

# JACKCRETE 220-D Series

## CONCRETE LIFTING SYSTEM

### PRODUCT DESCRIPTION:

JACKCRETE 220-D is a nominal 2.2 pcf free-rise density, plural-component, synthetically-blown, all PMDI based low density spray polyurethane foam system designed for light duty soil stabilization, concrete lifting, and void filling. JACKCRETE 220-D is dispensed using 1/1 by volume ratio equipment. This system is available in slow and regular speeds.

### TYPICAL PROPERTIES\*\*:

<u>As Supplied</u>	<u>B-side</u>	<u>A-side</u>
Appearance	Amber, transparent liquid	Brown, transparent liquid
Specific Gravity @ 70°F	1.17	1.23
Viscosity @ 70°F (cps)	500 - 800	200

  

<u>As Cured</u>	<u>Value</u>	<u>Test Method</u>
Mix Ratio (volume : volume)	1:1	
Density (pcf)	3.9 - 4.2	ASTM D 1622
Compressive Strength (psi)	75	ASTM D 1621
Tensile Strength (psi)	60 – 80	ASTM D 1623
Shear Strength (psi)	40 – 60	ASTM C 273
Closed Cell Content (%)	>90	ASTM D 6226
Water Absorption (lbs./ft^2)	<0.025	ASTM D 2842

\*\* These physical property values are typical for this material as applied at our development facility under controlled conditions or statistical measurement. SPF performance and actual physical properties will vary with differences in application (i.e. ambient conditions, process equipment and settings, material throughput, etc). As a result, these published properties should be used as guidelines solely for the purpose of evaluation. Physical property specifications should be determined from actual production material.

The above data was collected from samples prepared using the following equipment configuration:

- Graco E-30 proportioner set at 1:1 volume ratio with 250 ft of heated delivery hose
- GX-7 spray-gun configured with a #22 mix module and JACKCRETE PCD Body with 3-1/2" injection port
- Process temperature settings: Isocyanate 130°F; Resin 130°F; Hose 130°F
- Process pressure: 1000 psig minimum during dispensation

Every job site and set of ambient /substrate conditions are different; therefore, one set of process settings may not work for every situation. It is the responsibility of the applicator to evaluate the on-site conditions then choose the appropriate SPF reactivity and process settings.

### GENERAL INFORMATION:

JACKCRETE 220-D is a technically advanced SPF system intended for use by qualified contractors trained in the processing and application of SPF lifting systems as well as the plural-component polyurethane dispensing equipment required to do so. Contractors and applicators must comply with all applicable and appropriate storage, handling, processing and safety guidelines. JACKCRETE, LLC technical service personnel should be consulted in all cases where application conditions are questionable.

### FORMULATION SPEED:

The JACKCRETE 220-D SPF lifting system is available in several reactivity "grades": S (Slow) has a suggested ambient temperature range of 40-80 degrees Fahrenheit, R (Regular) has a suggested ambient temperature range of 70-100 degrees Fahrenheit. These temperatures are meant as general suggestions only. Ultimately, the experience of the applicator should determine which reactivity grade is best suited for any specific project and ambient conditions. Please contact your JACKCRETE, LLC representative with any questions or for more specific assistance.



## **RECOMMENDATIONS:**

JACKCRETE 220-D is designed for an application rate up to 4 inches maximum. Once installed material has cooled it is possible to add additional applications in order to increase the overall installed thickness of SPF.

In addition to reading and understanding the MSDS, all contractors and applicators must use appropriate respiratory, skin and eye Personal Protective Equipment (PPE) when handling and processing polyurethane chemical systems. Personnel should review the relevant technical documents published by Spray Polyurethane Foam Alliance (SPFA) and Center for the Polyurethanes Industry (CPI).

## **CAUTIONS:**

JACKCRETE 220-D is NOT designed for use as an INTERIOR insulation system.

This product is neither tested nor represented as suitable for medical or pharmaceutical uses.

As with all Polyurethane foam systems, improper application techniques such as: excessive thickness of SPF, injecting into or under rising SPF, and off-ratio material can significantly degrade the physical properties. Potential results of improperly installed SPF include: dangerously high reaction temperatures that may result in fire and offensive odors that may or may not dissipate. Improperly installed SPF must be removed and replaced with properly installed materials.

LARGE MASSES of excess SPF should be removed to an outside safe area cut into smaller pieces and allowed to cool before discarding into any trash receptacle.

SPF is combustible. High-intensity heat sources such as welding or cutting torches must not be used in contact with or in close proximity to JACKCRETE 220-D or any polyurethane foam.

## **SHELF LIFE AND STORAGE CONDITIONS:**

JACKCRETE 220-D has a shelf life of approximately three months from the date of manufacture when stored in original, unopened containers at 65-75°F. As with all industrial chemicals, this material should be stored in a covered, secure location and never in direct sunlight. Storage temperatures above the recommended range will shorten shelf life. Storage temperatures above the recommended range may also result in elevated headspace pressure within packages.

## **LIMITED WARRANTY INFORMATION – PLEASE READ CAREFULLY:**

The information herein is to assist customers in determining whether our products are suitable for their applications. Our products are only intended for sale to industrial and commercial customers. Customer assumes full responsibility for quality control, testing and determination of suitability of products for its intended application or use. We warrant that our products will meet our written liquid component specifications. We make no other warranty of any kind, either express or implied, by fact or law, including any warranty of merchantability of fitness for a particular purpose. Our total liability and customers' exclusive remedy for all proven claims is replacement of nonconforming product and in no event shall we be liable for any other damages, including without limitation special, incidental, punitive, or consequential damages.