



ECOFAST™ Pure Sustainable Textile Treatment

Introduction

ECOFAST™ Pure is a textile grade cationic reagent for the functionalization of cellulosic materials such as cotton, rayon, etc. in the presence of basic reagents. ECOFAST™ Pure can be applied to fiber, yarn and fabrics prior to dyeing via pad batch, jet exhaust and other method. ECOFAST™ Pure offers a sustainable no odor solution that eliminates the need for salt in the dyebath, increases dye uptake, offers higher color yields and reduces water, steam and energy usage during dyeing process.

Description

An aqueous solution of quaternary ammonium salt.

Application

Sustainable Textile Treatment. For detailed application conditions, consult with Dow technical support.

Features & Benefits

Dyeing fabrics with ECOFAST™ Pure treatment can result in up to:

- 90% less process chemicals, including dyes, salt and other additives
- 50% less water with fewer rinses and faster cycle times
- 50% less dye with improved uptake
- 40% less energy with room-temperature dyeing process

Physical Properties*

Property	Typical Value
Appearance	Colorless to amber
Physical state	Liquid
Active content	50 wt%
Density at 20 °C (68 °F)	1.15 g/cm ³
Viscosity at 25 °C (77 °F)	7 cSt
pH	7

*Typical values, not to be construed as specifications. Users should confirm results by their own tests.

Personal Protective Equipment (PPE) Requirements for Product Handling

When staging the chemicals necessary for ECOFAST™ Pure treatment, which includes but is not limited to ECOFAST™ Pure, sodium hydroxide either solution or pellets, wetting agent and water, we highly recommend the operator to use the following protective equipment:

- Hand protection: Use impervious gloves that are chemical resistant to materials being handled. Recommended glove types are butyl rubber; natural rubber (Latex); Neoprene, nitrile/butadiene rubber (nitrile or NBR), polyethylene, ethyl vinyl alcohol laminate (EVAL), polyvinyl chloride (PVC or vinyl) gloves are recommended. Avoid polyvinyl alcohol (PVA) gloves.
- Eye wear: safety glasses with side shield
- Clothing: long sleeves and full-length pants to protect exposed skin; Chemical resistant aprons are commonly used for such protection if there is splash risk during process
- Footwear: closed toe, non-absorbing shoes such as leather

Safe Handling for Product Solution Preparation

All components including ECOFAST™ Pure treatment should be transferred via a controllable metering system paired with a liquid transfer pump. During the process, the operator should not directly contact the treatment solution in the padder reservoir and avoid any splatting or inhalation exposure. A local exhaust ventilation is preferred. In the event a local exhaust ventilation is not available, general ventilation should be used for all processes and proper personal protective equipment as outlined in product handling section should be used. Limit foot traffic in area while processing and disposal are taking place.

As fabric is being dipped and transferred onto a receiving roller during the treatment process, operators should never touch the ECOFAST™ Pure-caustic treatment solution with bare hands, nor fabrics treated with this solution without proper protective equipment, in particular gloves and protective clothing as outlined in the product handling section. When mixed with caustic, this product converts to an epoxide intermediate. At the highest dose tested, this type of epoxide intermediate has caused health concerns in animal studies (please refer to section 11 of material safety data sheet). It is extremely important that operators are protected with proper equipment.

Waste Disposal

For unused product, please follow the MSDS recommendation, and be in compliance with local laws and regulations. We recommend unused product, as well as empty containers of product, be incinerated. All other chemicals should be disposed of properly based on the recommendations in their material safety data sheet. NEVER directly dump into sewers.

Post ECOFAST™ Pure treatment application, the residual solution should be collected into a compatible container, such as an HDPE drum, and allowed to fully convert its epoxide intermediate to non-hazardous alcohols over a period of 24 hours in a closed container. Disposal of the residual treatment solution should follow MSDS recommendations for incineration or put through a water treatment prior to releasing into the waterways. Never directly release any residual solution into waterways.

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Product Stewardship

Dow has a fundamental concern for all who make, distribute, and use its products, and for the environment in which we live. This concern is the basis for our product stewardship philosophy by which we assess the safety, health, and environmental information on our products and then take appropriate steps to protect employee and public health and our environment. The success of our product stewardship program rests with each and every individual involved with Dow products - from the initial concept and research, to manufacture, use, sale, disposal, and recycle of each product.

Customer Notice

Dow strongly encourages its customers to review both their manufacturing processes and their applications of Dow products from the standpoint of human health and environmental quality to ensure that Dow products are not used in ways for which they are not intended or tested. Dow personnel are available to answer your questions and to provide reasonable technical support. Dow product literature, including safety data sheets, should be consulted prior to use of Dow products. Current safety data sheets are available from Dow.

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