

## Geon™ HC Compounds for Healthcare

LIFE Corporation, a medical device manufacturer, solves odor problem in CPR masks by changing to odor-free Geon™ HC flexible vinyl compound from PolyOne

### Situation

Based in Milwaukee, Wisconsin, LIFE Corporation is a U.S. Food and Drug Administration (FDA) registered manufacturer of medical devices specializing in CPR administration equipment and portable emergency oxygen. Although LIFE Corporation had been manufacturing CPR masks for 25 years, when the company expanded into the Japanese market, a problem arose. Clear, flexible vinyl is typically used to make the CPR mask component that fits over the nose and mouth of the victim to allow mouth-to-mask resuscitation without direct human contact, thus avoiding disease transmission. However, LIFE Corporation discovered that the Japanese are exceptionally sensitive to odors and found the smell of the vinyl that it was using at the time to be offensive.

To be successful in the Japanese market, LIFE Corporation sought a vinyl product offering no or low odor combined with high clarity and gloss, which would also meet regulatory approval for medical applications.

### The PolyOne Difference

After unsuccessful experimentation with many competitive materials, LIFE Corporation found PolyOne and trialed Geon™ HC XV1197, which features high gloss, flexibility and excellent clarity. According to LIFE's president, John Kirchgeorg, "We tried many different suppliers over the years and we finally found PolyOne's Geon HC vinyl, which produces consistent clarity and flexibility without any detectable effluent odor, a necessity for our LIFE® CPR masks used in all our LIFE® OxygenPac emergency oxygen products."

PolyOne's Geon HC vinyl-based compounds for medical applications offer a number of important features, beginning with no discernable odor. Geon HC XV1197 uses all FDA-compliant raw materials and passes United States Pharmacopeia (USP) Class VI testing, giving medical device manufacturers increased confidence that their end product will pass all applicable FDA qualification requirements. The Geon material is biocompatible, which ensures the safety of both the victim and the first responder. In addition, the Geon compound is sterilizable using ethylene oxide (EtO).

Geon HC XV1197 also enhances the performance of the masks: high clarity enables first responders to observe the victim's condition (breathing, choking, etc.) and ensures correct positioning, while flexibility creates a firm seal around the victim's face and forms a barrier protecting the first responder from direct contact.



## Delivering a Value-Added Solution

Geon HC XV1197, with its odor-free formulation, made a critical difference for LIFE Corporation by resolving a long-standing problem that was preventing the company from achieving its business goals.

- **No discernable odor = broader market opportunities:** By enabling LIFE Corporation to offer a product that meets the unique sensory requirements of the Japanese market, Geon HC helped clear the way for successful marketing of its CPR masks in Japan, and on a global basis. With the PolyOne material, LIFE Corporation is able to sell to even the most discriminating users.
- **Meeting customer needs = enhanced corporate reputation:** By eliminating discernable odor from its product, LIFE Corporation demonstrated its responsiveness to customer needs. The company showed it was willing to take major strides to find an appropriate solution.
- **High clarity = improved emergency response:** Transparent Geon HC compound enables first responders to observe the victim's condition (breathing, choking, etc.) and ensure correct positioning of the mask.
- **Effective seal and barrier performance = greater safety:** The flexibility of the Geon HC material creates a firm seal around the victim's face and forms a barrier protecting the first responder from direct human contact.
- **Sterilizability = cost-effectiveness of the product:** The PolyOne material can be sterilized using ethylene oxide (EtO), allowing multiple uses of the CPR mask and lowering the per-use cost of the device.

The Geon compound enabled LIFE Corporation to meet all of its stringent performance requirements pertaining to clarity, flexibility and regulatory compliance. The breadth of PolyOne's offerings for the medical device industry made it easy to find a material with the precise properties for this unique application.

Kirchgeorg concluded, "The unique characteristics of PolyOne's Geon HC vinyl allowed LIFE Corporation to market our products worldwide and maintain our reputation for preferred, superior products."

® LIFE OxygenPac emergency oxygen products are a registered trademark of LIFE Corporation.

**Product choices often vary by region due to differences in regulatory and agency requirements, availability and other key factors. Please contact your nearest sales office for assistance in choosing the right solution for your locale.**

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The logo for PolyOne, featuring the word "PolyOne" in a stylized font. "Poly" is in black and "One" is in red. A red underline is positioned beneath the "One".

*Beyond Polymers.*

*Better Business Solutions.™*

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