

AsahiKASEI

SUNVIEO™ A7171

Asahi Kasei Corporation - Thermoplastic Vulcanizate

Wednesday, February 15, 2017

General Information

Product Description

SUNVIEO™ A7171 is a thermoplastic elastomer featuring ultra-high melt flow, good physical properties and UV and resistance. SUNVIEO™ A7171 is for use in injection molded parts, thin thickness and wide area such as automotive instrument panel skin. It can be also over molded for interior parts. It is polyolefin based and completely recyclable.

Key Features

- Ultra high melt flow
- Excellent moldability
- Good physical properties and UV resistance
- Recommended applications for wide area and thin thickness by injection molding

General

Material Status	• Commercial: Active		
Availability	• Asia Pacific	• Latin America	• North America
Features	• Good Moldability • High Flow	• Recyclable Material • UV Resistant	
Uses	• Automotive Instrument Panel • Automotive Interior Parts • Automotive Interior Trim	• Consumer Applications • Electrical/Electronic Applications • Furniture	• Overmolding • Thin-walled Parts
RoHS Compliance	• RoHS Compliant		
Appearance	• Opaque		
Forms	• Pellets		
Processing Method	• Foam Processing • Injection Blow Molding	• Injection Molding • Multi Injection Molding	

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	0.900	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR)			ISO 1133
230°C/1.2 kg	55	g/10 min	
230°C/2.16 kg	250	g/10 min	
Molding Shrinkage			Internal Method
Across Flow	1.2	%	
Flow	1.4	%	
Elastomers	Nominal Value	Unit	Test Method
Tensile Stress			ISO 37
100% Strain, 23°C	3.80	MPa	
200% Strain, 23°C	4.80	MPa	
Tensile Stress (Break, 23°C)	5.70	MPa	ISO 37
Tensile Elongation (Break, 23°C)	280	%	ISO 37
Tear Strength (23°C)	23	kN/m	ISO 34-1
Compression Set (100°C, 22 hr)	62	%	ISO 815
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore A, 10 sec, 23°C, 2.00 mm)	75		ISO 7619

Disclaimer:

- Data shown are typical values obtained by proper testing methods and should not be used for specification purpose.
Please use these data for selecting the most appropriate grade suitable for specific usage.
These data may be changed because of improvement in properties.
- Be sure to read the relevant SDS before handling and use, and always follow the Important Precautions.
- Do not use plastics in any of the following orally- or medically-related applications.
 - Orally-related application : any part, device or component which may come into direct oral contact or into direct contact with drinking foods or beverages.
For drinking water application, please consult Asahi Kasei Chemicals Corporation.
 - Medically-related applications : any part, or component which may be used intracorporeally or which may in dialysis or other processes come into direct or indirect contact with body tissue, body fluids, or transfusion fluids.

SUNVIEO™ A7171

Asahi Kasei Corporation - Thermoplastic Vulcanizate

Thermal	Nominal Value	Unit	Test Method
Brittleness Temperature	-49.0	°C	ASTM D746
Aging	Nominal Value	Unit	Test Method
Change in Tensile Strength in Air	-3.5	%	ISO 188
Change in Tensile Strain at Break in Air	-7.9	%	ISO 188
Flammability	Nominal Value	Unit	Test Method
Burning Rate	88	mm/min	FMVSS 302
Fogging	91	%	SAE J1756
Additional Information	Nominal Value	Unit	Test Method
Oil Resistance - 80°C, 24hr	45	%	ISO 1817

Processing Information

Injection	Nominal Value	Unit
Rear Temperature	160	°C
Middle Temperature	180	°C
Front Temperature	200	°C
Nozzle Temperature	220 to 230	°C
Processing (Melt) Temp	220 to 230	°C
Mold Temperature	40 to 60	°C
Injection Rate	Fast	
Back Pressure	0.500 to 3.00	MPa
Screw Speed	50 to 100	rpm
Cushion	5.00 to 10.0	mm

Notes

¹ Typical properties: these are not to be construed as specifications.

Disclaimer:

- Data shown are typical values obtained by proper testing methods and should not be used for specification purpose.
Please use these data for selecting the most appropriate grade suitable for specific usage.
These data may be changed because of improvement in properties.
- Be sure to read the relevant SDS before handling and use, and always follow the Important Precautions.
- Do not use plastics in any of the following orally- or medically-related applications.
 - Orally-related application : any part, device or component which may come into direct oral contact or into direct contact with drinking foods or beverages.
For drinking water application, please consult Asahi Kasei Chemicals Corporation.
 - Medically-related applications : any part, or component which may be used intracorporeally or which may in dialysis or other processes come into direct or indirect contact with body tissue, body fluids, or transfusion fluids.