



Innovation through Formulation

## DURAGARD® H-170

### TECHNICAL DATA SHEET

EFFECTIVE: 07/10/20

#### PRODUCT DESCRIPTION

##### CHEMICAL DESCRIPTION

Solventless Aromatic Polyurethane, Chemical Cure, ASTM Type V

##### USAGE

DuraGard H-170 (DGH-170) is a 100% solids, two-component polyurethane coating that contains no volatile organic compounds (VOC) or solvents. DGH-170 is a high-performance polyurethane that combines the corrosion protection properties of LifeLast's DuraShield product line with the toughness and durability of cast polyurethane technologies, like the DuraGard W-250. DGH-170 was specifically designed for applications requiring high durability at low application thicknesses. DGH-170 has excellent resistance to salt and brine solutions and maintains very good flexibility in cold conditions, making it ideally suited for use on equipment operating in snowy and icy climates. DGH-170 is designed to provide very fast cure times, while at the same time demonstrating excellent adhesion. DuraGard H-170 is applied using the LifeLast Cartridge System or an approved plural component spray system.

##### COLORS

Standard color is black. Custom colors available on request.

##### TYPICAL APPLICATIONS

- Undercarriages
- Utility and Cargo Boxes
- Trailer Railing

#### PRODUCT ADVANTAGES

##### EXCELLENT IMPACT RESISTANCE

Provides excellent protection against sand, gravel, rocks, hoses, straps and other equipment

##### VERY GOOD FLEXIBILITY

Expands, contracts and flexes with the substrate

##### EXCELLENT HYDROLYTIC STABILITY

Retains properties in moist environments

##### FAST CURE TIME

Quick return-to-service times

##### VERY CORROSION RESISTANCE

No primer necessary for non-immersion applications; withstands salt and brine environments

##### HIGH BUILD CHARACTERISTICS

Application thicknesses from 20 mils to 250 mils in one application; completely encapsulates welds, rivets and edges

#### COATING SYSTEMS

##### PRIMERS

- **Steel, Non-Ferrous Metals & Galvanized Steel, Concrete, & Wood:** Self-priming, Primall-AP, Primall-125 or Primall-160

##### TOPCOATS

- May be topcoated with aliphatic polyurethane for color stability; check with topcoat manufacturer for compatibility

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## TECHNICAL DATA

### SOLIDS VOLUME

100 percent

### MIX RATIO BY VOLUME

1 : 1 [DGH-170 (POLYOL): Activator 9711 (ISO)]

### RECOMMENDED DRY FILM THICKNESS

20 mils up to 250 mils; thickness varies with application. Consult a LifeLast technical representative for information.

### COVERAGE

- Theoretical: 80.2 ft<sup>2</sup>/gallon @ 20 mils
- Spray: ≈ 70-75 ft<sup>2</sup>/gallon @ 20 mils

### NET WEIGHT PER GALLON (BLACK)

- POLYOL: 8.8 ± 0.2 lbs/gallon
- ISO: 9.7 ± 0.2 lbs/gallon
- Mixed: 9.1 ± 0.2 lbs/gallon

### CURE TIME @ 70°F (21°C) - 75°F (24°C)\*

Tack Free	Recoat Time	To Immersion	To Normal Use
30 min.	< 6 hours	24 hours	12 hours

\*Varies by application technique, thickness & temperature

### SHELF LIFE

12 months at recommended storage temperatures in sealed, unopened containers.

### STORAGE

- Temperature
  - ◇ POLYOL: Min 50°F (10°C), Max 120°F (49°C)
  - ◇ ISO: Min 55°F (13°C), Max 120°F (49°C)
- Containers must be kept sealed in a dry environment.
- Contact LifeLast for continuous storage above 90°F (32°C)

## PHYSICAL PROPERTIES

Test	Standard	Result
Adhesion to Steel	ASTM D4541; A.2	> 2,000 psi
Tensile Strength	ASTM D412	4,050 psi
Elongation	ASTM D412	28%
Flexibility	ASTM D522	No cracking or delamination – 2" Mandrel
Salt Spray	ASTM B117	>2,000 hours
Hardness, Shore D	ASTM D2240	75±5

## APPLICATION

### SHIPPING INSTRUCTIONS

Unheated trailer, no special requirements. Keep dry.

### SURFACE PREPARATION

Preparation requirements vary with application. Refer to the *DuraGard H-170 Application Specification Sheet* or contact a LifeLast technical representative for assistance.

### MIXING

Power mix contents of POLYOL containers for a minimum of 30 minutes, making sure to remove all pigment from the bottom and sides of the container.

### GEL TIME

≈ 2 minutes @ 75°F (24°C)

### SPRAY TEMPERATURE\*

POLYOL: 120°F (49°C) - 150°F (66°C); ISO: 80°F (27°C) - 150°F (66°C)

\*Exact temperatures depend on spray equipment setup

### SURFACE TEMPERATURE

Min. 40°F (4°C) , Max 140°F (60°C); surface should be clean, dry and more than 5°F (3°C) above dew point.

### AMBIENT CONDITIONS

- Min. 0°F (-18°C), Max 120°F (49°C)
- Relative humidity should be less than 85%. Ambient air temperature must be no less than 5°F (3°C) above the dew point.

### SPRAY EQUIPMENT

Refer to *DuraGard H-170 Application Specification Sheet* for recommended spray equipment and setup. **Spray equipment must be approved by LifeLast.**

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