

**FASTRACK™ 3427 ER Emulsion**

Emulsion for Waterborne Traffic Marking Paints

Regional Product Availability

EMEAI

Product Description

FASTRACK™ 3427 ER Emulsion is a second-generation all-acrylic emulsion for fast-dry waterborne traffic marking paints with improved durability. Traffic marking paints based on FASTRACK™ 3427 ER Emulsion feature fast dry over a broad range of application conditions and excellent durability in terms of retention of glass beads for night visibility and wear properties over asphalt, concrete and old markings.

Advantages

Features and benefits of Traffic Paints based on FASTRACK™ 3427 ER Emulsion

- Improved Durability–Superior wear properties over various bituminous and concrete road surfaces
- Fast Dry–Fast dry-to-no-pickup and resistance to early rain showers under a wide range of climatic conditions
- Enhanced Retention of Glass Beads–Excellent long-term night visibility
- Environmentally Friendly–V.O.C.s as low as 80 grams/liter
- User Friendly–Non-flammable, water clean-up, reduced disposal costs, increased worker safety
- Performance Advantages

Typical Properties

These are typical properties, not to be construed as specifications

Property	Typical Values
Appearance	Milky white liquid
Solids content, %	50.0 – 51.0
pH	10.0 – 10.6
Brookfield LV Viscosity (spindle 3,60 rpm), mPa's	<500
Minimum Film Formation Temperature, °C	~16
Specific Gravity (wet polymer), g/mL	1.05
Specific Gravity (dry polymer), g/mL	1.13

Formulation Guidelines

Formulating and manufacturing principles associated with FASTRACK™ 3427 ER Emulsion are generally the same as with FASTRACK™ E-2706 ER. The fast-drying characteristics of FASTRACK™ 3427 ER Emulsion require careful consideration when formulating to ensure delivery of maximum benefits from the technology.

Paint Manufacture

In contrast to the manufacture of conventional latex paints, there is no grinding or high-speed dispersion operation in the manufacture of traffic paints. What is typically required is a low speed, low shear operation with a slight vortex. This procedure is necessary to avoid excessive heat build-up in the paint during the mixing stage, which otherwise may result in skinning of the paint due to the heat and loss of ammonia. Due to the nature of the application and the high applied film thickness, the pigment and extender dispersion fineness does not need to be above 3 on the Hegman gauge (i.e., below 60-70 microns).

Other Considerations

- Maintain the paint pH at not less than 10.0. This should be checked at the end of the "grind" stage and again at the end of manufacture.
- Add the alcohol before the Texanol into the vortex and mix thoroughly. Do not pre-mix the alcohol and Texanol.
- Add the Texanol slowly into the vortex to avoid polymer flocculation. Pre-emulsification of the Texanol (separately under higher shear) may be beneficial to ensure homogeneous incorporation.

Formulation: Volume Solids

It is important to formulate fast-dry waterborne traffic paints at maximum volume solids, within the constraints of viscosity and stability, in order to minimize the dry-to-no pick-up time.

Applications, Conditions and Handling

FASTRACK™ 3427 ER Emulsion can be applied with airless or conventional air-spray equipment to asphalt, concrete, or existing road markings that are adhering well to the pavement surface. Air and surface temperature should be above 10°C and at least 1°C above the dew point during application. Paints will require longer drying times when the relative humidity exceeds 80% with minimal air flow.

Clean-up is accomplished with clean or soapy water to remove wet paint from equipment. Stainless steel equipment should be used, and typical paint solvents can assist if removal of dried paint from tools and equipment is necessary. All solvents and solvent borne paint should be removed from tanks and spray equipment prior to handling waterborne paints to avoid contamination, and equipment should be cleaned after each use. An ammonia solution can be floated on the surface of stored paint to prevent skinning.

Handling Precautions

Before using this product, consult the Material Safety Data Sheet (MSDS)/Safety Data Sheet (SDS) for details on product hazards, recommended handling precautions and product storage.

Storage

Store products in tightly closed original containers at temperatures recommended on the product label.

Disposal Considerations

Dispose in accordance with all, local or national regulations. Empty containers may contain hazardous residues. This material and its container must be disposed in a safe and legal manner.

It is the user's responsibility to verify that treatment and disposal procedures comply with local or national regulations. Contact your Dow Coating Materials Technical Representative for more information.

Chemical Registration

Many countries within EMEAI require the registration of chemicals, either imported or produced locally, prior to their commercial use. Violation of these regulations may lead to substantial penalties imposed upon the user, the importer or manufacturer, and/or cessation of supply. It is in your interests to ensure that all chemicals used by you are registered. Dow does not supply unregistered products unless permitted under limited sampling procedures as a precursor to registration.

Note on EMEAI Product Line

Product availability and grades vary throughout the countries in the EMEAI area. Please contact your local Dow Coating Materials representative for further information and samples.

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.

For more information visit our website:
www.dow.com

To contact us, call:
Europe, Middle East, Africa & India:
+31 115 672 626

Notice: No freedom from infringement of any patent owned by Dow or others is to be inferred. Because use conditions and applicable laws may differ from one location to another and may change with time, Customer is responsible for determining whether products and the information in this document are appropriate for Customer's use and for ensuring that Customer's workplace and disposal practices are in compliance with applicable laws and other government enactments. The product shown in this literature may not be available for sale and/or available in all geographies where Dow is represented. The claims made may not have been approved for use in all countries. Dow assumes no obligation or liability for the information in this document. References to "Dow" or the "Company" mean the Dow legal entity selling the products to Customer unless otherwise expressly noted. NO WARRANTIES ARE GIVEN; ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

