

POLYURETHANE AUTOMOBILE SOLUTION

Why polyurethane in automobile?

Polyurethane is a highly versatile material that is commonly used in the automobile industry because of many economic and ecological benefits it provides:

Efficiency: Polyurethanes can be tailor-made to meet the exact shape and size requirements, thereby reducing the generation of scrap material and lowering vehicle costs.

Sustainability: Polyurethanes are often applied as lightweight foams, which help reduce the weight of cars, thereby lowering fuel consumption and CO2 emissions.

Recyclability: At the end of their useful life, polyurethanes can be recycled and their energy recovered through a range of approved technologies

Versatility: Polyurethanes are an extremely versatile material, which makes them ideal for a range of applications in cars, from foam seat fillings to bumpers and steering wheels.

Safety: The shock absorbing qualities and high resilience of polyurethane foams ensure the safety of drivers and passengers in cars, under static and dynamic conditions.

What's included in our automobile polyurethane solution?

Automotive roof trimming——TPU system

Automotive body coating ——Water-blown PU system

Dashboard filling ——Semi-rigid PU foam system for

Armrest ——Integral-skin products

Car back cushion and motor saddle——High-resilient cold-curing foam system

Shock absorber, shockproof gasket, automobile used air filter-----micro-cellular elastomer premix

Wind shield and sealing bar for car window glass,

Side panel for car inner trimming, vacuum- foaming seat cushion, car bumper

Automotive Roof Trimming PU System

According to the requests of varies product lines of the automotive roof trimming companies, we have developed a series of raw materials for thermoformable PU rigid foam and cold formable PU foam to keep up with the trend of lightness, personality and comfort of automobile and meet the need of automobile module mass production.

Features

- * Adopting water blown technology to eliminate CFCS, making the product more environmental friendly
- * Good extensibility and can be formed into almost any shape
- * High percentage of open-cell and excellent voice adsorption
- * Low density, lightweight, in accordance with the trend of lightness of automobile

* Excellent formability and self-resistant structure

All of these features make it suitable as automobile roof trim material. Thus the Automobile headliners thereby have lightweight, dimensional stability, excellent thermal insulation and good voice absorption.

Application

We have successfully cooperated with many famous companies in automobile industry and our products are widely used in various models. We covers majority of domestic market of automotive roof trimming during the past years, gaining good reputation from customers home and abroad.

Properties

	thermoformable PUR foam	coldformable PU foam
Density, kg/cm ³	35~50	22~30
Weight per unit area, g/m ²	800~1200	600~800
Stability(deformation volume)	≤2.5	≤0.5
Machining temperature	180~200	120~150

JDPUR 303 water foaming system for spray-applied PUR foam plastic

The JDPUR303 polyol composition is mainly used to manufacture water-blown spraying foam .It has been widely used in the surface spraying of automotives, and it also shows excellent performance in applications such as waterproof, heat-preserving, corrosion-resistance of buildings, automotives, as well as pipelines.

Features

- * Good fluidity and storage stability.
- * Foam plastics thereby have the character of high curing speed, excellent adhesion, low thermal conductivity and good dimensional stability.

Usage

- * thermal insulation material in automotive interior trim system
- * piping thermal insulation
- * building industry
- * household appliances

Properties

Item	Data
Appearance	Brown liquid
Viscosity (mPa·s)	1100±300
Hydroxide content	400±30 MgKOH/g
Water content	3.5±0.5%

Foam properties

Item	Data
Density	37±5 kg/m ³
Compression	≥200 kPa
Hydroxide content	≤0.027 W/m·K
Dimensional stability at high temperature	≤1.0 %
Dimensional stability at low temperature	≤1.0%

JDPU-503 Semi-rigid PU foam system

Features

- * Low viscosity, good fluidity and strong adhesion to substrates
- * integral skin PU foam plastics thereby have low density and good properties.

Usages

Premix JDPU-503 is mainly used to manufacture semi-rigid PU foam plastics used in car dashboard

Properties

Appearance:	Milky , thick liquid
Viscosity(25), mPa·s:	1100±200
Hydroxide content, MgKOH/g:	88±20
NCO content, %:	1.8±0.20

Application

Mix ratio:	component R: component I=100:(60±1)
Material temperature:	25±2
Mold temperature:	50±5
Tack-free time	120s

PUIS-901 Raw material for integral skin PU foam

Features

- * Low viscosity and good fluidity.
- * integral skin PU foam plastics thereby have low density and good properties.

Usages

The PUIS-901 is mainly used to manufacture integral skin PU foam plastics in automotive armrest.

Properties

This product is produced by mixing two components (PUIS-901-R and PUIS-901-I) with certain ratio.

Component Item	Component PUIS-901-R	Component PUIS-901-I
Appearance	Milky liquid	Yellowish liquid
Viscosity	860±200	150±50
Hydroxyl number	190±20	/



Application

High-resilience cold-curable polyurethane foam compound

1. Excellent resilience
2. High comfort
3. Extraordinary physical property and processing property
4. Good gas permeation performance
5. Outstanding flame-retardance

1. motorcycles
2. cars
3. furniture industry

	JSUF6653	JSUF6663
Density (kg/m ³)	48.6	61.4
Elongation rate %	112	125
Tear strength(N/cm)	2.34	2.13
Resilience rate %	64	61
Compress permanent deformation rate % (70°C.22hr)	8.6	7.7
Compress hardnessN(25%)	126	186
Compress hardnessN(65%)	378	540
SAGindex	3.0	2.9

1. You can either use high or low pressure machine to foam or foam by hand
Foam in accordance with the black and white material ratio provided by us