

## TPSiV™ X3011-70A Thermoplastic Elastomer

### FEATURES

- Melt reprocessible
- Plasticizer free
- Silky feel
- Easy injection moulding
- Excellent high temperature performance in air
- Excellent abrasion resistance
- Bonds without adhesives to PC, ABS, PU, PVC, PA
- Good tensile and tear strength
- Good hydrolysis resistance
- Good oil resistance

### COMPOSITION

- Vulcanized silicone thermoplastic resin

**TPSiV™ material for injection moulding and extrusion applications**

### APPLICATIONS

- Solution for soft touch applications (i.e., appliances, portable electronics, etc.)
- Solution for automotive, sports & leisure, electrical/electronic, and industrial/mechanical applications

### TYPICAL PROPERTIES

Specifications writers: These values are not intended for use in preparing specifications. Please contact your local Multibase sales representative prior to writing specifications on this product.

Mechanical Properties @ 23°C	Test Method	Units	Values
Tensile Strength	ASTM D412 (Die D)	MPa	16
Elongation at Break	ASTM D412 (Die D)	%	600
Tear Strength	ASTM D624 (Die C)	N/mm	46

Physical Properties	Test Method	Units	Values
Specific Gravity (23/23°C)	ASTM 792		1.2
Hardness	ASTM D2240	Shore A	71
Compression Set 22hrs	ASTM D395 Method B	%	
• 23°C			23
• 120°C			95
• 120°C after annealing <sup>1</sup>			74
Tensile Set (23°C)	ASTM D412 (Die D)	%	
• 100% elongation			16
• 300% elongation			80
• At Break			80
Abrasion Resistance (Taber, H18, 1000 g, 1000 cycles)	ASTM D1044	mg loss	38

Heat Ageing Properties	Test Method	Units	Values
Tensile Strength after heat ageing	ASTM D573-99 1008 hrs @ 120°C 1008 hrs @ 150°C	% Change	+18 -1.8
Elongation at Break after heat ageing	ASTM D573-99 1008 hrs @ 120°C 1008 hrs @ 150°C	% Change	+17 -19
Hardness after heat ageing	ASTM D573-99 1008 hrs @ 120°C 1008 hrs @ 150°C	Point Change	+2 +10
Change in tensile strength after water immersion	250 hrs @ 100°C	% Change	-18
Change in elongation at break after water immersion	250 hrs @ 100°C	% Change	-11
Change in hardness after water immersion	250 hrs @ 100°C	Point Change	+4

<sup>1</sup>annealed at 120°C for 22 hrs in air

## HOW TO USE

### Injection Moulding Processing Guide

Drying Time	6 - 8 hrs
Drying Temperature	80°C
Moisture Level	< 0.03%
Feed Zone Temperature	180°C
Transition Zone Temperature	190°C
Metering Zone Temperature	200°C
Nozzle Temperature	210°C
Melt Temperature	205°C
Mould Temperature	10°C
Back Pressure	3.5 bar
Injection Speed	Fast

## USABLE LIFE AND STORAGE

Usable life of 24 months when stored at room temperature or a cool dry place.

## PACKAGING

This product is available in 25kg bags.

Samples of quantities less than 25kg can be made available by request.

## LIMITATIONS

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

## HEALTH AND ENVIRONMENTAL INFORMATION

To support Customers in their product safety needs, Dow Corning has an extensive Product Stewardship organization and a team of Health, Environment and Regulatory Affairs specialists available in each area.

For further information, please see our website, [www.dowcorning.com](http://www.dowcorning.com) or consult your local representative.

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