

PRODUCT DATA SHEET

ESI 9000 Polyaspartic Coating System

Product Description

ESI 9000 is a solventless, two component polyaspartic coating system. It provides outstanding appearance, superior chemical, U.V., and solvent resistance. It exhibits excellent physical properties. This system has been approved by the Canadian Food Inspection Agency (CFIA).

Advantages

- Long potlife (30 min. to 45min.)
- Very fast drying in thin film (6-10mils); recommended min film 6 mils up 25mils
- Superior chemical resistance (very good stain resistance)
- Superior weather and abrasion resistance
- Non yellowing and good gloss retention
- Dense surface resistant to bacteria and humidity
- May apply several layers on itself
- Contains no solvent, allowing for interior application without harmful odors (100%solids)
- Excellent adhesive properties, allowing application on other firm and hard coating, as well as a good bond to the substrate

Colour

Upon request

OPERATION

Surface Preparation

Concrete surface must be clean. Remove any dust, milt, grease, oil, dirt, curing agents, wax, foreign substances and disaggregated substances by BLASTRAC or by other approved methods. Compression resistance of concrete must be at least 25 MPa (3625 lbs/inch²) after 28 days and traction resistance must be at least 1,5 MPa (218 lbs/inch²).

Mix

Mix each component separately. Pour component B into component A using the proper mixing ratio. Mix both components for at least 3 minutes using a drill at low revolution (300 to 450 rpm) to reduce trapping of air. While mixing, scrape bottom and walls of container at least once to ensure a homogeneous mix. Only prepare quantity that may be applied during pot life.

Application

Apply mixed product on the prepared surface tightly (thin film) using a rubber rake and pass a roller to obtain a uniform coating. Avoid creating puddles.

Overlaps

Subsequent overlaps must be applied when primer is still wet or tacky. If primer has dried, reprime. Porous substrates may require multiple priming.

Suggestion

Sprinkle the primed area lightly with aggregate to provide better footing.

Cleaning

Clean all tools and materials with SCT-1000. Once product has hardened, it may only be removed through mechanical means.

Restrictions

- Minimum/Maximum temperature of substrate: 10 °C / 30 °C (50 °F / 86 °F).
- Maximum relative humidity during application and curing : 85 %.
- Substrate temperature must be above 3 °C (5.5 °F) at dew point measured.
- Humidity content of substrate must be < 4 % when coating is applied.
- Do not apply on porous surfaces where a transfer of humidity may occur during application.
- Avoid exterior use on substrates at ground level.
- Protect from humidity, condensation and contact with water during the 24 hour initial curing period.
- Surface may discolor in areas exposed to regular ultraviolet light.

PHYSICAL PROPERTIES

	Part A	Part B	Mixed
Colour	Upon request	Clear	Upon request
Viscosity (cps) @ 25°C	300 - 500	1200 - 1400	800 - 1000
Solids by weight (%)	100	100	100
Solids by volume (%)	100	100	100
Thinner	SCT -0001	SCT -0001	SCT -0001
Density (kg/L)	1.05	1.13	–
Mixing ratio by volume	2	1	–
Mixing ratio by weight	100	54	–
Pot life (454 g @ 25°C)	–	–	30 - 40 minutes
Recoat window	–	–	6 - 10 hours
Mileage per gallon* (6 - 8 mils thickness)	–	–	300- 400 ft ²
Recommended thickness: Top coat	–	–	8 - 12 mls
Pedestrian traffic	–	–	12 - 24 hours
Normal traffic	–	–	24 - 48 hours
Heavy equipment traffic	–	–	> 48 hours
Storage	12 months	12 months	–

*Please note that the indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same mileage.

MECHANICAL PROPERTIES

	Test	Result
Tensile strength (psi)	ASTM D638	6500 - 7600
Elongation (%)	ASTM D638	4 - 6
Bond strength (psi)	ASTM D4541	>300 (Substrate ruptures)
Hardness (Shore D)	ASTM D2240	75 - 85
Abrasive resistance (CS17 / 1000 cycles / 1000 g)	ASTM D4060	0.05
Water absorption (%)	ASTM D570	0.2

HEALTH AND SAFETY

In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult with a doctor. For respiratory problems, transport victim to fresh air. Remove contaminated clothes and clean before reuse. For more information, consult the material safety data sheet.

Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with may cause serious burns. Avoid eye contact. Avoid breathing vapors release from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Predict suitable ventilation. Consult the material safety data sheet for further information.

IMPORTANT NOTICE

All statements, recommendations and technical information contained in this document are accurate to the best knowledge of Epoxy Solutions. The data relates only to the specific material designated herein. It may not be valid if used in combination with any other materials. It is the users' responsibility to verify suitability of this information for their own particular use, and to test this product before use. Epoxy Solutions assumes no legal responsibility for use upon these data. Epoxy Solutions assumes no legal responsibility for any direct, indirect, consequential, economic, or any other damage except to replace the product or refund the purchase price as set out in the purchase agreement.