



Changzhou Juyou New Material Tech Co.,Ltd.

JY-131M liquid silicone rubber for moulding

1. Product features

Keep soft and elastic property under long time operation during -65°C~200°

Excellent electrical property and chemical stability

Water-resistance, ozone resistance, weatherable aging, non-corrosiveness, non-reactivity and non-toxic and tasteless

Low linear shrinkage, high transparency, excellent mould-releasing ability and easy operation

2. Product typical applications

Making precision mold, like polyurethane, epoxy resin;

Mapping the size of chemical materials, carbon fibrous composite materials and machine parts;

Duplicating artware and decoration made by POLYESTER, ER-OXY and PU foamex;

Making artistic and fancy candles and gypsum mould ;

Mould making of furniture and electronics

For making high hardness and long working life rubber pad printing head.

3. Product Technical Parameters

	Project	Unit	Value		Test method
Before vulcanization	Component		A	B	
	Appearance		Transparent fluid	Transparent fluid	Visual results
	Viscosity(25°C)	Pa • s	≤80	≤1	GB/T 2794-1995
	Mixture ratio	A:B	10:1		
	Pot life, 25°C	min	80		
	Vulcanizing time,at 25°C	h	20		
	Vulcanizing time,at 60°C	min	50		
	Vulcanizing time,at 80°C	min.	40		
After vulcanization	Tensile strength	MPa	≥5.5		GB/T 528-2009
	elongation	%	≥400		GB/T 528-2009
	Tear strength	kN/m	≥15		GB/T 529-2008
	Linear shrinkage	%	≤0.1		
	Shore A hardness		40±3		GB/T 531-1999

The above data only for reference.

(Sample preparation curing conditions: 24h*at room temperature ,80°C×60min)

4. Product Color

It is the transparent fluid after mixing A and B.

The color can be done according to client's demand.

5. Usage and dosage

Premix: before using, mixing well A and B separately

Weigh: weigh A and B according to A: B = 10:1.

Mix: mixing the two components well, it is better to use the special rubber mixing equipment (like small planet stirrer). If mixing the rubber by hand, make sure the bottom and the sides of the drum are scraped well.

Defoaming: putting the mixed rubber in to the special equipment to defoaming under vacuum, or you can put the mixed rubber together with the special mixing equipment in the vacuum defoam equipment and defoaming. During the vacuum defoaming procession, the liquid level of the mixture will be higher 3-4 times than before. Then after the bubble broke, maintain the vacuum for 4-6 minutes. Finally release the vacuum.

Mould making: Liquid injection moulding(LIM) is suggested. Inject sizing material into moulding chamber, after 24hours at room temperature, then can get silicone rubber model. It can extend the mould working life after treating the vulcanized silicone rubber mould 2 hours under 80-100°C. To improve the molding efficiency, it also can be cured under the high temperature of 60°C-90°C

6. Matters to be attention

Specific materials, compound, vulcanizing agent and plasticizer will affect the vulcanization of JY131M including:

- Organic tin and other metallo-organic compound
- Silicone rubber with organic tin catalyzer
- Sulfur, polysulfide, polysulfone or other sulfur-containing materials
- Amine, ethyl carbamate or amine-containing materials
- Unsaturated hydrocarbon plasticizer
- Scaling powder remnant

If you don't know whether the material (A) will affect the vulcanization, you can do a small compatibility test. If there has liquid or non-vulcanized material that exist in the A and the gel surface . it shows that it doesn't have consistency and will hinder vulcanization.

The component A and component B are non-toxic. there is no need to take special preventive measures, it just needs general industrial hygiene.

The catalyzer is easily to be poisoned and lose activity, pls avoid contacting the nitrogen, phosphorus, sulphur compounds and heavy metals compounds, such as organic tin . Keep the utensil clean.

The operation period of the mixed JY-131M will be influenced by environment temperature. The operation period will be shorten at high temperature.

7. Package

Component A and Component B are packed in 200kg metal barrel and 20kg plastic drum separately, or other specification package.

8. Product storage and transportation

This product should be stored under the temperature of 0°C~30°C. The shelf life is 1 year under original packaging sealed condition. To be shipped according to the non-dangerous goods.