

ANALYZE WITH POLYMER DIAGNOSTICS, INC. (PDI)

Are you designing new products or improving existing ones?

Trying to qualify materials?

Attempting to troubleshoot processing or performance problems?

Turn to the experts!

GEON's premier testing and analytical services team can accelerate time to market. Polymer Diagnostics, Inc. can support you from the design phase all the way through production with expert services:

- Analytical chemistry
- Rheology
- Physical testing
- Fire science
- Weathering

We can help you diagnose failure mechanisms, conduct product de-formulation, qualify materials and strive for product safety. Our team also provides legally directed technical assistance and other highly technical evidentiary laboratory support.

PDI is accredited under ISO 17025 through A2LA and participates in the UL Client Test Data program.

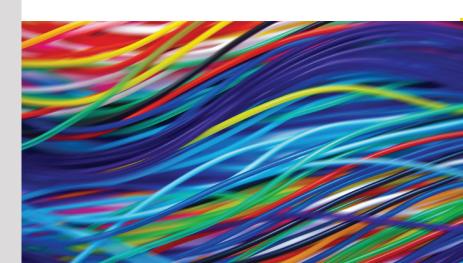
For a consultation, please call 1-800-438-2335.

FEATURES OF GEON VINYL, VINYL ALLOY, AND PLASTICIZER PRODUCTS

Our GEON product line offers superior performance to meet tougher demands on wire and cable.

- Inherent flame retardance
- Resistance to abrasion, impact, chemicals and corrosion
- Weatherability, including ozone resistance and UV resistance, with products that meet UL 720 requirements for sunlight exposure
- Ability to withstand harsh environments, including low-temperature performance down to -50°C, with good color retention and impact retention
- Noise and vibration damping
- Excellent colorability
- High transparency
- Superior processability, including high-flow materials and products for high-speed extrusion
- Compliance with low acid gas requirements under CSA regulations

Our portfolio offers a wide range of linear phthalate and trimellitate plasticizers, custom plasticizers and bio-based reFlex[™] plasticizers.





1-800-GET-GEON SALES@GEON.COM

Copyright © 2021, GEON Performance Solutions. GEON Performance Solutions makes no representations, guarantees, or warranties of any kind with respect to the information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifi cations. Processing conditions can cause material properties to shift form the values stated in the information. GEON makes no warranties or guarantees respecting suitability of either GEON's products or the information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the information and/or use or handling of any product. GEON MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the information or products reflected by the information. This literature shall NOT operate as permission, recommendation, or inducement to practice any patented invention without performation without performance.

GEON® CONNECTED SOLUTIONS



POWERING UP WIRE & CABLE FOR A CONNECTED WORLD

Two important trends are affecting the wire and cable industry: the global proliferation of information technology and the fundamental changes in the way power is generated and used. These trends are driving the industry to explore new designs and materials.

Whether it's the popularity of social media, the rise of health monitoring technology or the fast-growing IoT (Internet of Things) that allows consumers to control their information and energy use, it's clear we live in a highly interconnected world.

Computing devices and smart objects are using larger amounts of data more rapidly than ever before. As a result, network bandwidth is expanding, transmission rates are accelerating and power consumption is skyrocketing.

Meanwhile, more people around the world are using information technology, and they expect fast access and performance. For example, hospitals and retailers use this data to provide a more personalized experience, while industrial companies use smart technology to increase efficiency and productivity.

At the same time, smart grids, microgeneration and flexible energy are changing the way we generate and use power.

Today's wire and cable interconnects need to deliver expanded capabilities with high efficiency, while complying with stringent regulations. That means greater pressure on processors and manufacturers to deliver advanced wire and cable solutions.

Where can you connect to the exceptional materials and expertise you need to solve this challenge?

GEON[®] CAPABILITIES FOR WIRE & CABLE

GEON helps you meet current and future requirements with our broad portfolio of GEON Performance Materials for wire and cable, supported by regulatory assistance, testing and analytical services, and processing expertise.

Whether you need extrusion products for insulation or jacketing, plasticizers for compounding, or injection molding products for sensors, cell tower antennas or enclosures, we have the materials, services and nowledge you need to meet your goals. Smart grids, microgeneration and flexible energy are changing the way we generate and use power.



MATERIAL OPTIONS

- Flexible and rigid formulations
- Custom formulations
- Specialized colors
- Transparent products

- Chemistries for harsh environments
- Anti-counterfeit chemistries
- Non-phthalate and non-lead chemistries
- Bio-based solutions

For consistently high quality, GEON[®] vinyl and vinyl alloy products are manufactured in ISO 9001 certified facilities.

GLOBAL SERVICES

When you work with GEON, you have access to a world-class, global formulator that offers a full breadth of polymer solutions, including vinyl, specialty engineered polymers, colorants and additives.

In addition to a complete line of polymer solutions, we deliver:

Regulatory assistance

- Many of our materials are compliant with the European Union's Restriction of Hazardous Substances (RoHS) and Registration, Evaluation, Authorization and Restriction of Chemicals (REACH) regulations.
- We offer materials listed with Underwriter Laboratories (UL) and the Chemicals Safety Audit (CSA).
- We can help you demonstrate support for Leadership in Energy and Environmental Design (LEED) and Green Globes environmental certifications by providing Environmental Product Declarations and Health Product Declarations.
- Our products are backed by our No Surprises Pledge[™] (see page 9) attesting to compliance with global regulations, and quality and safety standards.

Testing and analytical services

Our wholly-owned subsidiary and independent contract laboratory, Polymer Diagnostics, Inc. (PDI), provides technical expertise and testing and analytical capabilities (see page 3).

Design and processing support

GEON services range from rigid molding design and mold flow analysis, to processing guides and troubleshooting, to product lifecycle management. Choose from on-site or phone-based technical consultations with our global team.

COLOR CAPABILITIES

Add color to your cables without impacting performance. Our OnColor™ pre-formulated colorants or color masterbatches are available in a wide palette. They are designed to Munsell's National Electrical Manufacturer's Association (NEMA) standards with performance exceeding J1128 and ISO 6722 requirements for demanding automotive applications. These products also meet many standard wire and cable specifications, including RAL color matching, the International Electrotechnical Commission (IEC) standards, the British Standard (BS) and the Association Française de Normalisation (AFNOR) Certification.

In addition to our stock color or masterbatch formulations, GEON can create a custom color concentrate or masterbatch that meets your specific needs, including temperature, aging, and shrinkage requirements.

> GEON can create a custom color concentrate or masterbatch that meets your specific needs, including temperature, aging, and shrinkage requirements.