Together we can take good ideas and turn them into great ones.
Innovative foam expansion technologies that can help create breakthrough products.

As a long-standing industry leader and global scientific company with critical resources in every region, DuPont is a partner you can count on to deliver innovative, reliable foam expansion technologies.

DuPont™ Formacel® products deliver safe, reliable performance—so you can design higher quality, more energy-efficient products across a wide range of thermoset and thermoplastic applications.

**Collaborative teams focused on your needs**

With our extensive expertise in product design and manufacturing, we understand the demands of balancing physical and mechanical properties with economics, safety and environmental goals. That’s why we’re committed to working with you to identify the right product for your needs.

Formacel® HFC and HCFC products can be blended with each other, as well as with co-expansion agents, to deliver the right combination of properties. Our technical experts can help you determine the best solution for your specific applications.

**Innovation you can count on**

With more than 75 years of proven leadership in fluorochemical science and technology, DuPont is committed to the foam industry. We continue to invest in the development of next generation foam expansion technologies that will meet the performance needs of tomorrow’s innovative foam products.

**World-class manufacturing**

With global manufacturing facilities, including the world’s first and largest manufacturing complex for CFC alternatives, DuPont can deliver the supply capacity needed to help keep your production lines running smoothly.

In addition, our rigorous quality control and inspection processes help to ensure that you get superior quality ingredients—delivered on time.

**Committed to sustainability**

Since the phaseout of CFCs, DuPont has been a world leader in introducing HCFC and HFC alternatives. We continue to work with system suppliers and foam manufacturers to develop new alternative foam expansion agents.

Our global resources are engaged in an active research program to develop the next generation of high-performance, sustainable alternatives. So whether you need solutions to better balance environmental and production demands, or improve product performance, we can help. Working together, we can transform your innovative ideas into products that make a difference.

With product design experts in every region, we’re ready to work on any project you have in mind.

At DuPont, we constantly push the limits of science to deliver innovative solutions for greater energy efficiency.

Our world-class manufacturing includes the world’s largest HFC and HCFC processing plant in Corpus Christi, Texas.

DuPont is putting science to work in ways that contribute to improved product efficiency.
In the construction industry, DuPont™ Formacel® foam expansion agents are ideal for both polyurethane foam systems and extruded polystyrene board. Formacel® products can help you create more uniform components, which can result in better, tighter insulation, higher energy efficiency and reduced energy consumption. In addition, Formacel® foam expansion agents are non-ozone depleting and are not considered to be volatile organic compounds (VOCs).

Commercial construction

DuPont™ Formacel® foam expansion agents are an ideal choice for commercial construction applications including block pipe and roof insulation, roof adhesives, doors, sheathing, foundations and sealants for windows and doors. They are well-suited for applications exposed to compressive strength loads, delivering enhanced insulating properties to increase energy efficiency and superior moisture resistance for increased structure durability.

DuPont™ Formacel® Z-2 (HFC-152a)
DuPont™ Formacel® Z-4 (HFC-134a)
DuPont™ Formacel® S (HCFC-22)*
DuPont HCFC-141b*

Residential construction

With excellent performance and processing characteristics, DuPont™ Formacel® foam expansion agents are ideal for the high-volume production of residential building insulation. In addition, Formacel® foam expansion agents are used to create polyurethane molding and decorative wood alternatives that deliver uniform expansion and good adhesion to facades and substrates.

DuPont™ Formacel® Z-2 (HFC-152a)
DuPont™ Formacel® Z-4 (HFC-134a)
DuPont™ Formacel® S (HCFC-22)*
DuPont HCFC-141b*

*Check formacel.dupont.com for availability in your region.
Cold storage applications

DuPont™ Formacel® foam expansion agents provide better insulation at lower temperatures, helping you meet one of the biggest challenges in today’s cold storage industry—achieving greater insulation performance and energy efficiency at the low temperatures required to keep products at a safe temperature for consumer use.

Commercial refrigeration

From refrigeration warehouses to supermarket display cases, DuPont™ Formacel® foam expansion agents help you deliver higher energy efficiency and better insulation performance for today’s critical refrigeration applications—so your customers can realize greater energy efficiency and lower operating costs.

DuPont™ Formacel® Z-4 (HFC-134a)
DuPont™ Formacel® S (HCFC-22)*
DuPont HCFC-141b*

Household appliances

Because of their reliable, consistent post-expansion performance providing dimensionally stable insulating foams, DuPont™ Formacel® foam expansion agents can help you design household appliances with even greater energy efficiency—a key benefit for today’s cost-conscious and environmentally aware consumers.

DuPont™ Formacel® Z-4 (HFC-134a)
DuPont™ Formacel® S (HCFC-22)*
DuPont HCFC-141b*

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Packaging applications

In the food packaging industry, producing safe, environmentally acceptable containers is not only important for manufacturers—it’s becoming increasingly important to consumers as well. DuPont® Formacel® Z-2 (HFC-152a) delivers an ideal combination of properties to help you achieve low bulk density for lower package weights, with zero ozone-depletion, low global-warming potential and no VOC emissions.

Food packaging
DuPont® Formacel® Z-2 (HFC-152a) has been approved by the U.S. Food and Drug Administration (U.S. FDA) for use in polystyrene foam for plates, cups, meat trays, egg cartons and fast food containers. It offers excellent solubility in polystyrene for low density, lighter weight packaging, good post-expansion and zero ozone-depletion-potential (ODP).

Insulated cups
DuPont® Formacel® Z-2 (HFC-152a) offers an easy replacement for HCFC-22 in production of speciality foam cups. Good post-expansion and improved surface characteristics make it easy to create innovative, high-quality and cost-efficient designs.
Specialty applications

DuPont® Formacel® foam expansion agents can be used across a variety of specialty consumer, industrial and transportation applications including insulated transport containers, shoe soles, art board and decorative display items (such as artificial fruit). The expansion characteristics of Formacel® foam expansion agents provide the uniformity and consistency necessary for producing attractive and lightweight specialty products.

Transportation

In marine holds, DuPont® Formacel® foam expansion agents deliver superior dimensional stability and structural integrity to provide buoyancy in marine applications. The reliable, consistent performance also allows for tighter, more insulating refrigerated truck panels that can help keep food safer and fresher during transport.

**DuPont® Formacel® Z-4 (HFC-134a)**
**DuPont® Formacel® S (HCFC-22)**
**DuPont HCFC-141b**

Specialty consumer products

With consistent expansion properties DuPont® Formacel® makes it easy to create art board and other specialty materials such as shoe soles, graphic arts supplies and decorative display items. The non-flammability characteristics of DuPont® Formacel® foam expansion agents make them an excellent choice for consumer products; and their reliable, consistent expansion performance helps ensure a uniform appearance.

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