



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

22-063 High Density Rigid Foam System

Technical Data Sheet

NCFI 22-063 is a two-component, water-blown, all PMDI based high density pour foam ideal for molding applications.

Typical Properties of Components

| Component | B-22-063 | A-22-063 |
|-------------------------------|--------------------------|--------------------------|
| Appearance | Transparent amber liquid | Transparent brown liquid |
| Brookfield Viscosity @ 50 rpm | 2200 cps at 72°F | 200 cps at 72°F |
| Specific Gravity | 1.07 | 1.24 |
| Storage Temperature | 40°F – 90°F | 40°F – 90°F |

Mix Ratio, 115 Index

By weight.....100 parts poly : 100 parts iso

Typical Properties of Mixed System at 72°F, 115 Index

| | REGULAR | SLOW | VS |
|------------------------|-------------|-------------|-------------|
| Cream Time | 50 seconds | 65 seconds | 85 seconds |
| Gel Time | 160 seconds | 195 seconds | 270 seconds |
| Tack Free Time | 210 seconds | 280 seconds | 380 seconds |
| Rise Time | 230 seconds | 300 seconds | 400 seconds |
| Free Rise Core Density | 10.0 pcf | 10.0 pcf | 10.0 pcf |

Process Parameters

| | |
|------------------|---------------|
| Iso Temperature | 75°F to 85°F |
| Poly Temperature | 70°F to 95°F |
| Mold Temperature | 95°F to 125°F |

* Demold time is dependent on shot size, and material and mold temperatures. NCFI recommends using a high-quality, properly applied wax or silicone release agent to prevent cured material from sticking to mold surfaces.

The Information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained there from. The information is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance. Because of the variation in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the application disclosed. Full-scale testing and end product performance are the sole responsibility of the user. NCFI Polyurethanes shall not be liable for and the customer assumes all risk and liability of any use or handling of any material beyond NCFI's direct control. NCFI MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OR MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendations, nor as an inducement to practice any patented invention without permission of the patent owner.

Typical Physical Properties

| MIL-PRF-26514G, TYPE I (STANDARD FOAM), CLASS 1 | PASS |
|--|---------------------------------------|
| Compressive Strength (ASTM D1621) | 5% deformation at max load 745 psi |
| Compressive Strength (ASTM D1621) After Hydrolytic Stability Test | 5% deformation at max load 745 psi |
| Relative Combustibility (MIL-PRF-26514G) | pass |
| Water Absorption | 4.84% |
| Dimensional Stability, 158F, 100% R.H. 14 days | 0.09% |

All testing performed on 20 pcf molded part, 100R:100A ratio

Storage and Handling

Store the poly from 65°F to 85°F. Avoid moisture contamination during storage, handling, and processing. For both components, pad containers and day tanks with either nitrogen or dry air (desiccant cartridge or air dryer @ -40°F dew point). For optimum shelf life, the recommended storage temperature for iso is 64°F to 86°F. **Do not expose iso to lower temperatures – freezing may occur.** Shelf life is 6 months for factory sealed containers.

Original: 012216
 Modified: 080619
 Modified: 022820