# TECHNICAL BULLETIN

## FSC-ASPARTIC CLEAR COAT

SINGLE COMPONENT POLYASPARTIC

### PRODUCT DESCRIPTION AND SYSTEM INFORMATION

**FSC-ASPARTIC: S**ingle component Polyaspartic coating, provides application working time of 50-60 minutes, versatility for interior or exterior use with outstanding durability and resistance to chemicals, abrasion, and damaging UV fading. Used as a one product complete system for resinous floors, including broadcast color flake, and metallic pigment providing an easier installation process compared to other products.

### PRINCIPAL CHARACTERISTICS

- Outstanding weather resistance with excellent color and gloss retention
- Application down to 35°F (2°C)
- 75% solids, rapid cure
- Tough, durable and abrasion resistant

### TYPICAL USES

- Garage floors
- Industrial and commercial warehouses / office facilities
- Production shops, decks, and other areas with UV exposure

### COLOR AND GLOSS LEVEL

- Clear: Gloss Finish | Pigment color packs available

### NOTES

- Shelf life is for unopened containers, 12 months stored at 72°F (22°C)
- Drying Time at 72°F (22°C): Light Foot Traffic – 6 hours | Heavy Traffic – 48 hours | Full Cure – 5 days
- Minimum recoat at 72°F (22°C): 6 hours / Maximum recoat at 72°F (22°C): 24 hours
    - *Recoating after maximum recoat hours requires surface abrasion to ensure proper adhesion*
- Proper surface preparation required, refer to the product application guide for additional information

| DATA FOR PRODUCT USE FSC-ASPARTIC | SINGLE COMPONENT POLYASPARTIC - BASIC DATA @ 72° F (22° C) |
|---|---|
| Number of components | 1 (single component) |
| Volume solids | 75% + -2% |
| VOC (Supplied) | 235 + - 5% |
| Recommended dry film thickness | Up to 12 mils |
| Theoretical spreading rate | 250 sq/ft per gal (4 Mils – smooth substrate)<br>150-180 (8-10 Mils – Over decorative chips) |
| Shelf life | 1 year stored @ 72°F (22°C) |

### RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Coating performance is proportional to the degree of surface preparation. Inadequate surface preparation can cause adhesion failure. Refer to the application instructions for application and curing procedures. All previous coats must be dry and free of contaminants. Adhere to all minimum and maximum topcoat times for specific primers and intermediate coats. Aged coatings require abrading prior to applying the product. A test patch over unknown coatings is recommended.

### ATMOSPHERIC EXPOSURE CONDITIONS

- Ambient temperature during application and curing should be between 35°F (2°C) and 95°F (35°C).
- Material temperature during application and curing should be between 35°F (2°C) and 95°F (35°C).
- Relative humidity must be between 20% and 85% during application and curing

### PRECAUTIONS

Moisture vapor emission in the concrete (MVE) to be less than 3-pounds per 1000 sq. ft. for 24-hour period. Calcium Chloride test ASTM F1869-98 is recommended. FSC-ASPARTIC should not be applied in direct sunlight or on elevated surface temperatures. Not recommended for outdoor applications with potential moisture vapor drive concerns.

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### CONCRETE

- Remove all surface contaminants such as oil, grease, and embedded chemicals
- Abrade the surface per ASTM D4259 to remove all chalk and surface glaze or laitance
- The coating must have adequate absorption into the concrete
- If needed, FSC-ASPARTIC can be used as a basecoat primer for a 3-coat system
- Refer to data sheet for further surface preparation details

### SUBSTRATE TEMPERATURE

- Substrate temperature during application should be between 35°F (2°C) and 95°F (35°C)
- Substrate temperature during application should be at least 5°F (3°C) above dew point

### SYSTEM SPECIFICATION

- To be used as a topcoat, and basecoat for broadcast flooring decorative flakes, quartz aggregate and metallic pigments.
- Compatible over epoxy systems.
- Can also be used as a topcoat on a properly prepared bare concrete floor.
- Review and understand the application guide prior to applying the FSC-ASPARTIC.

### ADDING FSC-ASPARTIC PIGMENTS TO THE CLEAR COAT

- Pigment packs are in pre-measured container for ease of use. To pigment 1 gallon, add the contents of 1 quart container into the clear.
- Blend in by hand with a standard pant stick or low speed mechanical mixer, be careful to not induce air into the coating.

| TECHNICAL DATA | PHYSICAL PROPERTIES |
|---|---|
| Pot life | No pot-life issues (Single component) |
| Working time | 50-60 minutes |
| Curing (each coat) | 2-6 hours |
| Tack free time | 2-3 hours |
| Light foot traffic | 6-hours |
| Heavy traffic | 48-hours |
| Vehicle parking | 72-hours |
| Full cure | 5-days |
| Total Solid Content | 75% (+ -) 2% |
| Viscosity | 400-800 cps |
| Hardness ASTM D-2240 | 70-75D |
| Tensile strength ASTM D-412 | 4800 psi |
| Abrasion ASTM 4060-90 | 12.0 mg loss 1000gm / 1000 cycles. |

### FSC-ASPARTIC SINGLE COMPONENT POLYASPARTIC

- Outstanding hardness, excellent hot tire and staining resistance.
- Excellent durability - provides a long service life.
- May be used as a topcoat, basecoat or a stand-alone product.
- Easy application, “single component product”.
- High strength, tenacious adhesion.
- Abrasion resistant and scratch resistant.
- No mixing errors, single component product.
- Fast dry time, tack free in 2-3 hours.
- No pot-life issue, the product won’t begin to dry until it is on the surface.
- Long working time 40-50 minutes, 2.5 x longer than standard Polyaspartic coatings.
- Superior self-leveling capabilities, won’t leave roller marks.
- UV color stable, won’t yellow or fade.
- Compatible with Epoxy, can be used as a topcoat over Epoxy systems.

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**CHEMICAL RESISTANCE ASTM D543 / ISO 4599 UL**

This test covers evaluation of coating materials for resistance to chemical reagents, simulating performance in potential end use environments.

| CHEMICAL | EFFECT |
|---|---|
| Sulfuric Acid 5% | G |
| Sulfuric Acid 10% | F |
| Citric Acid | E |
| Isopropyl Alcohol 99% | G |
| Aviation Fuel | G |
| Diesel Fuel | G |
| Gasoline | E |
| Ammonia | E |
| Sodium Hydroxide | E |
| Sodium Hypo Chlorite 5% | E |
| Hydraulic Fluid | E |
| Brake Fluid | E |
| Sulfuric Acid (Battery, Acid | F |
| Dyes & Colorants | S |

**RATING:**

E= No Effect

G= Limited Effect

F= Moderate Effect

P= Unsatisfactory

S= Staining

This ASTM testing standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this information to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use. Testing based on 24-hour full immersion to simulate the typical application environment and conditions. All testing is based on non-pigmented material

**TIRE STAINING AND HOT TIRE PICKUP (ASTM D2203 / ASTM WK14355)**

High performance automotive tires contain additives that can leach out of the rubber and stain floor coatings. **FSC-ASPARTIC** Polyaspartic coating is built on today's most innovative technology and exhibit excellent resistance to tire staining and hot tire pick up.

**NOTICE**

Flexstone technical advice, whether given verbally or in writing, is given in good faith but without warranty. It is the customer's obligation to test the products supplied by us for their suitability for the intended application. The application, use and processing of the products are beyond our control, and are the customer's responsibility. Should liability be established for any damage, it will be limited to the value of the goods delivered by us and used by the customer. It is our relentless focus to provide products of consistent quality.