



COLLOIDS

THE MAKERS OF MASTERBATCH

A MEMBER OF THE TOSAF GROUP

Masterbatch

for Pipes and Fittings



Products for Pipes and Fittings

Pipes and fittings – whether for use in pressure pipe for transporting gaseous fuels or potable water, plumbing, drainage or optical fiber and service conduits – represent a demanding application for plastics. We have developed products that are suitable for use with a range of materials, including HDPE, PA-12, PB, PP and ABS, and can also formulate custom-made masterbatches and compounds on demand.

In potable water and gas applications, our additives protect and stabilize pipes for long-term performance and integrity, protecting against risks such as environmental stress cracking (ESCR), slow crack growth, and over pressurising, to ensure that they last throughout, and beyond, the international 50-year guarantee requirement for Minimum Required Strength (MRS).

Our E-TEC® range of conductive compounds and concentrates provide required levels of electrical conductivity to make them suitable for use in the applications for the transportation of fuels and in ATEX environments.

Our range of PACE™ colour masterbatches and compounds, used as identifiers or for esthetics, offer UV resistance, mechanical stability and long-term integrity.

Because we understand the importance of production rates and costs, our solutions make for consistent processing of materials, with the convenience of choice and availability with technical support.

COLOUR ACCURACY

Colour accuracy to the RAL® standards is important for identification purpose. Combining the extensive expertise of our colourists with state-of-the-art spectrophotometers, we guarantee the most stringent tolerance demands operating within the industry.

SUPERIOR MECHANICAL PROPERTIES

Our compounds and masterbatches can be formulated to provide the optimal balance of mechanical properties, such as environmental stress cracking, resistance to rapid crack propagation and tensile and dynamic mechanical performance, regardless of the polymer being used, for the widest choice of materials suitable for your application.

CHEMICAL RESISTANCE

When pipes and fittings are used for applications involving the transportation of aggressive chemicals or environments, such as contaminated soils and high ozone levels, chemical degradation must be considered. Performance and long-term integrity depends on several factors, amongst them: environmental stress cracking resistance, effectiveness of antioxidation additives, stresses generated in the applications during installation and operation, and decay in yield stress with time. Leveraging our extensive knowledge of polymers and additives, we carefully select suitable antioxidant additives and materials to provide the chemical resistance required to enhance the long-term performance of pipe materials for use with chemicals or in chemical environments.

FR

Our Flame retardant masterbatches for polypropylene corrugated and smooth pipes comply with international standards of the pipe industry, whether they are electrical installation pipes, fluid-carrying piping or pipes for communication solutions. Our cost-effective solutions lead the market for flame retardants in the pipe industry.

WEATHER FASTNESS

Weather fastness and resistance to fading and degradation of the polymer by environmental factors helps to protect the longevity of piping. Our colourants have the highest Grayscale performance, for minimal fading over time.

LIGHT FASTNESS

Even pipes that are laid underground can be exposed to sunlight for long periods in the stockyard. Light fastness and anti-oxidation additives help prevent pipes and fittings from fading over time due to exposure to UV radiation. Our products are specifically selected to give a high level of colour permanence, as measured by the Blue Wool Scale (BWS).

BLACK

Our black masterbatch is formulated to deliver maximum long-term UV protection, and colour with mechanical stability. Careful selection of our colouring system and incorporation of functional additives provide improved processing, UV protection and stability, resistance to rapid crack propagation, short-term rupture strength and environmental stress cracking, while maximizing the material's long-term performance.

COLOUR

Colour masterbatches, whether yellow or orange for gas pipes, blue for water pipes, green for conduits or ANSI colours, are formulated to incorporate functional additives that enhance processing, UV resistance, resistance to rapid crack propagation, short term rupture strength and environmental stress cracking.

TERRACOTTA

Our terracotta masterbatch has been formulated to deliver long-term colour and mechanical stability.

WHITE

Our white masterbatch is formulated to deliver long-term colour and mechanical stability, by incorporating functional additives that enhance processing, UV resistance, resistance to rapid crack propagation, short term rupture strength and environmental stress cracking.



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Every effort has been made to provide accurate information in this leaflet. However, customers must satisfy themselves of the suitability of these masterbatches in their application. Colloids Limited does not offer or imply any responsibility in this respect.

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Ref: col240010416en

