Advanced Materials

Healthcare Applications

alphagary

orbia | Polymer Solutions

- Our facilities in Mexico are designed for the production of PVC compounds and plasticizers for a wide variety of applications, with onsite R&D capabilities to aid in specialized material design.
- Enhanced performance features such as UV resistance, chemical resistance and fungus resistance available
- REACH, RoHS and Prop 65 compliant grades.
- Advancing Life Around the World in Mexico! We make our processes more efficient and sustainable every year such as in our Altamira facility where we increased our production levels and reduced CO_2 emissions by 1,000 TON CO_2 eq/year.

Our compounds enable life-saving systems

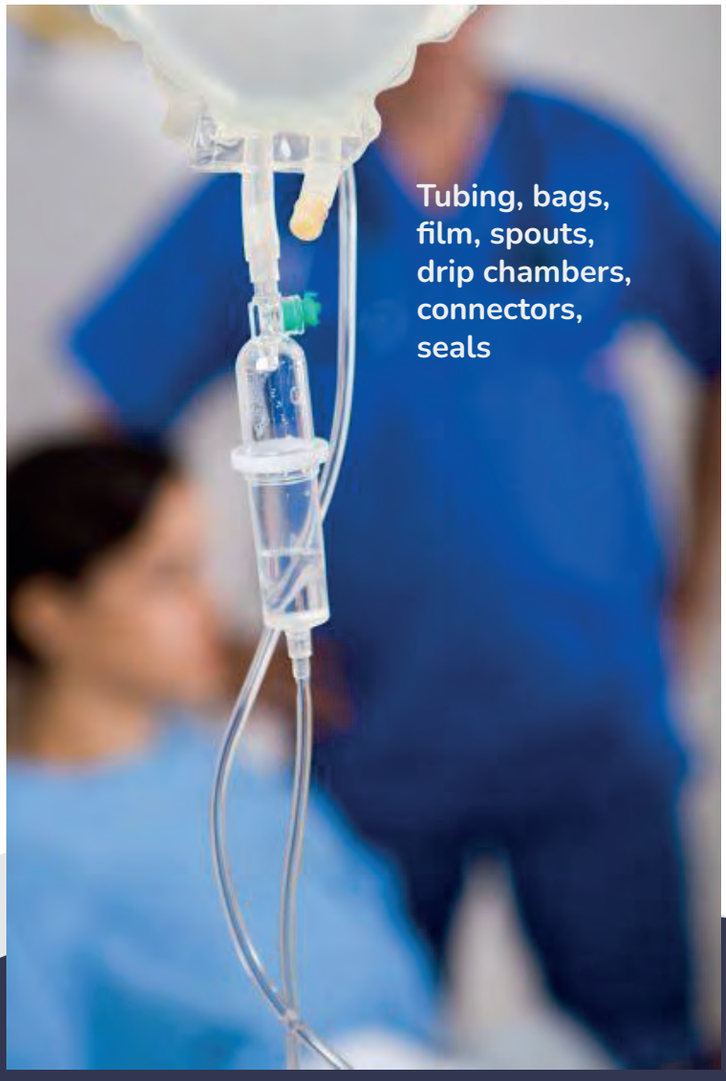
These are materials that directly affect us when we need them the most. Our customers rely on the materials we provide to be dependable and they rely on us to be trustworthy with formulation integrity, and accessible and knowledgeable when it comes to regulatory support. For decades we have been unwavering in our dedication to this marketplace, offering formulations with FDA-sanctioned ingredients that carry Class VI biocompatibility approval.

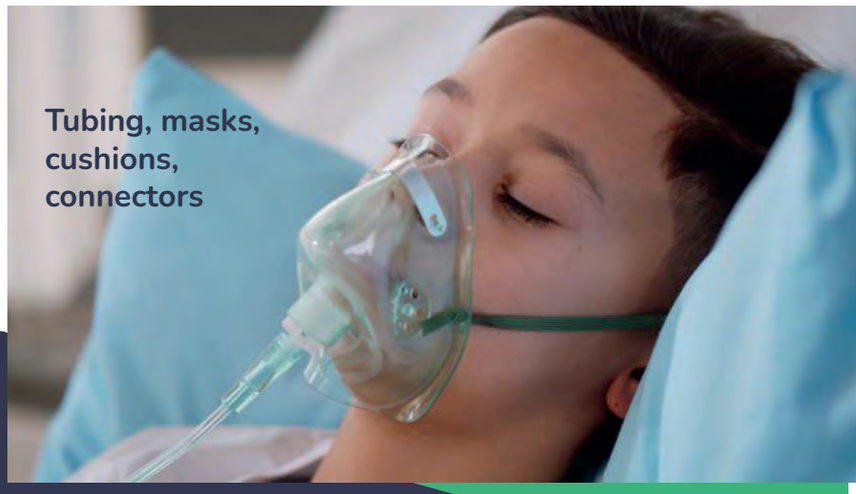
- Formulation integrity
- Consistency with every blend
- Regulatory Expertise
- Dedicated R&D team
- REACH, RoHS and Prop 65 reporting transparency
- Broad polymer selection

Typical applications

We've designed a robust material portfolio, giving multiple polymer options (PVC, TPE, TPU) to engineers as you build healthcare devices. Compounds are designed to optimize performance and are manufactured to provide the consistency that is so critical for a wide variety of healthcare applications.

- REACH, RoHS-3, Prop 65 compliant grades (dedicated regulatory expertise)
- Formulations with DOP/DEHP, DOTP or phthalate-free; bio-based options (specialized R&D team)
- USP Class VI Biocompatibility test results available
- Compounds formulated for typical sterilization methods including ETO, Autoclave, Gamma and E-Beam
- Crystal-clear formulations with blue-tint levels available (water clear to opaque)





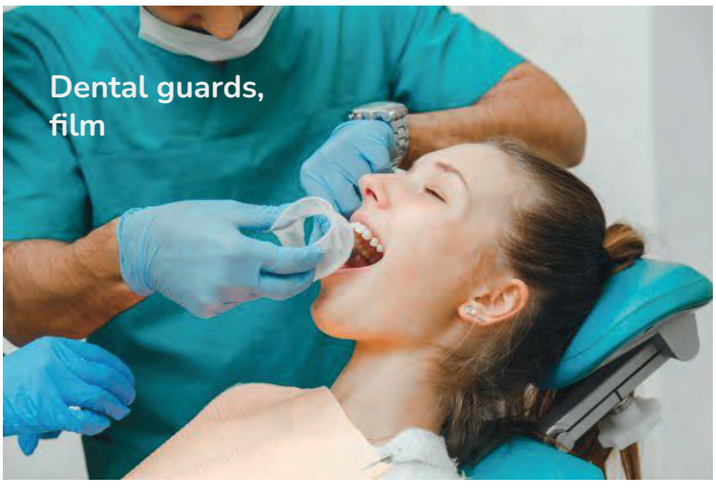
Materials formulated for Healthcare Devices

Alphagary has designed and manufactured flexible POLIVISOL® PVC compounds for healthcare device manufacturers since the 1960s. Based on customer requirements, the VYTHENE® TPU series was introduced, targeted towards applications needing improved resiliency. In the mid-1980s, we introduced SUPERKLEEN, a series of PVC compounds formulated with bio-based plasticizers

In the 1990s, Alphagary introduced EVOPRENE® TPE compounds to the US marketplace. In 2021, we carved out an EVOPRENE R series dedicated strictly to medical, pharma, food contact, toy and other related applications

Formulated for extrusion and molding applications with food grade ingredients as per standards from US FDA 21 CFR, EU 10/2011, 1935/2004

POLIVISOL®	PVC compounds	Flexible applications
SUPERKLEEN™	PVC compounds, bio-based	Flexible applications
VYTHENE®	TPU compounds	Flexible applications
EVOPRENE® R EVOPRENE® R ECO	TPE compounds TPE compounds, bio-based	Flexible applications



Healthcare Compound Developments

Visit our website to learn more
Follow us on LinkedIn to receive notifications about new developments

EVOPRENE R 99 series formulated for medical tubing

Our newest EVOPRENE TPE compound development has addressed the requirements of medical device and beverage tubing with its flexibility, clarity and good kink resistance

EVOPRENE TPE compounds for healthcare applications

The EVOPRENE R 99 series of compounds is formulated with food-grade ingredients for healthcare and pharma applications that require biocompatibility and cytotoxicity testing. Newest developments include formulating compounds for tubing with good clarity and improved kink resistance.

POLIVISOL PVC compounds formulated without reportable phthalates

As reporting requirements evolve, we ensure customers are kept up-to-date and given options that are formulated with non-restricted phthalate plasticizers. See our latest sell sheet PHTHALATE REPORTING REQUIREMENTS

EVOPRENE TPE compounds for baby & toddler products

The EVOPRENE R 90 series of compounds is ideal for a variety of baby and toddler applications that involve skin contact such as feeder spouts, eating utensils and pacifies. This series of EVOPRENE is formulated with food-grade ingredients.

Compound	Hardness (shore)	Specific Gravity	Sterilization	Biocompatibilty	Characteristics
Polivisol 2662	A 62	1.20	ETO		Medical grade Flexible PVC Compound for manufacturing injection of oxygen mask and connector
Polivisol 2667	A 67	1.22	ETO		Medical grade Flexible PVC Compound design for extrusion sheet manufacturing for urine collection bag
Polivisol 2669	A 70	1.22	ETO	USP Class VI	Medical grade Flexible PVC Compound used for extrusion of Hemodialysis hose.
Polivisol 2677	A 77	1.24	ETO	USP Class VI	Medical grade Flexible PVC Compound used for extrusion of hose and serum tube
Polivisol 2880	A 80	1.25	ETO		Medical grade Flexible PVC Compound designed for manufacturing injection molding of drip chambers
Polivisol 2760	A 60	1.18	Gamma	USP Class VI	Medical grade Flexible PVC Compound used for extrusion of hose or tubing for the hemodialysis pup segment
Polivisol 2765	A 66	1.20	Gamma	USP Class VI	Medical grade Flexible PVC Compound used for extrusion of hemodialysis hose.
Polivisol 2769	A 70	1.22	Gamma	USP Class VI	Medical grade Flexible PVC Compound used for extrusion of hemodialysis hose.
Polivisol 2774	A 75	1.23	Gamma	USP Class VI	Medical grade Flexible PVC Compound used for extrusion of hemodialysis hose.

Phthalate Free

Compound	Hardness (shore)	Specific Gravity	Sterilization	Biocompatibilty	Characteristics
Polivisol 7001-50	A 43	1.14	ETO	USP Class VI	Medical grade Flexible PVC Compound used for extrusion of hose solution or oxygen and devices injection.
Polivisol 7001-61	A 54	1.17	ETO	USP Class VI	Medical grade Flexible PVC Compound used for extrusion of hose for solution or oxygen and devices injection.
Polivisol 7001-77	A 79	1.22	ETO	USP Class VI	Medical grade Flexible PVC Compound designed for extrusion of hose and serum tubing.
Polivisol 7001-80	A 74	1.21	ETO	USP Class VI	Medical grade Flexible PVC Compound used for extrusion of hose for solution or oxygen and injection of oxygen masks.

Since the 1960s, Alphagary has earned its reputation for providing innovative, functional and durable solutions to a broad marketplace, often custom formulating a material to meet end-user and market-**specific requirements. We work with an extensive range of** polymers, giving our global customer base a variety of features to choose from as they create products that we rely upon for safety, health and comfort in our everyday lives.

We are passionate about safety, dedicated to quality, and committed to harnessing the power of material science and innovation to serve customer needs, address world challenges and provide sustainable solutions.

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Alphagary is an Orbia business
www.orbia.com

GENERAL PURPOSE | SPECIALTY PLASTICIZERS | PHTHALATE - FREE

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