

## Akulon® F132

## PA6

Film Extrusion, High Viscosity

Print Date: 2016-11-08

Properties	Typical Data	Unit	Test Method
<b>Material specific properties</b>			
Viscosity number	210	cm <sup>3</sup> /g	ISO 307, 1157, 1628
RSV formic acid, 1g/100ml	3.2	-	DSM method
Melt Viscosity (260 °C)	1120	Pa s	DSM method, 260 °C
Density	1130	kg/m <sup>3</sup>	ISO 1183
<b>Thermal properties</b>			
Coeff. of linear therm. expansion (parallel)	0.9	E-4/°C	ISO 11359-1/-2
Spec. heat capacity	1550	J/(kg K)	-
Average spec. heat capacity 20-150 °C	2550	J/(kg K)	-
<b>Mechanical properties (Film)</b>			
Modulus of elasticity	450	MPa	DSM-Method, 50 mm/min
Stress at yield, parallel	32	MPa	ISO 527-3
Maximum stress, parallel	83	MPa	ISO 527-3
Maximum strain, parallel	350	%	ISO 527-3
Trouser Tear resistance, parallel	32	-	ISO 6383-1
Puncture resistance	1300	J/m	DSM-Method
Static coefficient of friction	1.2	-	ISO 8295
Dynamic coefficient of friction	1	-	ISO 8295
<b>Other Properties (Film)</b>			
Transparency/Clarity	83	%	DSM method
Oxygen transmission rate at 23°C/0%r.h.	26	cm <sup>3</sup> /(m <sup>2</sup> *d*bar)	DIS 15105-1/-2

All information supplied by or on behalf of DSM in relation to its products, whether in the nature of data, recommendations or otherwise, is supported by research and, in good faith, believed reliable, but DSM assumes no liability and makes no warranties of any kind, express or implied, including, but not limited to, those of title, merchantability, fitness for a particular purpose or non-infringement or any warranty arising from a course of dealing, usage, or trade practice whatsoever in respect of application, processing or use made of the aforementioned information or product. The user assumes all responsibility for the use of all information provided and shall verify quality and other properties or any consequence from the use of all such information. Typical values are indicative only and are not to be construed as being binding specifications.

Properties	Typical Data	Unit	Test Method
Oxygen transmission rate at 23°C/85%r.h.	38	cm <sup>3</sup> / (m <sup>2</sup> *d*bar)	DIS 15105-1/-2
Water Vapor Transmission Rate at 23°C/85%r.h.	35	g / (m <sup>2</sup> *d)	DIS 15106-1/-3

### Test specimen production (Film)

Type of extrusion	cast	-	-
Thickness of specimen	0.05	mm	-
Extruder temperature	270	°C	
Die temperature	270	°C	
Chill Roll Temperature	110	°C	

### Viscosity-shear rate

