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Does your handheld landscaping equipment fail in the winter?

Rigid fuel tubing may be the culprit

By Lily Lei

It's winter and many professional landscapers and handy consumers are planning to clean lawns and yards before the coming snow covers the fallen leaves and knocks down the broken tree branch hanging by a thread after a summer storm. They pick up a chainsaw or blower and are ready to fire them up to get these tasks accomplished but halfway through, the engine starts to choke and may even stop running. Frustrated users begin to wonder what's going on. Here's what's happening:

During normal use, combustion-powered, handheld tools such as chainsaws and blowers are oriented at different angles to meet the task-at-hand. As this occurs, the fuel line has to be flexible enough to keep the fuel filter in consistent contact with fuel. Without adequate contact, fuel transfer will be inconsistent. This can result in poor operation or stalling of the engine, particularly at low fuel levels.

Generally speaking, plastic or rubber fuel lines are well suited to meet this flexibility requirement. However, this can become a challenge at frigid temperatures as the tubing may become too rigid. Cold temperatures can also make the tubing more susceptible to mechanical shock and reduce its ability to maintain a seal. Therefore, proper material selection and tubing construction for all outdoor power equipment manufacturers are critical in order to achieve the balance of properties required to maintain durability and fuel transfer at low temperatures.

Saint-Gobain's [Tygon® LP-1200](#) fuel tubing for handheld outdoor power equipment offers excellent flexibility. The tubing's highly-engineered formulation and construction ensures sufficient fuel pick up even in cold temperatures and harsh winters when compared to other rubber or fluoroelastomer fuel hoses in the market. LP-1200 meets the low evaporation standards of the US Environmental Protection Agency (EPA) and California Air Resource Board (CARB) while providing great chemical compatibility including ethanol blended fuels. Read more about Tygon® LP-1200's ability to build your brand equity by warranting the quality and performance of your products while keeping your customers happy and nurture brand trust [here](#).

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About Saint-Gobain

[Saint-Gobain](#) designs, manufactures and distributes materials and solutions which are key ingredients in the wellbeing of each of us and the future of all. They can be found everywhere in our living places and our daily life: in buildings, transportation, infrastructure and in many industrial applications. They provide comfort, performance and safety while addressing the challenges of sustainable construction, resource efficiency and climate change. With 2016 sales of more than \$43 billion, Saint-Gobain operates in 67 countries and has more than 172,000 employees.

[Saint-Gobain's Performance Plastics](#) business is headquartered in Solon, Ohio, and employs 6,000 people in 22 countries. It is a world leader in high-performance plastics, including flexible tubing, seals, coated fabrics, foams, window film, barrier/release films, tapes, medical components, fluid handling systems and bearings.

Saint-Gobain's Process Systems business unit helps customers achieve safety, performance and brand assurance through a broad range of capabilities that rely on superior engineering and customer support. Our product applications include those in the food, beverage, habitat, aerospace, chemical and electronics sectors. We've helped customers in all of these industries achieve goals in innovation, efficiency, sustainability and product integrity through customized solutions such as flexible tubing, gaskets, seals, hoses, fittings, pumps, valves and manifolds.

