Product Datasheet

SP&S
Specialty Polymers and Services

Resin EP 8260/Hardener H190

Filled Epoxy Dip Coating resin

Typical Properties

(Not for specification purposes. All tests run at 25°C unless otherwise noted)

Resin / A-side Properties:

Appearance	Visual	Black
Specific Gravity	ASTM-D-2393	1.43 g/cc
Viscosity	ASTM-D-792	100,000 cP
Flash Point, closed cup	ASTM-D-92	>63°C (145°F)

Hardener/ B-side Properties:

Appearance	Visual	Light brown liquid
Specific Gravity	ASTM-D-2393	1.03 g/cc
Viscosity	ASTM-D-792	450 cP
Flash Point, closed cup	ASTM-D-92	180°C (356°F)

Mix Ratio:

Parts by weight (volume) 100A:16.5B (100A : 23B)

Mixed Properties:

Initial Viscosity,cps @25°C	ASTM-D-792	31,000 cP
Pot life (100g mass)	OC-WI-001	35 minutes

Recommended Cure Schedules:

16-24 hrs at 25°C **or** alternate 2-4 hours @ 65°C.

Please note: any cure schedule selected for use should be confirmed through testing as being appropriate for your particular processing methods and for your intended application.

Cured Properties (cured 7 days at 25°C)

Appearance	Visual	Black
Specific Gravity	ASTM-D-792	1.41 g/cc
Shore Hardness	ASTM-D-2240	87D
Linear shrinkage	ASTM-D-2566	0.005 in
Compressive strength	ASTM D-695	17,000 psi
Compressive modulus	ASTM D 695	501,000 psi
Flexural strength	ASTM D-790	11,400 psi
Flexural modulus	ASTM-D-790	876,000 psi
Water absorption (24 hrs)	ASTM-D-252	0.08%
Coefficient of Thermal Expansion(CTE) (per °C)	ASTM-E-381	63 x 10^{-6}
Glass Transition Temp (Tg)	Perkin Elmer Appl.Cast #20	80°C
Thermal Conductivity	ASTM D-2214	0.0007 cal/cm-sec-°C
Service temperature	ASTM-D-638	-40 to + 130°C
Volume Resistivity @ 25°C	ASTM-D-257	2.4 x 10^{15} Ω-cm.
Dielectric Strength	ASTM-D-149	420 volts/mil
Dielectric Constant @1KHz / 1KHz	ASTM-D-150	4.51 / 3.93
Dissipitation Factor @1KHz / 1KHz	ASTM-D-150	0.02 / 0.04

EP8260 with Hardener H190 is a filled, 100% solids epoxy dip coating system. When cured, this material forms a continuous infusible envelope of protection with excellent electrical, physical and chemical properties. EP8260/H190 is thixotropic in nature and yields a smooth, void-free, sag-free and drip-free coating even on vertical surfaces. The EP8260 can be cured at room or mild elevated temperatures with a variety of hardeners of which Hardener H190 is the most common. It has superior resistance to moisture along with good thermal cycle resistance. This material adheres well to various substrates and exhibits excellent edge coverage in the most demanding of coating applications. EP8260/H190 is recommended for the dip coating of heat sensitive electronic components, rectifiers, capacitors (styrene, paper, mylar, and tantalum), resistors and ferrites.

Suggested Applications:

- Brushing or dipping
- Heat sensitive electronic components, rectifiers, capacitors and resistors and ferrites.

Benefits:

- Thixotropic
- Low shrinkage Superior moisture and thermal cycle resistance.
- Excellent physical and electrical properties

Storage Guidelines:

Store this material in a clean, cool and dry environment in its tightly closed original container. Products which may crystallize during storage may be reliquified by warming the contents of the shipping containers, loosely covered, to 65°C for 1-4 hours. Allow contents to cool to at least 35°C before continuing. Avoid extended exposure to extreme humidity. If the recommended storage conditions are observed the products will have a minimum shelf-life of 12 months from the date of shipment.

Processing Guidelines:

Weigh Part A and Part B in the recommended ratio as accurately as possible into a clean mixing container. Always use weighing equipment having accuracy in proportion to the amounts being weighted. Blend by hand for 2-3 minutes using a kneading motion. Scrape the bottom and sides of the mixing container carefully and frequently to produce a uniform mixture. Follow with power mixing, if possible, for an additional 2-3 minutes. Avoid excessive power mixing speeds which could introduce large amounts of air or cause overheating of the mixture resulting in shorter working life.

Handling Precautions:

Mandatory and recommended industrial hygiene procedures should be followed whenever these products are being handled and processed. For additional information please consult the corresponding material safety data sheets.

Personal Hygiene:

EP 8260A

WARNING! Causes skin and eye irritation. May cause allergic skin reaction. Harmful if inhaled or swallowed. Avoid contact with eyes, skin, or clothing. Wear eye protection and impervious gloves when handling. Wash thoroughly after handling. Avoid breathing vapor or mist. Keep containers closed when not in use. Use only with adequate ventilation. Do not take internally.

Hardener H190

DANGER! Corrosive - causes eye burns and skin irritation. Do not get in eyes. Avoid contact with skin and clothing. Avoid breathing vapor or mist. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling

First Aid

In case of contact:

Skin – Immediately wash skin thoroughly with mild soap and water. Remove contaminated clothing and wash before reuse. Destroy contaminated shoes and other articles made of leather.

Eyes – Immediately flush eyes with plenty of water for 15 minutes and get prompt medical attention.

Inhalation - Remove person to fresh air. Administer oxygen or artificial respiration if necessary. Call a physician.

Ingestion - Do not induce vomiting. Dilute with plenty of water and contact physician immediately. Never give anything by mouth to an unconscious person.

Disclaimer:

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