

Water-based Polyurethane Blend Polyols for Pipeline DonPipe 301

Products Introduction

This product is a type of blend polyols with water as foaming agent, which is specially researched for rigid PUF to produce thermal insulation pipes. It is widely used in steam pipes, liquefied nature gas running pipes, oil pipes and other fields. The characteristics are as follows:

- (1) good flowability, by regulating formula to suit different pipe diameters.
- (2) high temperature-resistance performance, long standing in 150℃
- (3) excellent low temperature dimensional stability

Physical Property

Appearance		Light yellow to brown yellow transparent liquid
Hydroxyl value	mgKOH/g	250-450
Dynamic viscosity (25℃)	mPa.s	300-600
Density (20℃)	g/ml	1.10-1.16
Storage temperature	℃	10-25
Storage stability	Month	6

Technology and Reactivity Characteristics

Component temperature is 20℃, the actual value is varied according to pipe diameter and processing condition.

	Manual mixing	High pressure machine
Ratio (POL/ISO)	1:1.40-1.1.60	1:1.40-1.60
Rise time s	20-40	15-35
Gel time s	80-200	80-160
Tack free time s	≥150	≥150
Free density kg/m ³	30-40	30-40

Foam Performance

Molded foam density	GB 6343	60-80kg/m ³
Closed-cell rate	GB 10799	≥90%
Thermal conductivity(15℃)	GB 3399	≤33mW/(m.K)
Compressive strength	GB/T8813	≥250kPa
Water absorption	GB 8810	≤3 (V/V) %
Dimensional stability (24h, 100℃)	GB/T8811	≤1.5%
(24h, -30℃)		≤1.0%

The data provided above are typical value, which are tested by our company. For our company's products, the data included in the law do not have any constraints.