TECHNICAL DATA SHEET PremARC® 70-90 Urethane Binder

Description

PremARC ® 70-90 is a solvent-free, moisture-curing, one-component, polyurethane binder that is designed for use on elastic base layers for the production of playgrounds and safety surfaces. It is formulated for use in areas of hot climate. As with any product, the use of PremARC® 70-90 must be tested by the user in advance to a large scale application (laboratory and field testing are strongly recommended) to determine the suitability of the product for the specific application.

Application

COVERAGE/USAGE

For top surfaces (cap), we recommend a ratio of 18-22 parts binder to 100 parts of rubber (18-22%). For base layers, consumptions of 15-18% are typical. The amount of binder to be used will be dependent upon the shape and size of the rubber as well as dust content. Higher surface area, smaller particle size distribution and higher dust content will necessitate a higher consumption of binder. The viscosity of the binder is considerably lower at the higher temperatures encountered during the summer. Curing takes place at ambient temperature by reaction with atmospheric moisture. Higher temperatures, moisture and the addition of accelerators will shorten the cure time. An ambient humidity of 40-80% is recommended for appropriate cure. Relative humidity below 40% may extend the cure profile and may necessitate the addition of water and/or accelerator. The temperature should not fall below 50 °F(10°C) during curing.

UV Stability

As with any urethane based on aromatic isocyanates, this product is not UV stable and may show discoloration after exposure to direct sunlight. This effect is magnified when used in tandem with rubber granules of lighter or more vibrant shades. Mechanical properties are not impacted. (laboratory and field testing are strongly recommended to establish a base line with your owner)

STORAGE

Binder must be protected against humidity and stored above 50 °F(10°C). The ideal storage temperature is in the range of 59-77 °F(15-25°C). Higher storage temperatures over a longer period of time can shorten the shelf life. At ideal storage conditions, the material can be stored for six months in the original unopened packaging. Opened drums or pails should be used quickly.

Precaution

Prior to application, the user *must* read and become familiar with the risks and hazards associated with the use of this product. Adherence to and observation of proper safety techniques cannot be overemphasized.

Please read the SDS carefully before use.

Typical Properties

System Type	Aromatic Polyurethane Binder		
Appearance	Amber		
Cure Type	Moisture Cure		
Solids by weight	100%		
Solids by volume	100%		
Typical Properties at 68°F			
Specific Gravity	DIN 53217	g/cm ³	1.08
Density	DIN 53217	lbs/gal	9.01
Viscosity	DIN 53018/1+2	mPa-s	6500

Handling

Wear proper protective equipment at all times. Avoid contact with skin and eyes. In the event of eye contact, flush eyes thoroughly with water and seek medical attention. Consult SDS before handling and observe all recommended safety and handling practices. Pressure can build up in new and previously opened containers, open all containers carefully. Protect open containers from moisture. Dispose of contaminated materials and empty containers in accordance with Federal, State, and Local regulations.

Customer Notice

ARC encourages its customers to review their application of ARC products from the standpoint of human health and environmental quality. To help ensure that ARC products are not used in ways for which they were not intended or tested, ARC personnel will assist customers in dealing with ecological and products safety.

NOTICE: The information and data contained herein do not constitute sales specifications. The product properties may be changed without notice. No liability, warranty or guarantee of product performance is created by this document. It is the Buyer's responsibility to determine whether ARC products are appropriate for Buyer's use and to ensure that Buyer's workplace and disposal practices are in compliance with applicable laws and regulations. No freedom from any patents owned by ARC or other industrial or intellectual property rights is granted or to be



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