

RIGID POLYURETHANE FOAM

Rigid polyurethane (PUR) foam

Rigid polyurethane (PUR) foam shows its versatility through excellent chemical and physical properties, both of which enable it to be used in a wide variety of multi-functional building and structural products which have high demand for insulation. Rigid polyurethane foam boasts for its low thermal conductivity, high shear strength, excellent processability, high chemical resistance, adjustable flame-retardance, good adhesion, etc.

Our PUR foam products range from PUR foam system to PUR panels (including continuous moulding panels)

JY SERIES RIGID POLYURETHANE FOAM SYSTEM

Introduction

They are mixed by polyol, blowing agent, catalyst, additives at optimum ratio, directly used in on-the spot foaming. The raw material has good fluidity and finished foam products have uniform density, high strength, good dimensional stability at low temperature, low thermo conductivity, etc.

Physical and Chemical Properties

Density(g/m^3 ,20) :	1.1~1.2
Value of OH/ (mgKOH/g):	400~450
Flash Point/ :	135~145
Viscosity (20)/cps:	120~200
Appearance:	amber liquid
Shelf life:	six months

Options

JY-4351

Especially used by means of spraying in refrigerator, freezer and other applications with high demand for heat-preservation.

JY-4352

Especially used in polyurethane panel injection.

JY-4353

Especially designed for pipeline Polyurethane foam.

JY-4354

Especially used to manufacture Polyurethane foam products for refrigerator and water heater.

Reaction Properties with Isocyanate (manual foaming)

	JY-4351	JY-4352	JY-4353	JY-4354
Material temperature/	21~23	21~23	21~23	21~23
Cream time /s	1~5	20~35	15~25	8~15

Fibre time /s	5~18	100~150	80~100	70~95
Tack-free time /s	7~20	120~180	90~120	100~150

Notes: the reaction properties can be adjusted to meet customers' specific requirements.

Typical Foam Properties

	JY-4351	JY-4352	JY-4353	JY-4354
Density /(kg/m ³)	25~40	25~40	25~40	25~35
Thermal conductivity (20 °C)/(W/m.K)	≤0.024	≤0.024	≤0.024	≤0.022
Dimensional Stability	≤1.0	≤1.0	≤1.0	volume deformation (-20 °C, 72hr) -0.5% volume deformation(+70 °C, 72hr) +0.5%
Compress Strength /kPa	≥100	≥100	≥100	≥170(horizontal) ≥100(perpendicular)
Water absorption (%)	≤ 2	≤ 2	≤ 2	≤1.5

Storage

Shelf life is six months minimum when stored at 59°F~68 °F and suitable storage environment. Like most construction materials, it must be stored in a dry, cool and well-ventilated place free from direct sunshine and other heat sources.

As it is easy to volatilize and absorb moisture, please use it up once. If not, please do keep the rest sealed right after use in order to prevent it from moisture and volatilization.

Safety &Precaution

*Please do wear rubber gloves, safety glasses and guarding clothes before application. Gloves should be changed frequently, working environment should be well-ventilated, equipments should be checked regularly and application site should be kept clean.

*polyether has slight toxicity because of the existence of low-density additives such as catalyst in it.

*The material is flammable.

*Once contacted with eyes: flush with low-pressure and clean water for at least 15 minutes and go for doctor at once.

Once contacted with skin: flush with clean water and wash with soap.

RIGID POLYURETHANE FOAM PANEL

Features

- * Low thermal conductivity
- * Low water absorption
- * High strength and low weight
- * Excellent adhesion to a range of materials
- * Thermal Stability from -160°C to 110°C
- * Flow properties suitable to fill any shape of cavity
- * Light weight

Properties

We provide PU panels with **adjustable** properties such as thermo-conductivity, compress strength, dimensional stability, water-absorption, **flame-retardance**, density, etc, to meet your specific requirements.

Usages

They are extensively used in applications such as:

- * Thermal insulation for hot/cold purposes (pipeline, storage tank...)
- * Refrigerated equipments (Refrigerated containers, trucks/transport, domestic and commercial refrigerators....)
- * Construction material
- * Structural material for molding
- * Continuous moulding