Blend Polyol for PU Faux stone

1. Product Description:

The pu faux stone material is widely used for produce decorative building material, decorative cornice and board, sofa leg, carved furniture and artware, decorative wall panel, picture frame, mirror frame, wood imitation furniture spare parts, European classical style furniture, shoe mould, large carving products, ski board core, auto spare parts, car interior furnishing, etc. The material is suitable for high pressure foaming machine, low pressure foaming machine and manual foaming.

The advantage of pu faux stone polyurethane rigid foam:

Good liquidity, uniform density, good compressive strength and size stability, light weight, free maintenance, corrosion resistance, waterproof, sound insulation, flame retardant, save manpower and material; Green cfc-free foaming technique, excellent self-adhesive performance (without any intermediate bonding materials), strong bonding effect with material such as wood, metal, brick, glass, etc; Stable chemical properties, long service life and does not make environment pollution; Closed cell, closed rate was 95%.

Compared with natural stone, pu faux stone material has obvious advantage: molding. It can be applied in mould mass production of various shapes, especially good at carving patterns. Repeated molding performance is very good,
molding process is simple, time-saving and efficient; The products appearance and performance are similar to wood, strength is higher, density lower, can be dug, saw or drill; Also has excellent acid and alkali proof and anti-corrosion performance.

High density polyurethane rigid foam has high intensity, strong carrying capacity, and the weight is very light, can replace denser traditional plasterboard, polyester, glass fiber reinforced plastic and other composite stone. Pu foam can used for producing decorative panels, ceiling, big droplight pattern plate, etc. It has advantage of repeated high accuracy in molding production, product size precision, clear printing pattern, wood texture vivid.

2. Parameters

2.1 Chemical composition introduction:

This premixed polyether is composed of polyether polyols, crosslinking agent, foam stabilizing agent, catalyst, blowing agent, flame retardant, it reacts with isocyanate. The pu system has good liquidity, uniform density, the generated foam has good adhesion, good dimensional stability. It is suitable for high and low pressure foaming machine.

2.2 Physical properties of the premixed polyether:

Appearance	Dark yellow viscous liquid
Density	0.9±0.05g/cm3
Viscosity (25℃)	900±200mpa.s

2.3 Recommend formula:

Premixed polyether polyol	100(weight)
Isocyanate	100(weight)

2.4 Reaction Characteristics (material temperature 20℃, test by hand)

Stirring time(s)	10～15
Cream time(s)	30～60
Gel time(s)	75～150
Tack free time(s)	100～210
The reaction time can adjust according to the requirements of the user.	

2.5 Physical properties of the foam:

Density (kg/m3)	250±20
Hardness (shore A)	≥80
Tensile strength (MPa)	≥3.0
Elongation at break (%)	≥3.0
Compression strength 10% (MPa)	≥3.5
Impact strength (KJ/m2)	≥2.0

3. Package and Storage

Raw material is packed in dry and sealed iron containers, don't expose to air, avoid direct exposure, storage temperature 5 ~ 45℃.

Shelf life: Under normal conditions, A component is valid for 9 months, B component for 12 months.

4. Safety Precautions

A component contains amine additives, should avoid contact with eyes or skin. B component is low toxicity, also should avoid contact with skin and eyes. Wear safety gloves when operating, if contact with eyes, please wash with running water, and immediately send to hospital.