

# INJECTION MOLDING FLUROSILICONE RUBBER

## Product Information:

Two-component platinum-cured fluorosilicone materials for injection molding process. This material units the advantage of FSR and LSR. Liquid injection molding process can help to reduce the processing cost for seals, O-rings, diaphragms, membrane and parts used on engine systems with improved emission control requirements.

## Application:

AFS-LIM-2000 is particularly suitable for the manufacturing of parts, which are used in air-intake systems, and where improved resistance to automotive fluids is needed like connectors and gasket.

AFS-LIM-2000 includes AFS-LIM-2100 and AFS-LIM-2200.

## Characteristics:

Faster curing at elevated temperatures.  
 Excellent molding release for shorter cycle times.  
 Wide application temperature range: -60°C-200°C.  
 Excellent fuel, oil, solvent and chemical resistance.  
 Could be used to make intricate parts.

AFS-LIM-2100	Items	Testing Method	AFS-LIM-2130	AFS-LIM-2140	AFS-LIM-2150
	Appearance	Eyeballing	Translucent or light yellow	Translucent or light yellow	Translucent or light yellow
	Specific Gravity	ASTM D792	1.38	1.38	1.38
	Hardness (Shore A)	ASTM D2240	30±5	40±5	50±5
	Tensile Strength (MPa) Die C	ASTM D412	≥3	≥4	≥4
	Elongation at Break (%) Die C	ASTM D412	≥200	≥250	≥200
	Tear Strength (KN/m)	ASTM D624	≥10	≥10	≥10
	Volume Swell (%) (fuel B 72h @ room temp.)	ASTM D471	≤50	≤50	≤50
	Tg	-	-70°C	-70°C	-70°C

AFS-LIM-2200	Items	Testing Method	AFS-LIM-2230	AFS-LIM-2240	AFS-LIM-2250
	Appearance	Eyeballing	Translucent or light yellow	Translucent or light yellow	Translucent or light yellow
	Specific Gravity	ASTM D792	1.28	1.28	1.28
	Hardness (Shore A)	ASTM D2240	30±5	40±5	50±5
	Tensile Strength (MPa) Die C	ASTM D412	≥4	≥5	≥5
	Elongation at Break (%) Die C	ASTM D412	≥300	≥250	≥200
	Tear Strength (KN/m)	ASTM D624	≥15	≥15	≥10
	Volume Swell (%) (fuel B 72h @ room temp.)	ASTM D471	≤120	≤120	≤120
	Tg	-	-100°C	-100°C	-100°C

## 【Testing in FAM B (@room temp. for 3 days)】

	Hardness change(Shore A)	Tensile Strength change	Elongation change	Volume change
AFS-LIM-2100	-12	-45.1%	-28.1%	17.2%
AFS-LIM-2200	-23	-85.9%	-78.1%	201.8%

## Processing:

Parts A and B components are designed to be mixed in equal parts using standard liquid injection molding pump and meter equipment and techniques.

Curing is initiated once part A and part B components are mixed and can be accelerated by heating the mixed elastomer.

## Attention:

Traces of foreign materials can render the catalyst inactive and inhibit the curing. Traces of amines, sulfur, nitrogen oxide, organotin compounds, and carbon monoxide can interfere with the curing of this product and should be avoided.

## Storage:

Shall be stored in a cool and dry environment, with a shelf life of six months.

## Transportation:

Transport this product as non-hazardous materials.