



**SYSTEMS INCORPORATED**

# FloMix Technical Specification Sheet

**PRODUCT DESCRIPTION:** FloMix combines polymers with a specially-treated aggregate to create a rapid-setting, easy-to-apply, long-lasting and durable asphalt repair. Repairs can be done in minutes, using only 4 simple steps. Originally developed for the military as a rapid runway repair material, FloMix is an inexpensive alternative to traditional asphalt restoration procedures. This innovative, patent-pending process provides a modern solution for an age-old problem. FloMix repairs are guaranteed to perform.

**Table 1. TX DMS-6170 Type I Physical Requirements**

| Test                          | Age at test | Method       | Requirement                          | Result    |
|-------------------------------|-------------|--------------|--------------------------------------|-----------|
| Gel time, min.                | -           | Tex-614-J    | 5 to 60 min.                         | 9 min.    |
| Wet bond strength, psi        | 7 days      | Tex-618-J    | > 100 psi                            | 176       |
| Compressive strength, psi     | 24 hrs.     | ASTM C579, B | > 200 psi                            | 1,710 psi |
|                               | 7 days      |              | -                                    | 1,820 psi |
|                               | 28 days     |              | -                                    | 2,140 psi |
| Compressive stress at 0.1 in. | 7 days      | Tex-618-J    | > 200 psi                            | 733 psi   |
| Resilience, %                 | 7 days      | Tex-618-J    | > 90 %                               | 97.2%*    |
|                               |             |              |                                      | 82.0%     |
| Thermal compatibility         | 7 days      | ASTM C884    | No delam. or cracking after 9 cycles | Pass      |

\* from earlier batch of material

## Physical/Chemical Characteristics

|                                 |  |  |                   |
|---------------------------------|--|--|-------------------|
| <b>Boiling Point:</b>           | 428° F, 536° F   | <b>Specific Gravity: (H<sub>2</sub>O)=1)</b> | 1.084, 0.942-.948 |
| <b>Vapor Pressure (mm Hg.):</b> | NE   | <b>Melting Point:</b>                        | N/A               |
| <b>Vapor Density: (AIR=1)</b>   | 9.9  | <b>Evaporation Rate: (Butyl Acetate=1)</b>   | NE                |
| <b>Solubility in Water:</b>     | Insoluble, reacts with water to form carbon dioxide gas. |  |                   |
| <b>Appearance and Odor:</b>     | Pale amber, odorless liquid                              |  |                   |
| <b>Reactivity:</b>              | Stable, under normal, recommended storage conditions.    |  |                   |
| <b>Conditions to avoid:</b>     | Open flame and storage temperatures above 120°F.         |  |                   |

**PACKAGING:** Roklin FloMix is available in a 5 gallon kit which made up of equal volume "A" and "B" polymer, 30 pounds of a 2-12 and 60 mesh blend of treated aggregates and a 12 pound bag of treated 2-12 topping sand. The entire contents come in a 5 gallon bucket which the material is mixed in with a 1/2 HP drill. Shelf life is 12 months in unopened containers stored indoors. Bulk distribution is also available with the Roklin Strong Arm Polymer and Aggregate dispensing system.

**Table 1. CT 551 Results**

| Material Property Tested   | Age at test | Result |
|----------------------------|-------------|--------|
| Compressive strength (MPa) | 1 hr.*      | 4.25   |
|                            | 3 hr.*      | 7.00   |
|                            | 6 hr.*      | 7.45   |
|                            | 24 hr.      | 11.80  |
|                            | 7 day       | 12.55  |
| Flexural strength (MPa)    | 24 hr.      | 5.10   |
|                            | 28 day      | 6.95   |
| Bond strength (MPa)        | 24 hr.      | 1.40   |
|                            | 28 day      | 2.45   |
| Modulus (MPa)              | 24 hr.      | 84.6   |
|                            | 28 day      | 163.0  |
| Specific gravity           | -           | 1.84   |
| Absorption                 | -           | 0.33%  |

\* stress at 10 mm displacement

A **FloMix** concrete repair kit includes coated sand, bottles of "A" and "B" liquids, and a high-traction topping. **FloMix** is mixed in its own bucket using an electric hand drill and a mixer. It reacts quickly after mixing, yet remains workable (with a lute, squeegee or trowel) for several minutes prior to thickening and setting. Repairs are completed in minutes and cure quickly with no shrinkage.

**FloMix** is virtually unaffected by the environment, with durability surpassing other repairs. It is waterproof, non-flammable, and unaffected by gasoline, diesel, motor oils, jet fuel, anti-freeze or de-icing fluids.

**FloMix** is also safe. The liquid polymers are odorless and non-flammable, with no fumes, no caustics, no acids, no solvents, no oxidizers, no flammables, no dust, and no heating. However, protective eyewear and gloves are required to prevent skin contact and avoid sensitization to the liquid polymer.

**DIRECTIONS:** FloMix can be applied in 4 simple steps:-

**CLEAN SURFACE** Apply to stable, clean, uncoated, dry surfaces.

**PREPARE FLOMIX** Mix polymers and sand, using a simple pail mixer and heavy-duty drill.

**APPLY FLOMIX** Pour and trowel FloMix over deteriorated concrete.

**ADD TOPPING SAND** and after FloMix sets up open to traffic.



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