


Fiber-reinforced Graphene-ABS compound for injection moulding

AROS IM[®] ABS

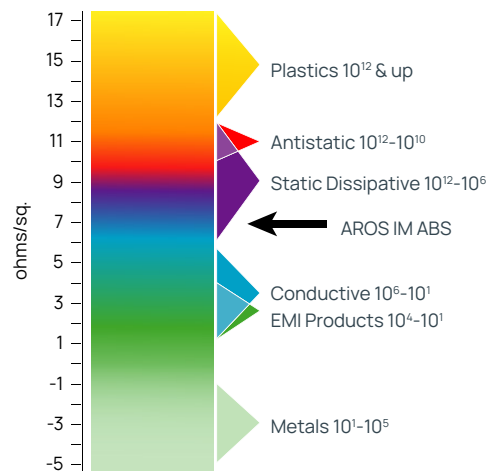
Fiber-reinforced Graphene-ABS compound for injection moulding with excellent process stability, high stiffness, and low heat distortion.

By being enhanced with Graphmatech's unique graphene formulation, AROS IM[®] ABS is a fire retardant and ESD hybrid composite based on ABS thermoplastics that are easy to process. ABS is an ideal material for structural applications, in which strength and stiffness are required. It may be used for interior applications such as appliance parts, transportation such as under the hood applications, and electronics.

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- ESD properties
 - Excellent mechanical properties
 - Good flow ability
 - Suitable for a variety of industries, such as electronics, aerospace and automotive applications.

PHYSICAL PROPERTIES - TYPICAL VALUES

Properties	Test method	Unit	Values
Heat Deflection Temperature (HDT)	ISO 75-2 Method A	°C	83
Heat Deflection Temperature (HDT)	ISO 75-2 Method B	°C	89
Melt Flow Rate (MFR)	ISO 1133-2 – 220 °C /10kg	g/10 min	21,9
Melt Volume Rate (MVR)	ISO 1133-2 – 220 °C /10kg	cm ³ /10 min	19,7
E Modulus	ISO 527-2/1A	MPa	9020
Stress at break	ISO 527-2/1A	MPa	71,9
Strain at break	ISO 527-2/1A	MPa	1,3
Apparent surface resistivity	ASTM D257-14 at 1V	ohm.square	5,39 E+06
Apparent surface resistivity	ASTM D257-14 at 1V	ohm.cm	8,92 E+07
Dielectric constant	ASTM D150-18 Air gap method	pF	19,5



FORMS OF SUPPLY

Shape	Pellets 1.5 to 2 mm
Category	Formulation
Packaging	5 kg and 20kg aluminium sealed bag or upon request

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RECOMMENDED INJECTION MOLDING PARAMETERS

Pre-treatment	Unit	Values
Drying temperature	°C	80
Drying time	Hr	4
Barrel temperature		50
Hopper	°C	200
Zone 1	°C	220
Zone 2	°C	220
Zone 3	°C	225
Zone 4	°C	225
Zone 5/ nozzle	°C	230
Mold temperature		
Mold	°C	60-80

CONTACT GRAPHMATECH

Are you curious to learn more about AROS IM ABS or a possible collaboration?

Contact our team at sales@graphmatech.com or visit our website Graphmatech.com

DISCLAIMER

The typical values presented in this data sheet are intended for quality control purposes. Actual values may vary with processing conditions. End-use performance of parts depends not only on materials but also on part design, environmental conditions, processing conditions, etc. Each user is responsible for determining the safety, lawfulness, technical suitability, and disposal/recycling practices of Graphmatech materials for the intended application. Graphmatech makes no warranty of any kind unless announced separately, to the fitness for any use or application. Graphmatech shall not be made liable for any damage, injury, or loss induced from the use of Graphmatech materials in any application.