+135-3858-6433 (GuangDong) +188-1699-6168 (ShangHai) +852-6957-5415 (HongKong)

SABIC Innovative Plastics™



Georg Fischer selects Cycolac* resins to help withstand high pressures in the cooling market

Cycolac ABS X399 resins provide a unique combination of excellent durability and good extrudability to help enable pipe systems to withstand extreme environments with an excellent life-span

Georg Fischer is a world leader in water distribution and industrial piping technology with products ranging from very small diameter pipe to extremely complex larger diameter pipe for refrigeration and cooling systems. Georg Fischer chose Cycolac X399 ABS resin to help it provide highly reliable piping products for various markets around the globe. One of its recent breakthrough technologies is the "COOL-FIT" product line. This product is a pre-insulated pipe system with a PE outer jacket and ABS insulated with high-density polyurethane foam.



SABIC Innovative Plastics and Georg Fischer demonstrate expertise in staying cool

"Cycolac X399 ABS resin provides us a reliable high performance resin that suits the demanding requirements of our highly technical markets", says Mark Bulmer, Global Market Segment Manager Food and Beverage / Cooling of Georg Fischer.

Headquartered in Schaffhausen, Switzerland, Georg Fischer is dedicated to designing, manufacturing and marketing piping systems for the safe and secure conveyance of liquids and gases. The COOL-FIT system from Georg Fischer is being used in a wide variety of cooling and refrigeration installations in markets around the world.

The high quality of Cycolac X399 and excellent technical support makes SABIC Innovative Plastics the supplier of choice for Georg Fischer.

Georg Fischer has extensively tested the Cycolac X399 resins to meet their requirements. Georg Fischer designs, manufactures and markets complete pipe systems ranging in diameter from 16mm to 400mm, with wall thicknesses up to

16mm. The ABS and COOL-FIT pipes offer excellent low temperature properties and an environmentally viable alternative for refrigeration systems that use Freon gases. Examples of typical areas of use for the COOL-FIT product line are in supermarkets, breweries and cold stores.

"Once installed, the reliability of the material used in the piping is key to ensuring the long life performance of the entire cooling system" states Mr. Bulmer. "These are the same systems which are bringing comfort and necessity to people's lives on a day-to-day basis".

The undeniable quality of Cycolac X399 resin provides good extrudability, very good resistance against high pressures and consistency during the lifetime of the application.

Other than in piping systems, Cycolac resins are used extensively in many applications including consumer appliances, sporting goods, telecommunications and marine components as well as in the medical and automotive industries.





+135-3858-6433 (GuangDong) +188-1699-6168 (ShangHai) +852-6957-5415 (HongKong)

Cycolac* / Georg Fischer

Cycolac X399 ABS resins are manufactured under stringent ISO 9001 procedures in SABIC Innovative Plastics' Grangemouth, Scotland plant. These resins feature fatigue-resistance, rigidity and durability, melt strength and low temperature ductility.

The incorporation of these characteristics as well as low moisture absorption, superior dimensional stability and consistent mechanical properties make Cycolac resin an excellent candidate for cooling manufactures.

THE MATERIALS, PRODUCTS AND SERVICES OF SABIC INNOVATIVE PLASTICS HOLDING BV, ITS SUBSIDIARIES AND AFFILIATES ("SELLER"), ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH CAN BE FOUND AT http://www.sabic-ip.com AND ARE AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION OR RECOMMENDATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SELLER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SELLER'S PRODUCTS, SERVICES OR RECOMMENDATIONS. EXCEPT AS PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user is responsible for making its own determination as to the suitability of Seller's products, services or recommendations for the user's particular use through appropriate end-use testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller's Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed by Seller. No statement by Seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of such product, service or design in a manner that infringes any patent or other intellectual property right.

SABIC Innovative Plastics is a trademark of SABIC Holding Europe BV * Cycolac is a trademark of SABIC Innovative Plastics IP BV © Copyright 2008 of SABIC Innovative Plastics IP BV. All rights reserved. October/2005



