



LET'S MANUFACTURE TOMORROW



**ARNITE®
T AM1210 (P)**

ARNITE® T AM1210 (P)

Arnite® T AM1210 (P) is the first-ever PBT powder commercially available for selective laser sintering. The material is the ideal solution for small series production via additive manufacturing in industrial applications such as automotive electronics.

- **Well-known material with dielectric properties**
- **PBT powder for selective laser sintering**

Arnite® T AM1210 (P) is the first material from DSM's powder platform, offering customers a widely-known material in the industrial sector which can now be considered for small series production of end use parts.

As 3D printing evolves from prototyping to industrial manufacturing, customers need materials such as Arnite® T AM1210 (P) to meet their stringent demands. Current solutions do not meet application requirements for industrial applications, such as automotive electronics or applications that need to perform under high temperatures. Arnite® T AM1210 (P) has the same dielectric properties as material used in injection molding processes, making it a material engineers are familiar with and prepared to use.

Developed for a wide sinter window, the powder is extremely easy to print. Additionally, Arnite® T AM1210 (P) is environmentally friendly with a high

reuse rate and is recyclable to the extent that the material can be brought back to the powder bed process.

Key Benefits

- A well-known material that can be adopted quickly
- Excellent dielectric properties
- Extremely easy to print
- Improved dimensional stability due to lower moisture uptake
- Less waste due to >60% reuse rate
- Recyclable: non-reusable material can be brought back to the powder bed process

Applications

- Connectors
- Automotive Electronics
- Electrical
- Lighting



ARNITE®

T AM1210 (P)

Provisional Technical Data

Mechanical properties	Value	Unit	Test Method
Tensile modulus XY	2600	MPa	ISO 527-1/-2
Tensile modulus Z	2600	MPa	ISO 527-1/-2
Tensile stress at break XY	47	MPa	ISO 527-1/-2
Tensile stress at break Z	30	MPa	ISO 527-1/-2
Strain at break XY	4	%	ISO 527-1/-2
Strain at break Z	1.2	%	ISO 527-1/-2

Thermal properties	Value	Unit	Test Method
Melting temperature (10°C/min)	225	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa) ¹	55	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa) ¹	165	°C	ISO 75-1/-2
Coeff. of linear therm. expansion (parallel) ¹	tbd	E-4/°C	ISO 11359-1/-2
Coeff. of linear therm. expansion (normal) ¹	tbd	E-4/°C	ISO 11359-1/-2

Other properties	Value	Unit	Test Method
Water absorption	0.45	%	Sim. to ISO 62
Humidity absorption	0.18	%	Sim. to ISO 62
Density	1300	kg/m ³	ISO 1183

¹ based on IM bars

For more information and buying options, please visit
www.dsm.com/additive-manufacturing/

DSM – Bright Science. Brighter Living.™

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 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 consequences from the use of all such information. Arnite is a trademark of DSM.

Copyright © DSM 2020. All rights reserved. No part of the information may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of DSM. Doc 0034-02

