



# INTELLATHANE

## ECO-9

Protective Coating System – FDA-Grade Spray Polyurea Designed for Indirect Food Contact

### DESCRIPTION

Intellathane ECO-9 is a 100% solids, spray applied elastomeric protective coating designed for use on surfaces involved in the production, manufacturing, packing, processing, preparing, packaging, transporting, or storing food. Intellathane ECO-9 is formulated to meet the United States Food and Drug Administration (FDA) requirements for use on food-contact surfaces. Intellathane ECO-9 is a urea hybrid system that contains zero VOCs and exhibits excellent adhesion to wood, metal, concrete, and fiberglass substrates.

### APPLICATION REQUIREMENTS & PARAMETERS

- » Spray equipment must produce a minimum of 2,500-psi with an output of 1.5 gallons per minute. The heating component of the equipment must be able to maintain a temperature at the gun of 150° F. The hose on the equipment must be heated and rated a minimum of 3,000-psi burst pressure. The spray gun must also be rated at the pressures and throughputs required.
- » The substrate must be dry! Proper substrate prep is critical to application success! A minimum ambient temperature of 5° F above the dew point is mandatory. The ambient relative humidity should be above 85%. Product working temperature range is -40° F to 280° F. Pin-holing may occur if the above parameters are not strictly followed; it is up to the applicator to check initial climatic conditions. It is recommended that a small area be sprayed and checked for proper application.
- » The material theoretically will cover 1,604 square feet at 100 mil dry film thickness. Coverage of the substrate should include a waste factor based on conditions at the site and type of substrate to which the material is being applied.
- » Liquid materials should be stored at temperatures between 55° F and 95° F in sealed containers. The A-side component should always be blanketed with nitrogen gas. Material shelf life is 6 to 12 months. Consult product SDS for proper safety and handling procedures of components.

### TYPICAL PHYSICAL PROPERTIES

Property	ECO-9 ISO	ECO-9 Resin
Brookfield Visc. @78° F, 20 RPM	500 CPS	800 CPS
Weight/Gallon	9.67 LBS	8.70 LBS
Processing Data		
Mix Ratio (Parts by Vol.)	1:1	
Reactivity Time	9 Seconds	
Full-Cure Time	24 Hours	
Cured Property	Test Method	Result
Color	N/A	Multiple Available
Durometer	ASTM D2240	65 Shore D
Tensile Strength	ASTM D412	2,600 PSI
Elongation	ASTM D5034	120%
Die-C Tear Strength	ASTM D624	430 PLI
Abrasion Resistance	ASTM D4060	99.89% @ 1,000 Cycles
Dolly Adhesion	ASTM D4541	> 1,800 PSI

### CHEMICAL RESISTANCE RATINGS – 90 DAYS IMMERSION (ASTM D6943)

Immersion Solution	% Weight Change	% Durometer Loss	Rating
Isopropyl Alcohol, 100%	+38.7%	-34.3%	C
Citric Acid, 10.0%	+5.4%	-9.1%	A
Hydraulic Oil, 100%	+0.3%	0.0%	A
Aqueous Sodium Hydroxide, 50.0%	-0.2%	0.0%	A
Aqueous Calcium Chloride, 30.0%	+0.6%	-2.0%	A
Aqueous Calcium Bromide, 50.0%	+0.5%	0.0%	A
Phosphoric Acid Solution, 10.0%	+15.3%	-12.1%	B
Phosphoric Acid Solution, 1.0%	+5.4%	-9.1%	A



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