



VE927BNI

Description: ENDURAFLEX Black, semi-hard nitrile synthetic lining for petroleum oil applications and general acid service.

Durometer of Face Material: Shore A Scale
Pressure Cure: 90 to 100
Atmospheric Cure: 90 to 100
Available Gauges: 1/8", 3/16", 1/4", 4mm, 5mm, & 6mm.

Adhesive System:
Adhesives: ENDURABOND SYSTEM for Synthetics

1st coat on metal:	Primer P-100
2nd coat on metal:	Intermediate I-100
3rd coat on metal:	201 Tack
On the rubber:	201 Tack
On skive:	800 See Applicator Note 1.

Skive: Closed

Cure Methods and Times:

Autoclave: 2 hours @ 275°F (135°C) For vacuum service minimum of 6 hours @ 275°F
Internal Pressure: 6 hours @ 260°F (127°C)
Atmospheric: 2 Step Process Step 1 – 6 hours from Ambient to 160° F. (71° C.) Step 2 – 48 hours @ 180° F. (82° C.) or 40 hours @ 200° F. (94° C.) Atmospheric curing not recommended for vacuum service. Water curable - 36 hours @ 200 - 212°F

Note: Cure times may require adjustment to compensate for heavy metal thickness, low exterior temperatures or other unusual factors. See Section 14 – Curing Instructions.

Repairs: Repair with original lining. See Section 16 – Repair Procedures.

Storage Life:

From 32°F (0°C) to 50°F (10°C)	180 days
From 51°F (13°C) to 65°F (19°C)	90 days
From 66°F (21°C) to 75°F (23°C)	60 days
From 75° F (23°C) to 85° F (30°C)	30 days
Do not exceed 90°F (32°C) prior to use.	Cold storage

Typical Physical Properties

Tensile Strength – PSI	ASTM D412	3400
% Elongation at break	ASTM D412	150
Durometer	ASTM D2240	90A
Specific Gravity	ASTM D927	1.31
Adhesion to Metal	ASTM D429	25 Lbs.

Application methods shall conform to BLAIR Rubber Company instructions contained in the Engineering & Applicator manual. Deviations from the specifications must be approved by BLAIR Rubber Company.

Notes: This lining has a neoprene tie gum, always apply plastic side down against the substrate.

Caution: Nitrile rubber is susceptible to deterioration by sunlight and oxygen called weather checking.

Applicator Notes:

- To increase the tack of the adhesive blend 20% by volume of 201 Tack to the 800Tack. For example add 1 gal. of 201Tack to every 4 gal. of 800 Tack.
- Strict adherence to adhesive specifications is required. Tack time is also critical to the success of the bond. **Application of multiple coats of adhesive will be detrimental to the bond.**
- This rubber lining cannot be overly stretched. It must be gently folded to cover the area to be lined and then firmly rolled down. **Do not attempt to push or force the lining down into corners.** Stretching the rubber will cause the lining and seams to lift during cure. Use "V-beads" in corners and sharp angles to prevent any stretching.
- A heated table that warms rubber to 120°F is best for application and pre-shrink the lining. The lining may shrink 10% lengthwise.
- Caution: Hard rubber linings may crack when subjected to thermal or mechanical shock.
 - After cure is complete bring down temperature slowly. For example; a maximum of 50°F (10°) per hour. When pressure curing bring temperature down under air pressure and follow the above temperature parameters.
 - Mark outside of hard rubber lined vessels with signs that would indicated prevention of mechanical shock. For example; a "do not use hammer or striking symbol".
 - Do not transport or move hard rubber lined vessels below 20°F (-5°C).
- The temperature of the substrate must be greater than 60° F (15° C) prior to applying primer and rubber. Temperatures should not exceed 120° F (48° C).