

# NCFI Polyurethanes Div. of Barnhardt Manufacturing Co. P. O. Box 1528 • Mount Airy, NC 27030 800-346-8229 www.NCFI.com

# NCFI POUR-IN-PLACE SYSTEM 24-486

01/05

#### **DESCRIPTION:**

NCFI 24-486 is a two component, water blown, all PMDI-based, nominal 4 pcf density, pour-in -place urethane foam system designed for concrete jacking and cavity filling using Gusmer mixing equipment. NCFI 24-486 has low component viscosities making the system suitable for either mechanical mix machines, high pressure (over 600 psi) impingement mixing machines or hand mixing.

#### DISTINGUISHING CHARACTERISTICS:

- Excellent Gel Pressure Development
- Excellent Compressive Strength
- Good Dimensional Stability

#### **TYPICAL RESIN PROPERTIES:**

	<u>24-486 R</u>	<u>24-486 A</u>			
Viscosity @	72°F				
-	620 cps	200 cps			
Lbs./Gallon					
	9.0 lbs.	10.2 lbs.			
Appearance					
	transparent,	transparent,			
	black liquid	brown liquid			
Shelf Life					
	6 months	6 months			
MIX RATIO:					
	<u>24-486 R</u>	<u>24-486 A</u>			
By Weight	100 parts	115 parts			

100 parts

By Volume 100 parts

TYPICAL	REAC	TION	PROPER	TIES:
11.	111 6	> 700E	1500	

Hand Mix @ 72°F, 1500 rpms
----------------------------

Cream Time	25 seconds
Gel Time	50 seconds
Tack Free Time	75 seconds
Rise Time	90 seconds
Density (FRC)	4 pcf

### **TYPICAL PHYSICAL PROPERTIES:**

Typical In-place Density	4 pcf
Compressive Strength	69 psi
Tensile Strength	146 psi
Closed Cell Content	>85%
Water Absorption, ASTM D2842	<u>&lt;</u> 0.04 lbs/sq ft
Resistance to Solvents	Excellent
Resistance to Mold and Mildew	Excellent
Maximum Service Temperature	200°F

\*The above values are average values obtained from laboratory experiments and should serve only as guide lines

# NCFI 24-486 APPLICATION INFORMATION

## EQUIPMENT AND COMPONENT RATIOS:

NCFI 24-486 should be mixed by pour machines designed to mix urethane chemicals. It is recommended that this system be processed with either HPIM machines or low pressure equipment with mechanical mix heads, both with the capability of controlling component temperatures to 60°F - 80°F. NCFI 24-486 **R** is connected to the **resin/polyol** pumps with NCFI 24-486 **A** being connected to the **isocyanate** pumps.

## **STORAGE AND USE OF CHEMICALS:**

Keep temperature of chemicals at 70 °F for several days before use. Cold chemicals can cause poor mixing, pump cavitation or other process problems due to higher viscosity at lower temperatures. Storage temperature should not exceed 100°F. Prolonged exposure to temperatures below 60°F can cause the 'A' component to freeze. Do not store in direct sunlight. Keep drums tightly closed when not in use and under nitrogen pressure of 2 - 3 psi after they have been opened.

### SAFE HANDLING OF LIQUID COMPONENTS:

Use caution in removing bungs from the container. Loosen the small bung first and let any built up gas escape before completely removing. Avoid prolonged breathing of vapors. In case of chemical contact with eyes, flush with water for at least 15 minutes and get medical attention. For further information refer to "MDI-Based Polyurethane Foam Systems: Guidelines for Safe Handling and Disposal" publication AX-119 published by Alliance For The Polyurethanes Industry 1300 Wilson Blvd, Suite 800, Arlington, VA 22209.

#### **Caution:**

Polyurethane products manufactured or produced from this liquid system may present a serious fire hazard if improperly used or allowed to remain exposed or unprotected. The character and magnitude of any such hazard will depend on a broad range of factors which are controlled and influenced by the manufacturing and production process, by the mode of application or installation and by the function and usage of the particular product. Any flammability rating contained in this literature is not intended to reflect hazards presented by this or any other material under actual fire conditions. These ratings are used solely to measure and describe the product's response to heat and flame under controlled laboratory conditions. Each person, firm or corporation engaged in the manufacture, production, application, installation or use of any polyurethane product should carefully determine whether there is a potential fire hazard associated with such product in a specific usage, and utilize all appropriate precautionary and safety measures

The information on our data sheets is to assist customers in determining whether our products are suitable for their applications. The customers must satisfy themselves as to the suitability for specific cases. NCFI Polyurethanes warrants only that the material shall meet its specifications; this warranty is in lieu of all other written or unwritten, expressed or implied warranties and NCFI Polyurethanes expressly disclaims any warranty of merchantability, fitness for a particular purpose, or freedom from patent infringement. Accordingly, buyer assumes all risks whatsoever as to the use of the material. Buyer's exclusive remedy as to any breach of warranty, negligence or other claim shall be limited to the purchase price of the material. Failure to adhere strictly to any recommended procedures shall relieve NCFI Polyurethanes of all liability with respect to the material or the use thereof