

Isofoam SS 6400

Zero ODP Rigid Foam Spray System

Baxenden Chemicals Limited

Polyurethane Systems, Paragon Works, Baxenden, Nr Accrington, Lancashire BB5 2SL England Tel: +44 (0) 1254 872278 Fax: +44 (0) 1254 302400

Description

Isofoam SS 6400 is the resin component of a two part, MDI based rigid (PUR) foam system designed for producing rigid foam by spray in place techniques.

The RESIN component is a fully formulated liquid mixture. Store at ambient temperatures (18-22°C). Keep drums closed when not in use, and thoroughly mix (with mechanical agitation) before application to redisperse any separated ingredients.

The ISOCYANATE component is a brown liquid grade of crude diphenylmethane di-isocyanate (MDI). Store at ambient temperatures (18-22°C). Protect from frost. Keep drums closed when not in use.

Typical Properties

RESIN Component

Viscosity @ 20°C 400-600 mPa.s Typical Specific Gravity @ 20°C 1.12

ISOCYANATE Component (Type 174)

Viscosity @ 20°C 300-400 mPa.s
Typical Specific Gravity @ 20°C 1.24

Mix Ratio 47.5% RESIN / 52.5% ISOCYANATE by weight 100 RESIN / 100 ISOCYANATE by volume

Typical reaction and density (at above ratio)

Cream time 4-6 sec Laboratory cup mix
Rise time 14-18 sec (electric drill stirrer)
Free rise core density 30-33 kgm⁻³ both components @ 5 °C

Safety Information

All polyurethane products are ORGANIC, combustible materials and may, therefore, present a fire risk if exposed to flame, fire and/or heat.

This Technical Data Sheet must always be used in conjunction with the appropriate Material Safety Data Sheets relating to the RES and ISO components of this product.

For further information please refer to BAXENDEN brochure, "Isocyanates and Polyurethanes Safety Advice".

Data No: SS 40/1 Version: 002

Last revised: 29.06.06 Polyurethane Systems

The recommendations made above are general in nature. Although every effort has been made to supply reliable data, it is for informational purposes only. We cannot guarantee the results as stated to be obtained since we have no control over the end use of the material. Each user must make their own tests to determine the suitability of the material for their own use. Nothing contained herein is intended as a recommendation to use our products to infringe any patent.

Isofoam SS 6400

Application

Isofoam SS 6400 is the resin component of a two part, zero ozone depleting system which was designed for use on 1:1 by volume, spray dispensing equipment.

Typical Physical Properties

The following physical properties were obtained from sprayed sections of foam, using a GUSMER FF machine fitted with a Model D gun. The foam was sprayed in four passes, giving a foam thickness of approximately 60mm.

Properties	Test Method	Units	Value
Density (overall)	BS4370	Kgm ⁻³	45.9
Density (core)	BS4370	Kgm ⁻³	38.5
Thermal Conductivity @ 24°C mean temperature	Anacon ASTM C-518	Wm ⁻¹ K ⁻¹	0.021
Closed Cell Content, corrected	ASTM D-2856	%	96
Compressive Strength Parallel to rise Perpendicular to rise	BS4370 BS4370	kPa kPa	340 142
Tensile interlaminar adhesion	BS5241	kPa	>262
Moisture vapour permeability	BS4370	ng(m.s.Pa) ⁻¹	3.9
Dimensional Stability, max volume change 24 hrs @ +100°C 24 hrs @ -15°C	ASTM D2126 ASTM D2126	% %	+1.1 -0.2
Surface spread of flame (1*)	BS476: part 7: 1987		Class 1

(1*) This is a laboratory scale test and should be used for comparative purpose. It is <u>NOT</u> to be used to assess the potential fire hazard of a material in use.

The above physical properties have been obtained under the conditions stated. The physical properties obtained when making different items or using alternative conditions to those detailed above, may vary and should be determined for the intended application.

Data No: SS 40/1 Version: 002

Last revised: 29.06.06 Polyurethane Systems