

DURAGARD® H-170

TECHNICAL DATA SHEET

EFFECTIVE: 10/15/2019

PRODUCT DESCRIPTION

CHEMICAL DESCRIPTION

Solventless Aromatic Polyurethane, Chemical Cure, ASTM Type V

USAGE

DuraGard H-170 (DGH-170) is a 100% solids, twocomponent polyurethane coating that contains no volatile organic compounds (VOC) or solvents. DGH-170 is a highperformance 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 ft²/gallon @ 20 mils
- Spray: ≈ 70-75 ft²/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	To	To Normal
	Time	Immersion	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 $5^\circ F\,(3^\circ C)$ 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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