

## Freudenberg Simrit 92 AU 21100 Low Temperature Polyurethane Elastomer

Category : Polymer , Thermoset , Polyurethane, TS , Thermoset Polyurethane, Elastomer, Unreinforced , Rubber or Thermoset Elastomer (TSE)

### Material Notes:

With the new low temperature material 92 AU 21100, Simrit has succeeded in developing a polyurethane material that is specially designed to meet the specific requirements for use at low temperatures and yet can also handle standard applications with no problems: the operating range of 92 AU 21100 stretches from  $-50^{\circ}\text{C}$  to  $+100^{\circ}\text{C}$ . This is made possible by targeted modification of the PU components responsible for temperature properties, while leaving the remaining material properties comparable to Simrit's standard PU materials. The 92 AU 21100 PU material demonstrates particularly beneficial viscoelastic behaviour, whereby the soft segments retain their flexibility over a broad range of temperatures and only solidify at very low temperatures. There is no negative influence on other critical material properties such as hardness and tensile strength. In practical terms, this means that seals made of the 92 AU 21100 material are sufficiently flexible even at extremely low temperatures and have the necessary sealing effect immediately after commissioning. This allows initial leakages to be reliably prevented. Information provided by Freudenburg-NOK.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Freudenberg-Simrit-92-AU-21100-Low-Temperature-Polyurethane-Elastomer.php](http://www.lookpolymers.com/polymer_Freudenberg-Simrit-92-AU-21100-Low-Temperature-Polyurethane-Elastomer.php)

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	92	92	DIN 53505
Tensile Strength, Ultimate	63.0 MPa	9140 psi	DIN 53504
Elongation at Break	770 %	770 %	DIN 53504
Resilience	45	45	DIN 53512
Compression Set	28 %	28 %	24 h; $-30^{\circ}\text{C}$ ; 10% Predeformation; 2 h after relieving of load measured at low temperatures
	31 %	31 %	24 h; $100^{\circ}\text{C}$ ; 25% Predeformation
	@Temperature $100^{\circ}\text{C}$	@Temperature $212^{\circ}\text{F}$	
	34 %	34 %	70 h; 10% Predeformation
	@Temperature $100^{\circ}\text{C}$	@Temperature $212^{\circ}\text{F}$	

Thermal Properties	Metric	English	Comments
Maximum Service Temperature, Air	$100^{\circ}\text{C}$	$212^{\circ}\text{F}$	Retains Stretch
Minimum Service Temperature, Air	$-50.0^{\circ}\text{C}$	$-58.0^{\circ}\text{F}$	Retains Stretch

Descriptive Properties	Value	Comments
TR 10	$-57^{\circ}\text{C}$	

## **Contact Songhan Plastic Technology Co.,Ltd.**

**Website : [www.lookpolymers.com](http://www.lookpolymers.com)**

**Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)**

**Tel : +86 021-51131842**

**Mobile : +86 13061808058**

**Skype : lookpolymers**

**Address : United North Road 215,Fengxian District, Shanghai City,China**