

# Coating Epoxy

## Description

Nerpa Polymers Coating Epoxy is a 1:1 quick-curing UV-protected system formulated for coating projects such as countertop refinishing, wood coating and resin art. It is formulated free of nonylphenol to provide a safer application experience. High viscosity and one of the best heat resistance within 1:1 systems allow achieving a durable and lasting thick coat in one pass.

## Key Features

- Significant renewable bio-content
- High viscosity allows thick coat build-up in one pass
- Optically clear
- Crystallization resistant
- UV absorbing technology complimented by radical neutralization resulting in two stage UV protection
- Nonylphenol free
- Compliant with Health Canada CCCR2001 regulations

## Physical properties

Appearance: Part A	Observed	Optically clear
Appearance: Part B	Observed	Optically clear
Renewable Carbon Content (Resin)	Theoretical	25%
Specific Gravity: Part A (r.t)	ASTM D1475	1.17
Specific Gravity: Part B (r.t)	ASTM D1475	1.02

## Handling Characteristics

Mix ratio by volume (A:B)	Calculated	1:1
Mix ratio by mass (A:B)	Calculated	1.15:1
Viscosity: Part A at 22°C	ASTM D2196	5000cP
Viscosity: Part B at 22°C	ASTM D2196	900cP
Initial Mixed Viscosity at 22°C	ASTM D2196	2500cP
Reactivity	Observed	Moderate
Peak Exotherm Temperature (100g. mass cylinder)	Observed	120 C
Maximum Recommended Coating Thickness	Observed	1/8"



## Processing Characteristics

Working Time	25-35 min
Gel time 100g	55 min
Tacky to Touch	3-9 hours
Set to Touch	10 hours
Full Cure	24-48 hours

## Cured Material Properties

Density g/cm <sup>3</sup>	Theoretical	1.09
Water Absorption %	ASTM D570	2.5
Abrasion Resistance	ASTM D4060	110-150 mg/1000 cycles CS17
Shore D Hardness	ASTM D2240	83-80
Glass Transition Temperature (T <sub>g</sub> ) by DSC °C	ASTM E1356	42

## Storage Conditions

Working Temperature	22-25C
Storage Temperature	15-25C
Shelf Life	2 years unopened