

# TECHNICAL DATA SHEET



## S7253 SERIES POTTING COMPOUND

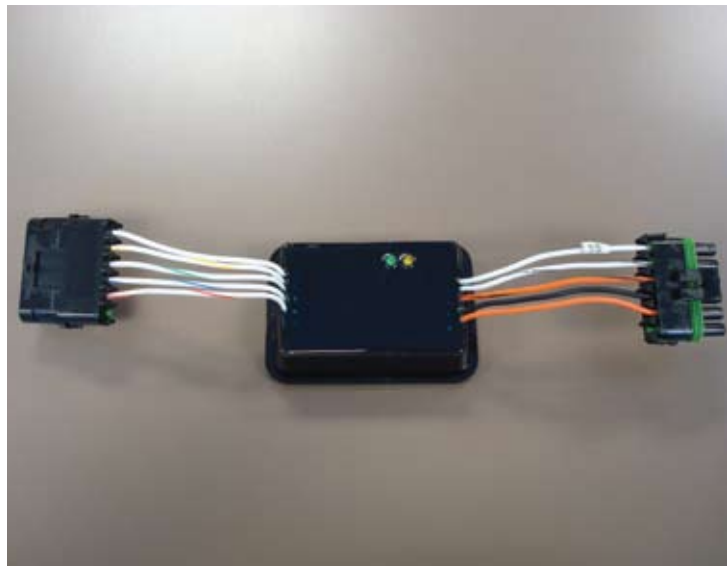
The S7253 series of materials are an excellent choice for the potting/encapsulation of sensitive electronics that are exposed to harsh environments. S7253 series of products feature many process/application friendly properties such as:

- Low mixed viscosity for superior flow into tight tolerance electronic applications
- Good thermal conductivity
- Low weight loss at elevated temperatures
- 125 °C operating temperature
- Outstanding adhesion to various metal and plastic potting cases
- RoHS compliant
- UL Recognized or Designed to Pass
- Thermal cycling between -40 °C and 85 °C
- Good electrical properties
- Excellent moisture resistance
- Moisture level forgiveness

S7253 materials are versatile polyurethane potting compounds used in a variety of applications including:

- LED outdoor displays
- Universal reader for security systems
- Various Sensors
- Control module potting
- Electronic potting for the pool and spa industry
- Energy storage devices
- Automotive applications

The S7253 Series of materials have the same cured/typical properties but do vary in color, processing time (gel time, pot life) and viscosities. This material is an excellent candidate as a low cost urethane for potting applications.



# COMMON PROPERTIES FOR ALL PRODUCTS IN SERIES S7253

## CURED PROPERTIES

<b>Operating Temp</b>	125 °C (maximum continuous)
<b>Tg</b> ASTM E1545 (Glass Transition)	-2 – 2 °C
<b>Specific Heat</b> (ASTM E1269)	1.10 – 1.20 J/gK @ 100 °C
<b>Thermal Cycles Passed</b>	10 (less than -55 °C to 105 °C)
<b>Weight Change After 7 days @ 125 °C</b>	-0.29 – -0.31%
<b>Hardness</b> ASTM D2240	
<b>Shore A</b>	82 – 88 @ 25 °C
<b>Shore A</b>	90 – 96 (2 hrs @ 65 °C= + 7 days @ 125 °C)

## Tensile Strength (ASTM D638 or D412)

Temperature	PSI
-25 °C	5011 – 5953
0 °C	2847 – 3762
25 °C	781 – 948
50 °C	370 – 442
70 °C	362 – 416

## Shrinkage (ASTM D2566)

Cured Temp / Time	% Change
25 °C for 24 hours	0.048 – 0.052
65 °C for 24 hours	0.77 – .085

## Coeff Therm Exp. (ASTM D696) 79.5 – 87 (EXP-6) in/in °C

## Thermal Conductivity (ASTM D2214)

<b>BTU</b>	<b>3.9 – 4.1 BTU in/hr ft2 F</b>
Cal Cm	13.8 – 14.2 (ECP -4) Cal Cm/ Sec Cm2 °C
W/mK	0.55 – .6 W/mK

## Elongation (ASTM D412)

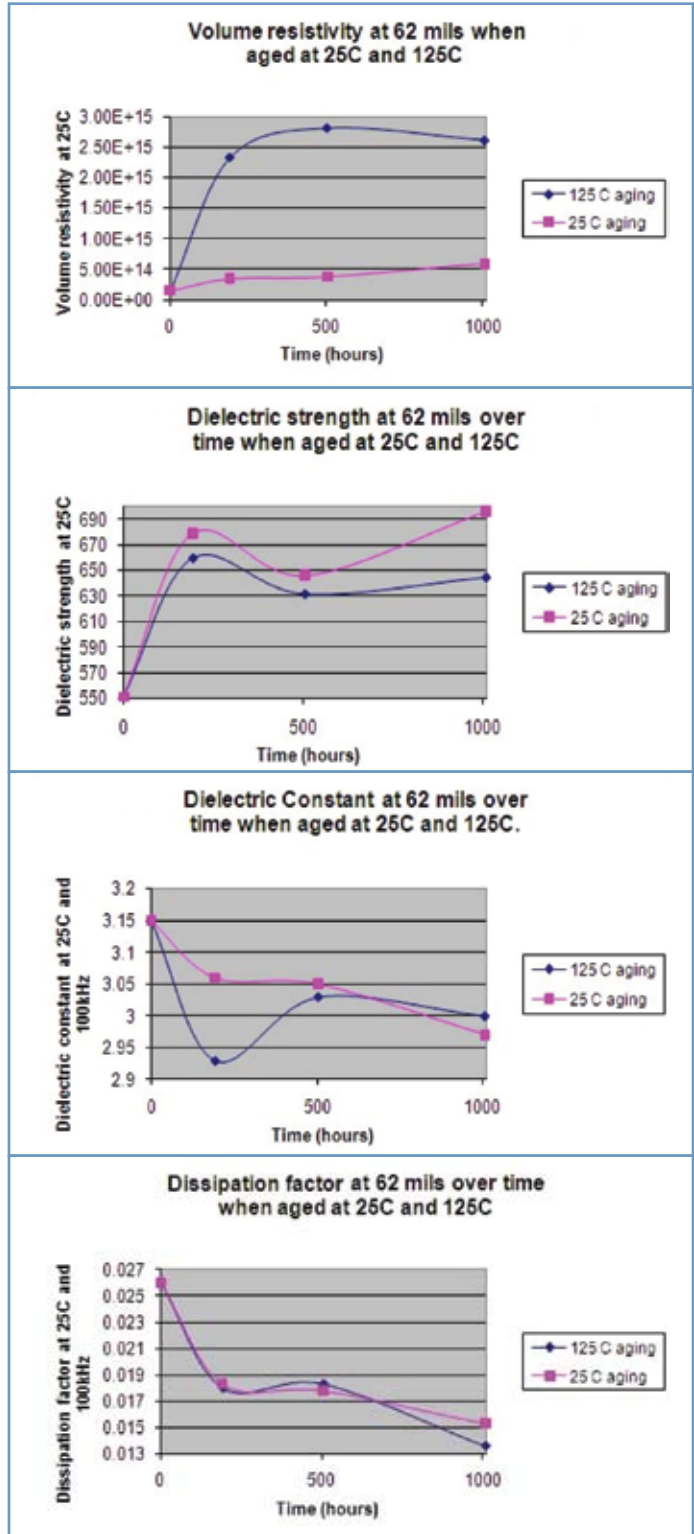
Temperature	% Change
-25 °C	2.5 – 4.5
0 °C	7 – 9
25 °C	140 – 160
50 °C	40 – 60
70 °C	25 – 35

## Modulus of Elasticity (ASTM D638 or D4120)

Temperature	PSI
0 °C	32246 – 44144
25 °C	1139 – 1428
50 °C	1495 – 2349
70 °C	1547 – 1910

## ELECTRICAL PROPERTIES

<b>Dielectric Constant</b> (ASTM D150)	3.71 – 4.1 @ 100 kHz
<b>Dissipation Factor</b> (ASTM D150)	0.0314 – 0.0346 @ 100 kHz
<b>Dielectric Strength</b> (ASTM D149)	335 – 365 Volts/mil @ 0.25"
<b>Volume Resistivity</b> (ASTM D257)	4.40e+13 – 4.80e=13 ohm cm



## S7253 ORIGINAL

UL File Number E55516 Plastics Component  
Flammability (UL): Recognized UL 94 V-0 @ 9.0 mm  
RoHS Compliant

### GENERAL PROPERTIES

Color Part A	Opaque
Color Part B	Amber
Color Mixed	Tan

### MATERIAL PROPERTIES

Mix Ratio by Weight	100:18.2
Mix Ratio by Volume	100:21.4
Viscosity @ 25 °C	Part A: 20 RPM : 5,000 – 8,000 CPS Part B: 800 RPM : 35 – 65 CPS Mixed: 20 RPM : 1,600 – 2,000 CPS
Weight Per Gallon	Part A: 11.50 – 12.50 lb/gal Part B: 10.15 – 10.25 lb/gal Mixed: 11.50 – 11.80 lb/gal

### MIXED PROPERTIES

Gel Time <small>ASTM D3056 (118 Grams)</small>	20 – 30 minutes @ 25 °C
Pot Life <small>(100 Grams)</small>	18 – 20 minutes @ 25 °C
Cure Schedule, Hours	48 – 54 hours @ 25 °C
Alternate Cure, Hours	2 – 2.5 hours @ 65 °C

### CURED PROPERTIES

See “Common Properties” on page 2.

## S7253-01

UL File Number E55516 Plastics Component  
Flammability (UL): Recognized UL 94 V-0 @ 9.0 mm  
RoHS Compliant

### GENERAL PROPERTIES

Identification	Potting Compound/Urethane
Component Count	2
Color Part A	Black
Color Part B	Amber
Color Mixed	Black
Shelf Life @ 25 °C	9 Months
Filler Stability Part A	Good
Filler Stability Part B	Unfilled

### MATERIAL PROPERTIES

Mix Ratio by Weight	100:18.2
Mix Ratio by Volume	100:21.4
Viscosity @ 25 °C	Part A: 20 RPM : 5,000 – 8,000 CPS Part B: 800 RPM : 35 – 65 CPS Mixed: 20 RPM : 1,600 – 2,000 CPS

### Weight Per Gallon

Part A: 11.5 – 12.50 lb/gal  
Part B: 10.15 – 10.25 lb/gal  
Mixed: 11.50 – 11.80 lb/gal

### MIXED PROPERTIES

Gel Time <small>ASTM D3056 (100 Grams)</small>	20 – 40 minutes @ 25 °C
Pot Life <small>(100 Grams)</small>	18 – 20 minutes @ 25 °C
Cure Schedule, Hours	48 – 54 hours @ 25 °C
Alternate Cure, Hours	2 – 2.5 hours @ 65 °C

### CURED PROPERTIES

See “Common Properties” on page 2.

## S7253-02

UL File Number E55516 Plastics Component  
Flammability (UL): Recognized UL 94 V-0 @ 9.0 mm

### GENERAL PROPERTIES

Color Part A	White
Color Part B	Amber
Color Mixed	Off-White

### MATERIAL PROPERTIES

Mix Ratio by Weight	100:18.2
Mix Ratio by Volume	100:21.6
Viscosity @ 25 °C	Part A: 20 RPM : 4,500 – 6,500 CPS Part B: 800 RPM : 35 – 65 CPS Mixed: 20 RPM : 1,800 – 2,200 CPS
Weight Per Gallon	Part A: 11.5 – 12.50 lb/gal Part B: 10.15 – 10.25 lb/gal Mixed: 11.50 – 11.80 lb/gal

### MIXED PROPERTIES

Gel Time <small>ASTM D3056 (100 Grams)</small>	20 – 30 minutes @ 25 °C
Pot Life <small>(100 Grams)</small>	18 – 20 minutes @ 25 °C
Cure Schedule, Hours	48 – 54 hours @ 25 °C
Alternate Cure, Hours	2 – 2.5 hours @ 65 °C

### CURED PROPERTIES

See “Common Properties” on page 2.

## S7253-03

UL File Number E55516 Plastics Component  
Flammability (UL): Recognized UL 94 V-1 @ 12.2 mm  
94 V-2 @ 9.0mm  
RoHS Compliant

### GENERAL PROPERTIES

Color Part A	Blue
Color Part B	Amber
Color Mixed	Blue

## MATERIAL PROPERTIES

<b>Mix Ratio by Weight</b>	100:18.2
<b>Mix Ratio by Volume</b>	100:21.4
<b>Viscosity @ 25 °C</b>	Part A: 20 RPM : 5,000 – 8,000 CPS Part B: 800 RPM : 35 – 65 CPS Mixed: 20 RPM : 1,900 – 2,100 CPS
<b>Weight Per Gallon</b>	Part A: 11.5 – 12.50 lb/gal Part B: 10.15 – 10.25 lb/gal Mixed: 11.50 – 11.80 lb/gal

## MIXED PROPERTIES

<b>Gel Time</b> <small>ASTM D3056 (100 Grams)</small>	20 – 40 minutes @ 25 °C
<b>Pot Life</b> <small>(100 Grams)</small>	15 – 35 minutes @ 25 °C
<b>Cure Schedule, Hours</b>	48 – 54 hours @ 25 °C
<b>Alternate Cure, Hours</b>	2 – 2.5 hours @ 65 °C

## CURED PROPERTIES

See “Common Properties” on page 2.

## S7253-04

UL File Number E55516 Plastics Component  
Flammability (UL): Recognized UL 94 V-0 @ 9.0 mm  
RoHS Compliant

## GENERAL PROPERTIES

<b>Color Part A</b>	Black
<b>Color Part B</b>	Amber
<b>Color Mixed</b>	Black

## MATERIAL PROPERTIES

<b>Mix Ratio by Weight</b>	100:18.2
<b>Mix Ratio by Volume</b>	100:21.4
<b>Viscosity @ 25 °C</b>	Part A: 20 RPM : 7,000 – 11,000 CPS Part B: 800 RPM : 35 – 65 CPS Mixed: 20 RPM : 1,600 – 2,000 CPS
<b>Weight Per Gallon</b>	Part A: 11.5 – 12.50 lb/gal Part B: 10.15 – 10.25 lb/gal Mixed: 11.50 – 11.80 lb/gal

## MIXED PROPERTIES

<b>Gel Time</b> <small>ASTM D3056 (100 Grams)</small>	7 – 12 minutes @ 25 °C
<b>Pot Life</b> <small>(100 Grams)</small>	5 – 7 minutes @ 25 °C
<b>Cure Schedule, Hours</b>	48 – 54 hours @ 25 °C
<b>Alternate Cure, Hours</b>	2 – 2.5 hours @ 65 °C

## CURED PROPERTIES

See “Common Properties” on page 2.

## S7253-05

Flammability (UL): Designed to pass UL 94 V-0 @ 9.0mm  
RoHS Compliant

## GENERAL PROPERTIES

<b>Color Part A</b>	Blue
<b>Color Part B</b>	Amber
<b>Color Mixed</b>	Dark Blue

## MATERIAL PROPERTIES

<b>Mix Ratio by Weight</b>	100:18.2
<b>Mix Ratio by Volume</b>	100:21.4
<b>Viscosity @ 25 °C</b>	Part A: 20 RPM : 5,000 – 8,000 CPS Part B: 800 RPM : 35 – 65 CPS Mixed: 20 RPM : 1,600 – 2,000 CPS
<b>Weight Per Gallon</b>	Part A: 11.5 – 12.50 lb/gal Part B: 10.15 – 10.25 lb/gal Mixed: 11.50 – 11.80 lb/gal

## MIXED PROPERTIES

<b>Gel Time</b> <small>ASTM D3056 (118 Grams)</small>	20 – 30 minutes @ 25 °C
<b>Pot Life</b> <small>(100 Grams)</small>	18 – 20 minutes @ 25 °C
<b>Cure Schedule, Hours</b>	48 – 54 hours @ 25 °C
<b>Alternate Cure, Hours</b>	2 – 2.5 hours @ 65 °C

## CURED PROPERTIES

See “Common Properties” on page 2.

## S7253-06

Flammability (UL): Designed to Pass UL 94 V-0  
RoHS Compliant

## GENERAL PROPERTIES

<b>Color Part A</b>	Black
<b>Color Part B</b>	Amber
<b>Color Mixed</b>	Black

## MATERIAL PROPERTIES

<b>Mix Ratio by Weight</b>	100:18.2
<b>Mix Ratio by Volume</b>	100:21.4
<b>Viscosity @ 25 °C</b>	Part A: 20 RPM : 5,000 – 8,000 CPS Part B: 800 RPM : 35 – 65 CPS Mixed: 20 RPM : 1,600 – 2,000 CPS
<b>Weight Per Gallon</b>	Part A: 11.5 – 12.50 lb/gal Part B: 10.15 – 10.25 lb/gal Mixed: 11.50 – 11.80 lb/gal

## MIXED PROPERTIES

<b>Gel Time</b> <small>ASTM D3056 (100 Grams)</small>	40 minutes minimum @ 25 °C
<b>Pot Life</b> <small>(100 Grams)</small>	30 – 40 minutes @ 25 °C

**Cure Schedule, Hours** 48 – 54 hours @ 25 °C  
**Alternate Cure, Hours** 2 – 2.5 hours @ 65 °C

### **CURED PROPERTIES**

See “Common Properties” on page 2.

## **S7253-07**

UL File Number E55516 Plastics Component  
Flammability (UL): Recognized UL 94 V-0 @ 9.0 mm  
RoHS Compliant

### **GENERAL PROPERTIES**

**Color Part A** White  
**Color Part B** Amber  
**Color Mixed** Off-White

### **MATERIAL PROPERTIES**

**Mix Ratio by Weight** 100:18.2  
**Mix Ratio by Volume** 100:21.6  
**Viscosity @ 25 °C** Part A: 20 RPM : 5,000 – 8,000 CPS  
Part B: 800 RPM : 35 – 65 CPS  
Mixed: 20 RPM : 1,800 – 2,200 CPS  
**Weight Per Gallon** Part A: 11.5 – 12.50 lb/gal  
Part B: 10.15 – 10.25 lb/gal  
Mixed: 11.50 – 11.80 lb/gal

### **MIXED PROPERTIES**

**Gel Time** ASTM D3056 (100 Grams) 7 – 12 minutes @ 25 °C  
**Pot Life** (100 Grams) 5 – 7 minutes @ 25 °C  
**Cure Schedule, Hours** 48 – 54 hours @ 25 °C  
**Alternate Cure, Hours** 2 – 2.5 hours @ 65 °C

### **CURED PROPERTIES**

See “Common Properties” on page 2.

## **S7253-08**

Flammability (UL): Designed to pass UL 94 V-0 @ 9.00mm  
RoHS Compliant

### **GENERAL PROPERTIES**

**Color Part A** Gray  
**Color Part B** Amber  
**Color Mixed** Gray

### **MATERIAL PROPERTIES**

**Mix Ratio by Weight** 100:18.2  
**Mix Ratio by Volume** 100:21.6  
**Viscosity @ 25 °C** Part A: 20 RPM : 4,500 – 6,500 CPS  
Part B: 800 RPM : 35 – 65 CPS  
Mixed: 20 RPM : 1,800 – 2,200 CPS

**Weight Per Gallon** Part A: 11.5 – 12.50 lb/gal  
Part B: 10.15 – 10.25 lb/gal  
Mixed: 11.50 – 11.80 lb/gal

### **MIXED PROPERTIES**

**Gel Time** ASTM D3056 (100 Grams) 20 – 30 minutes @ 25 °C  
**Pot Life** (100 Grams) 18 – 20 minutes @ 25 °C  
**Cure Schedule, Hours** 48 – 54 hours @ 25 °C  
**Alternate Cure, Hours** 2 – 2.5 hours @ 65 °C

### **CURED PROPERTIES**

See “Common Properties” on page 2.

## **S7253-09**

Flammability (UL): Designed to pass UL 94 V-0 @ 9.00mm  
RoHS Compliant

### **GENERAL PROPERTIES**

**Color Part A** Black  
**Color Part B** Amber  
**Color Mixed** Black

### **MATERIAL PROPERTIES**

**Mix Ratio by Weight** 100:18.2  
**Mix Ratio by Volume** 100:21.4  
**Viscosity @ 25 °C** Part A: 20 RPM : 7,000 – 9,000 CPS  
Part B: 800 RPM : 35 – 65 CPS  
Mixed: 20 RPM : 1,800 – 2,500 CPS  
**Weight Per Gallon** Part A: 11.5 – 12.50 lb/gal  
Part B: 10.15 – 10.25 lb/gal  
Mixed: 11.50 – 11.80 lb/gal

### **MIXED PROPERTIES**

**Gel Time** ASTM D3056 (100 Grams) 20 – 30 minutes @ 25 °C  
**Pot Life** (100 Grams) 18 – 20 minutes @ 25 °C  
**Cure Schedule, Hours** 48 – 54 hours @ 25 °C  
**Alternate Cure, Hours** 2 – 2.5 hours @ 65 °C

### **CURED PROPERTIES**

See “Common Properties” on page 2.

## **S7253-10**

Flammability (UL): Designed to pass UL 94 V-0 @ 9.0 mm  
RoHS Compliant

### **GENERAL PROPERTIES**

**Color Part A** Gray  
**Color Part B** Amber  
**Color Mixed** Gray

## MATERIAL PROPERTIES

<b>Mix Ratio by Weight</b>	100:18.2
<b>Mix Ratio by Volume</b>	100:21.6
<b>Viscosity @ 25 °C</b>	Part A: 20 RPM : 4,500 – 6,500 CPS Part B: 800 RPM : 35 – 65 CPS Mixed: 20 RPM : 1,800 – 2,200 CPS
<b>Weight Per Gallon</b>	Part A: 11.5 – 12.50 lb/gal Part B: 10.15 – 10.25 lb/gal Mixed: 11.50 – 11.80 lb/gal

## MIXED PROPERTIES

<b>Gel Time</b> <small>ASTM D3056 (100 Grams)</small>	40 minutes minimum @ 25 °C
<b>Pot Life</b> <small>(100 Grams)</small>	30 – 40 minutes @ 25 °C
<b>Cure Schedule, Hours</b>	48 – 54 hours @ 25 °C
<b>Alternate Cure, Hours</b>	2 – 2.5 hours @ 65 °C

## CURED PROPERTIES

See “Common Properties” on page 2.

## S7253-11

UL File Number E55516 Plastics Component  
Flammability (UL): Recognized UL 94 V-0 @ 9.0 mm  
RoHS Compliant

## GENERAL PROPERTIES

<b>Color Part A</b>	Black
<b>Color Part B</b>	Amber
<b>Color Mixed</b>	Black

## MATERIAL PROPERTIES

<b>Mix Ratio by Weight</b>	100:18.2
<b>Mix Ratio by Volume</b>	100:21.4
<b>Viscosity @ 25 °C</b>	Part A: 20 RPM : 10,000 – 15,000 CPS Part B: 800 RPM : 35 – 65 CPS Mixed: 20 RPM : 4,000 – 4,500 CPS
<b>Weight Per Gallon</b>	Part A: 11.92 – 12.22 lb/gal Part B: 10.15 – 10.25 lb/gal Mixed: 11.60 – 11.87 lb/gal

## MIXED PROPERTIES

<b>Gel Time</b> <small>ASTM D3056 (100 Grams)</small>	20 – 40 minutes @ 25 °C
<b>Pot Life</b> <small>(100 Grams)</small>	18 – 20 minutes @ 25 °C
<b>Cure Schedule, Hours</b>	48 – 54 hours @ 25 °C
<b>Alternate Cure, Hours</b>	2 – 2.5 hours @ 65 °C

## CURED PROPERTIES

See “Common Properties” on page 2.

## S7253-12

Flammability (UL): Designed to pass UL 94 V-0 @ 9.0 mm  
RoHS Compliant

## GENERAL PROPERTIES

<b>Color Part A</b>	Black
<b>Color Part B</b>	Amber
<b>Color Mixed</b>	Black

## MATERIAL PROPERTIES

<b>Mix Ratio by Weight</b>	100:18.2
<b>Mix Ratio by Volume</b>	100:21.4
<b>Viscosity @ 25 °C</b>	Part A: 20 RPM : 5,000 – 8,000 CPS Part B: 800 RPM : 35 – 65 CPS Mixed: 20 RPM : 1,600 – 2,000 CPS
<b>Weight Per Gallon</b>	Part A: 11.50 – 12.50 lb/gal Part B: 10.15 – 10.25 lb/gal Mixed: 11.50 – 11.80 lb/gal

## MIXED PROPERTIES

<b>Gel Time</b> <small>ASTM D3056 (100 Grams)</small>	2 – 6 minutes @ 25 °C
<b>Pot Life</b> <small>(100 Grams)</small>	1 – 4 minutes @ 25 °C
<b>Cure Schedule, Hours</b>	48 – 54 hours @ 25 °C
<b>Alternate Cure, Hours</b>	2 – 2.5 hours @ 65 °C

## CURED PROPERTIES

See “Common Properties” on page 2.

## S7253-13

Flammability (UL): Designed to pass UL 94 V-0 @ 9.0 mm  
RoHS Compliant

## GENERAL PROPERTIES

<b>Color Part A</b>	White
<b>Color Part B</b>	Amber
<b>Color Mixed</b>	White

## MATERIAL PROPERTIES

<b>Mix Ratio by Weight</b>	100:18.2
<b>Mix Ratio by Volume</b>	100:21.4
<b>Viscosity @ 25 °C</b>	Part A: 20 RPM : 10,000 – 15,000 CPS Part B: 800 RPM : 35 – 65 CPS Mixed: 20 RPM : 4,000 – 4,500 CPS
<b>Weight Per Gallon</b>	Part A: 11.92 – 12.22 lb/gal Part B: 10.15 – 10.25 lb/gal Mixed: 11.60 – 11.87 lb/gal

## MIXED PROPERTIES

<b>Gel Time</b> <small>ASTM D3056 (118.2 Grams)</small>	20 – 40 minutes @ 25 °C
<b>Pot Life</b> <small>(100 Grams)</small>	18 – 20 minutes @ 25 °C

**Cure Schedule, Hours** 48 – 54 hours @ 25 °C  
**Alternate Cure, Hours** 2 – 2.5 hours @ 65 °C

### **CURED PROPERTIES**

See “Common Properties” on page 2.

## **S7253-14**

Flammability (UL): Designed to pass UL 94 V-0 @ 9.0 mm  
RoHS Compliant

### **GENERAL PROPERTIES**

**Color Part A** Black  
**Color Part B** Amber  
**Color Mixed** Black

### **MATERIAL PROPERTIES**

**Mix Ratio by Weight** 100:18.2  
**Mix Ratio by Volume** 100:21.4  
**Viscosity @ 25 °C** Part A: 20 RPM : 7,000 – 9,000 CPS  
Part B: 800 RPM : 35 – 65 CPS  
Mixed: 20 RPM : 1,800 – 2,500 CPS  
**Weight Per Gallon** Part A: 11.50 – 12.50 lb/gal  
Part B: 10.15 – 10.25 lb/gal  
Mixed: 11.50 – 11.80 lb/gal

### **MIXED PROPERTIES**

**Gel Time** ASTM D3056 (100 Grams) 40 minutes minimum @ 25 °C  
**Pot Life** (100 Grams) 30 – 40 minutes @ 25 °C  
**Cure Schedule, Hours** 48 – 54 hours @ 25 °C  
**Alternate Cure, Hours** 2 – 2.5 hours @ 65 °C

### **CURED PROPERTIES**

See “Common Properties” on page 2.

## **S7253-15**

Flammability (UL): Designed to pass UL 94 V-0 @ 9.0 mm  
RoHS Compliant

### **GENERAL PROPERTIES**

**Color Part A** Black  
**Color Part B** Amber  
**Color Mixed** Black

### **MATERIAL PROPERTIES**

**Mix Ratio by Weight** 100:18.2  
**Mix Ratio by Volume** 100:21.4  
**Viscosity @ 25 °C** Part A: 20 RPM : 10,000 – 15,000 CPS  
Part B: 800 RPM : 35 – 65 CPS  
Mixed: 20 RPM : 4,000 – 4,500 CPS

**Weight Per Gallon** Part A: 11.92 – 12.22 lb/gal  
Part B: 10.15 – 10.25 lb/gal  
Mixed: 11.60 – 11.87 lb/gal

### **MIXED PROPERTIES**

**Gel Time** ASTM D3056 (118.2 Grams) 60 – 90 minutes @ 25 °C  
**Pot Life** (100 Grams) 40 – 50 minutes @ 25 °C  
**Cure Schedule, Hours** 48 – 54 hours @ 25 °C  
**Alternate Cure, Hours** 2 – 2.5 hours @ 65 °C

### **CURED PROPERTIES**

See “Common Properties” on page 2.

## **S7253-16**

Flammability (UL): Designed to pass UL 94 V-0 @ 9.0 mm  
RoHS Compliant

### **GENERAL PROPERTIES**

**Color Part A** Black  
**Color Part B** Amber  
**Color Mixed** Black

### **MATERIAL PROPERTIES**

**Mix Ratio by Weight** 100:18.2  
**Mix Ratio by Volume** 100:21.4  
**Viscosity @ 25 °C** Part A: 20 RPM : 5,000 – 8,000 CPS  
Part B: 800 RPM : 35 – 65 CPS  
Mixed: 20 RPM : 1,600 – 2,000 CPS  
**Weight Per Gallon** Part A: 11.50 – 12.50 lb/gal  
Part B: 10.15 – 10.25 lb/gal  
Mixed: 11.50 – 11.80 lb/gal

### **MIXED PROPERTIES**

**Gel Time** ASTM D3056 (100 Grams) 60 – 90 minutes @ 25 °C  
**Pot Life** (100 Grams) 40 – 50 minutes @ 25 °C  
**Cure Schedule, Hours** 48 – 54 hours @ 25 °C  
**Alternate Cure, Hours** 2 – 2.5 hours @ 65 °C

### **CURED PROPERTIES**

See “Common Properties” on page 2.

## ***MIXING INSTRUCTIONS***

Before mixing Part A with Part B ensure that the Part A is completely homogenous and does NOT display any separation or settling. When hand mixing two component polyurethanes, the ideal method is to mix by weight using a balance or digital scale. The mixing container should be placed on the scale and set to read zero, the appropriate amount of resin should be weighed followed by the appropriate amount of hardener. It is important to note that polyurethane materials must be weighed as close to exact as possible with a +/- 2% margin of error. The material should then be stirred, ideally with a metal spatula, ensuring that the material is thoroughly mixed to a homogenous state (approximately 45 – 60 seconds) by scraping the sides, bottom and the area where the sides meet the bottom of the container. Failure to do so can result in uncured sections of material or altered properties of the cured material. It may be necessary to remove/or evacuate any excess air in the material that was caused by mixing. This can be done by pulling a vacuum on the material. The material should be in a container 3 – 5 times larger than the height of the liquid. When mixing polyurethanes, precautions should be taken to prevent any moisture from contaminating the material. The use of wood stir sticks and paper cups should be avoided due to their porosity and ability to hold moisture. When reclosing partial containers, an inert gas purge (argon or nitrogen) of the container should be used to prevent moisture contamination.

## ***STORAGE AND HANDLING***

All polyurethanes are moisture sensitive by nature and proper precautions need to be taken to ensure proper handling and storage. All containers should be purged to displace room air with dry Argon or dry nitrogen. Doing this ensures that most moisture filled air is no longer in the container. All containers should be stored indoors as close to 25 °C as possible. Please refer to the Material Safety Data Sheet when determining the proper precautions to be used when storing or handling Epic S7253. Epic Resins recommends that engineering controls be used to minimize employee exposure to this or any other industrial chemical.

## ***EPIC RESINS***

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