

Hydrosize® U2023

BRAND FAMILY OVERVIEW Our Hydrosize® line of products includes sizing solutions designed for use in the manufacturing of glass fiber, carbon fiber and natural fiber, including both chopped and continuous formats of those fibers. These are in turn used to manufacture composite products and components.

USAGE An APE free, high strength sizing for glass and carbon fiber with excellent adhesion, providing good strand integrity and compatibility with most polyamide resins and polyester systems.

DESCRIPTION Nonionic polyurethane dispersion

PERFORMANCE ATTRIBUTES This product is used in many applications including the following:

Market	Properties Imparted
Fiber Sizing	<i>chopped strands, impact resistance, PA compatible, PET/PBT compatible, thermal stability</i>

PHYSICAL PROPERTIES The following properties are typical but should not be considered specifications:

Appearance:	Milky white liquid
Solids Type:	Polyurethane
Emulsifier Charge:	Anionic / Nonionic
Non-Volatile (%) :	59.0 - 61.0
pH:	6.5 - 8.5
Recommended pH of your system:	> 7.0
Brookfield Viscosity (cps) :	500 - 2000
Spindle Number:	3
RPM:	60

APPLICATION DATA Stir well before using in production. The components of Hydrosize U2023 have been risk-assessed based on their function in the sizing in our Food Contact Declaration of Compliance. This assessment was made according to the scientific opinion of the EFSA (European Food and Safety Authority) Panel: "Approach for safety assessment of glass fibre-sizing agents in glass fibre-reinforced plastics for food contact." in relation with Commission Regulation EU n°10/2011 Article 5. Please contact Michelman Regulatory department in order to get our Food Contact Declaration of Compliance.

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STORAGE Keep containers tightly closed in a dry, cool and well-ventilated place. Keep from freezing.

HANDLING Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required.

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The following information for this product, specific to each site of manufacture, is available upon request:

- Material Safety Data Sheets in various formats and languages (includes global chemical inventory listing)
- Food Contact Declaration of Compliance (if applicable)

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