

DISPERSIONS IN HEALTHCARE

The healthcare industry is experiencing continual change driven by technological advancements, evolving patient needs, and increasing regulatory demands. Medical devices and equipment are at the forefront of this change, with innovations in diagnostic tools, surgical systems, and wearable health monitors reshaping patient care. These advancements aim to improve accuracy, efficiency, and accessibility of healthcare services. However, they can also introduce new challenges in developing the high-performing and cost-effective products needed to help doctors and medical practitioners deliver treatments that will improve patient outcomes.

Avient offers a broad range of colorant and additive dispersions for use in healthcare applications that can improve process efficiency and enhance product performance. These dispersions are available for silicone, vinyl, and other thermoset applications and can be customized to meet specific needs. From silicone colorants pre-tested for USP Class VI compliance to additives that effectively streamline production, we have dispersion technologies that can address your challenges.

AESTHETIC APPEAL AND VERSATILITY

Custom colors, special effects, functional additives

CONSISTENT QUALITY

Lot-to-lot consistency, tight color tolerances, reproducible dispersions

DESIGN AND PROCESSING

Application development support and technical service

REGULATORY COMPLIANCE

Product stewardship expertise and regulatory support

SURFACE PROTECTION

Lightfastness, chemical resistance, durability

ENHANCED PERFORMANCE

Electrical conductivity, mechanical property retention



TECHNOLOGY	DESCRIPTION	TYPICAL APPLICATIONS
Silicone Colorant Dispersions	Biocompatible, conformable silicone rubber colorants that deliver lightfastness and aesthetic appeal	<ul style="list-style-type: none"> 3D medical silicone printing Anatomical models and surgical guides External prosthetics and orthotics Wearable medical devices Medical ventilation/respiratory masks Dental and medical tools and equipment Catheters and tubing Medical adhesives
Silicone Additive Dispersions	Silicone additive solutions formulated to provide chemical resistance, durability, and enhanced physical properties	<ul style="list-style-type: none"> Medical devices and tools Vibration and shock control for medical equipment Drug delivery devices
Rubber Colorant Dispersions	Durable rubber colorants formulated for optimal dispersion and lot-to-lot consistency to promote ease of handling	<ul style="list-style-type: none"> Medical packaging Foam enclosures/support for medical tools and equipment Medical and surgical devices Physical therapy tools
Urethane Colorant Dispersions	Versatile urethane colorants that streamline production and enhance quality	<ul style="list-style-type: none"> Medical adhesives Healthcare facility floor coatings
Epoxy Colorant Dispersions	Long-lasting, hygienic epoxy colorants that provide high-cost efficiency, stability, and customization opportunities	<ul style="list-style-type: none"> Catheters and tubing Medical equipment
Vinyl Colorant Dispersions	Vinyl colorants developed for applications where dispersion, uniformity, compatibility, and cleanliness are essential	<ul style="list-style-type: none"> Medical gloves Wound care
Aqueous Additive Formulations	Functional additives stabilized, suspended, and dispersed in water that shorten development cycles, streamline operations, and can be customized to meet specific requirements	<ul style="list-style-type: none"> Wearable medical devices Neurostimulation electrode pads Medical tools and equipment
Electrically Conductive Additives for Silicone	Innovative silicone additives to provide high conductivity and lower filler loadings	<ul style="list-style-type: none"> Medical packaging 3D medical silicone printing Anatomical models and surgical guides External prosthetics and orthotics Medical ventilation/respiratory masks Medical devices
Laser Marking Additives for Silicone	Dispersions containing laser absorbers and color formers that eliminate the need for secondary etching while promoting chemical resistance, mechanical property retention, and production efficiency	<ul style="list-style-type: none"> Catheters and tubing Dental tools and equipment Medical adhesives Medical devices, tools, and equipment
Surface Modification Additives for Silicone	Non-oil based silicone additives that reduce tackiness and enhance smoothness of the cured compound	<ul style="list-style-type: none"> Medical tools and equipment Wearable medical devices Medical packaging
Self-Bonding Silicone	Silicone compounds able to bond to various substrates without prime coating	

This listing represents standard Avient dispersion technologies and addresses common healthcare applications, but we can work with you to explore additional options. Bring us your challenges and let our material experts help you find the right solution for your specific needs.

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Avient Dispersions
products



Avient is a premier provider of specialized and sustainable material solutions and services that transform customer challenges into opportunities. Our dispersions team offers world-class custom color matching and specialized performance additives to optimize your design combined with regulatory coordination and support to help mitigate risk.

Ready to learn more? We're here to help.

Bring us your challenges. We'll provide step-by-step guidance and expertise to get you the solution you need.

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