



## Technical Data

# RibbonFlo 85

### Protective Coating & Rapid Mold Casting

NB 1188  
Revised: 041610

#### MANUFACTURER

GatorHyde Protective Coatings, Inc.  
2210 South Highway 69  
Wagoner, OK 74467  
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#### PRODUCT DESCRIPTION:

**RibbonFlo 85** is a two component, 100% solids, no VOC's (Volatile Organic Compound), UV controlled, modified elastomer. **RibbonFlo 85** offers superior performance in rapid cold mold casting and conveyor roller lagging and as a protective coating system. **RibbonFlo 85** displays quick cure times and offers excellent adhesion to properly prepared steel and concrete surfaces. **RibbonFlo 85** is fast curing and greatly reduces moisture sensitivity. In rapid parts casting it can be applied to cold unheated molds and requires no post heat curing. Because of its fast gel time, parts can be demolded in minutes. When used as a coating system, **RibbonFlo 85** can be applied at temperatures ranging from 25°F to 155°F. This unique polyurea elastomer system displays excellent UV characteristics and is suitable for either interior or exterior use.

#### PRIMARY APPLICATIONS:

- RAPID MOLD CASTING
- METAL TO METAL BONDING
- CONVEYOR ROLLER LAGGING
- FAST TRACK PROTOTYPING
- SHEAVE AND PULLEY CASTING
- LOW PRESSURE SPRAYING
- GEOTEXTILE FABRIC COATING FOR POND LINING

#### APPLICATION EQUIPMENT:

**RibbonFlo 85** is developed for use with low pressure, plural component pump systems and static mixing wands. This 1:1 ratio material can also be sprayed at low pressure using a special wand extension tube and spray tip. *See manufacturer for details on pump systems and accessories.*

#### SPECIAL APPLICATIONS:

**RibbonFlo 85** can be used as a concrete coating for protection against chemical exposure, moisture migration, abrasive vehicle/foot traffic or as a membrane for industrial floors, and protective coating for secondary containment. Due to its chemical makeup, **RibbonFlo 85** performs well in applications subjected to intermittent high temperatures and temperatures down to -40°F. Depending on the gel time, **RibbonFlo 85** can be applied to vertical or horizontal surfaces by low-pressure spray. *Contact manufacturer for information on additional applications and gel times.*

#### AVAILABLE COLORS:

All material comes non-pigmented from the manufacturer. However, colors may be blended upon request. Contact the manufacturer for color carrier recommendations.

#### APPLICATION RECOMMENDATIONS:

**RibbonFlo 85** adheres extremely well to properly prepared metal and concrete surfaces. Prior to casting or lagging procedure, make sure that there is no loose dust, dirt, rust, grease, mold release agent (unless being used in making mold patterns) oil or any material that will interfere with the bonding process. Where good adhesion is required, it is recommended that all metal or concrete surfaces be primed before applying **RibbonFlo 85**. *Contact manufacturer for recommended primer and details on pump systems and accessories.*

#### PHYSICAL PROPERTIES (1:1 BY VOL.):

TENSIL STRENGTH, PSI	ASTMD412	2933
ELONGATION, %	ASTMD412	650
100% MODULUS	ASTMD412	657
200%	ASTMD412	869
300%	ASTMD412	1117
DIE "C" TEAR STRENGTH, PLI	ASTM D624	351
HARDNESS, SHORE A	ASTM D2240	85
TABER ABRASION, MG LOSS	ASTM D3489	
CS 17 WHEEL MG/1000 CYCLES		
RESILIENCE BY VERTICAL REBOUND	ASTM D2632	48%
COMPRESSION SET, TEST METHOD B	ASTM D395	83%
SPLIT TEAR	ASTM D3489	140 PLI
VISCOSITY A-SIDE (75°F)	CPS	2500
VISCOSITY B-SIDE (75°F)	CPS	800

**TYPICAL PROCESSING PROPERTIES:**

GEL TIME (ADJUSTABLE)	SECONDS	8
TACK FREE TIME	SECONDS	20
MACHINEABLE	MINUTES	25
VOLUME RATIO	(A:B)	1:1

**APPLICATION NOTES:**

**RibbonFlo 85** adheres well to sound steel substrates. All surfaces should be free of moisture, rust, loose particles, petroleum-based products, bond breakers and other contaminating debris. When utilizing a plural component pump, it is recommended that a 3/8" x 40 element-mixing wand be used in order to ensure proper mixing and backpressure

**CLEAN-UP/DISPOSAL:**

Cured product may be disposed of without restriction. The un-cured isocyanate and resin portions should be mixed together and disposed of in a normal manner. "Drip free" containers should be disposed of according to local, state, and federal laws.

**SAFETY & HANDLING:**

MSDS will be mailed immediately upon receipt of a purchase order or upon request. All personnel should read and understand the safety recommendations. Keep uncured product away from children at all times.

**LIMITATIONS:**

**RibbonFlo 85** is an aromatic hybrid polyurea. While the physical properties may not be affected, the elastomer could yellow with exposure to UV or mercury vapor light. It is highly recommended to use a dark color for any applications requiring color stability. If color stability is mandatory, contact the manufacturer for recommendations. The chemical resistance chart should be consulted prior to any application. **Each individual user should check the product compatibility with their application requirements prior to full-scale use.** Samples are available upon request.

**SHELF LIFE & STORAGE:**

Six months in factory delivered, unopened drums. Keep away from extreme heat, freezing, and moisture. Proper storage temperature is between 60°F and 80°F. The components used in the **RibbonFlo 85** formulations have been specifically formulated to withstand low temperature applications. The material can be stored at temperatures as low as 20°F with no gelation of the components. However, it is recommended to warm the material to minimum of 60°F before application.

**PACKAGING:**

**RibbonFlo 85** is available in 5 gallon pails, 55-gallon drums or 275 gallon totes. **(Upon request RibbonFlo 85 can be packaged in 600 x 600 ml cartridge packs.)**

**SHIPPING INFORMATION:**

**RibbonFlo 85** can be shipped via most commercial truck lines. The shipping class is "55". The "A" and "B" sides are unregulated.

**CHEMICAL RESISTANCE:****ASTM D3912 MOD. 3 DAY IMMERSION**

<u>Chemical</u>	<u>Result (25°C)</u>
Brake Fluid (DOT3)	RC
Clorox® (10%)/Water	C,Dis
Diesel Fuel	R
Gasoline	R
Hydraulic Fluid (oil)	R,Dis
NaCl/Water (10%)	R
Potassium Hydroxide (10%)	R
Sodium Hydroxide (10%)	R
Sodium Bicarbonate	R
Sugar/Water (10%)	R
Sulfuric Acid (10%)	R,Dis
Sulfuric Acid (>22%)	NR
Vinegar (5%)/Water	R
Water	R
Xylene	C

**R = Recommend** = Little or no Visible Damage

**RC = Recommend Conditional** = Some Effect-Swelling, Discoloration

**C = Conditional** = Cracking—Wash Down Within One Hour of Spillage to Avoid Effects

**NR = Not Recommended**

**Dis = Discoloration Only**

**WARRANTY:**

The technical data and any other printed information furnished by GatorHyde are true and accurate to the best of our knowledge. **RibbonFlo 85** conforms to in-house quality control procedures and should be considered free of defects. Due to the wide range of applications of this product, it is impossible to assume responsibility for any errors in regard to application, coverage, workmanship, over-spray, or injuries resulting from the use of this product. GatorHyde makes no warranty expressed or implied, of its products and shall not be liable for indirect or consequential damage in any event.