIXING

The product is hot spray applied and mixing is an essential part of the operation occurring within the gun. (See Application section for further info).

APPLICATION

Prior to commencing use of the product ensure that the two components are stored at temperature no lower than 20°C, a temperature of around 25°C is preferable and can be achieved by storage in a heated room or the use of electrical jacket heaters. The B component should be thoroughly power mixed prior to use.

Suitable dispensing equipment is required in order to apply this product. Equipment must be capable of, delivering product to the gun at ~ 120-170 bar, with each component accurately metered in a 1 : 1 ratio by volume. The output of the machine should be capable of matching the highest output of the gun being used. Accurate temperature control of the two components should be possible, typically up to 70°C, with this heating being incorporated into the hose up to or as close as possible to the gun.

The spray gun must use high pressure impingement to achieve satisfactory mixing of the components immediately on triggering. Some static mixer modified guns are also suitable, consult Irathane Futura to discuss suitable systems.

To achieve an even finish during application the gun should be held at right angles to the substrate at a distance of 30-70cm, this can depend on the output volume and pressure.

Review the appropriate Specification Guideline for detailed application instruction.

CURE

Guideline cure times can be found below.

SUBSTRATE TEMPERATURE	10°C	20°C	30°C
SURFACE DRY @ 1.0MM / MINUTES	5	2	1
CURE 100% @ 1.0MM / DAYS	1	1	1
RECOAT TIME MINIMUM / MINUTES	<8	<4	<2
MAXIMUM WITHOUT REACTIVATION / HOURS	15	8	1
ABRADE, DEDUST / HOURS	>15	>8	>1

CLEAN UP

All equipment should be thoroughly cleaned directly after use using Mesamoll or suitable alternative. Spray guns should be cleaned using a proprietary cleaner as recommended by the manufacturer.

SHELF LIFE & STORAGE

12 months from date of shipment when stored at room temperature (~22°C) in original unopened containers in a dry environment.

PRECAUTIONS

For complete safety and handling information, please refer to Material Safety Data Sheets prior to using this product.

WARRANTY

ITW Performance Polymers will replace any material found to be defective. Because the storage, handling and application of this material is beyond our control we can accept no liability for the results obtained.

DISCLAIMER

All information on this data sheet is based on laboratory testing and is not intended for design purposes. ITW Performance Polymers makes no representations or warranties of any kind concerning this data.

For further product information or technical assistance please call +353 61 771 500.