## Ametek P409L P/M Stainless Steel, Sintered from 6.45 g/cc Green Density

Category : Metal , Ferrous Metal , Stainless Steel , T 400 Series Stainless Steel

## Material Notes:

P409L is a ferritic, weldable grade of stainless steel with high compressibility, enhanced green strength and good sinterability. This stabilized grade provides excellent corrosion resistance and has the capacity to provide high caliber mechanical properties because of its high temperature sintering response. P409L may be used in automotive exhaust system applications, among other uses. For property data reported here: Compacting properties measured on powders with 1% lithium stearate. Sintering was done in dissociated ammonia at 1121°C (2050°F) for 45 minutes. Compacting pressure 40 tsi. Green strength 1800 psi. Sintered breaking strength 105,000 psi.Information provided by Ametek Specialty Metal Products.

## Order this product through the following link: http://www.lookpolymers.com/polymer\_Ametek-P409L-PM-Stainless-Steel-Sintered-from-645-gcc-Green-Density.php

Physical Properties	Metric	English	Comments
Bulk Density	2.80 g/cc	0.101 lb/in³	Powder
Density	6.55 g/cc	0.237 lb/in <sup>3</sup>	Sintered

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell B	71	71	
Tensile Strength, Ultimate	372 MPa	54000 psi	
Elongation at Break	4.8 %	4.8 %	

Thermal Properties	Metric	English	Comments
Shrinkage	0.28 %	0.28 %	versus die size

Component Elements Properties	Metric	English	Comments
Carbon, C	<= 0.030 %	<= 0.030 %	
Chromium, Cr	11.5 - 13.5 %	11.5 - 13.5 %	
Iron, Fe	82.4 - 88.5 %	82.4 - 88.5 %	As Remainder
Manganese, Mn	<= 2.0 %	<= 2.0 %	
Phosphorous, P	<= 0.040 %	<= 0.040 %	
Silicon, Si	<= 1.0 %	<= 1.0 %	
Sulfur, S	<= 0.030 %	<= 0.030 %	



Descriptive Properties	Value	Comments
Powder Flow	30 sec/50 g	

## Contact Songhan Plastic Technology Co.,Ltd.

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