# MICRO-PAVE AVIATION GRADE ASPHALT EMULSION SEALER

Contains Hot Blended Rubber Similar to that Specified By FAA Guidelines For Airfield Maintenance

## **GENERAL DESCRIPTION**

STAR MICRO-PAVE AVIATOR<sup>®</sup> is designed as a premium grade, Asphalt Emulsion (water based) sealcoating that is superior to other conventional mix design sealers. STAR MICRO-PAVE AVIATOR<sup>®</sup>, as supplied, contains the necessary amount of rubber similar to that specified by the FAA for airfield maintenance. The rubber is "Hot Blended" during the manufacturing process to ensure it is properly fused into the asphalt binder. Cold mixing simply does not achieve the same level of bonding to the asphalt binder particles. The superiority of STAR MICRO-PAVE AVIATOR<sup>®</sup> has been well established in the field for nearly two decades. STAR MICRO-PAVE AVIATOR<sup>®</sup> has toughness and flexibility at all temperatures as well as resistance to many chemicals and de-icing salts. The combination of state-of-the-art technology in manufacturing and raw material selection translates into the following:

# **OUTSTANDING PROPERTIES**

- A Unique Product No other product on the market has employed this unconventional, but highly effective manufacturing approach, yielding far superior performance than conventional mix designs.
- Excellent Durability STAR MICRO-PAVE AVIATOR<sup>®</sup> is know for its outstanding performance and consistency, properties that are demanded by engineers.
- Superior Flexibility Ability to bridge minor surface (non-working) cracks in the pavement to eliminate water penetration and extend the life of runway, tarmac and apron surfaces.
- Dries to an appealing dark charcoal color that enhances the visibility of airfield markings. Snow removal becomes easier and runway markings last longer.
- Allows Mix Design Consistency Rubber is the most critical component in FAA mix designs. Factory blending of the rubber in STAR MICRO-PAVE AVIATOR<sup>®</sup> assures the accuracy of the mix.
- Non-Irritating, Non-Toxic and Nearly Odorless No noxious fumes or skin irritation during application. No solvent fumes, easy to handle, store and clean up. STAR MICRO-PAVE SUPREME<sup>®</sup> is a low VOC product.

## **RECOMMENDED USES**

STAR MICRO-PAVE AVIATOR® is recommended for all airfield asphalt pavement surfaces including runways taxiways fueling areas a pronsand vehicle parking lots.

# **MIX DESIGN RECOMMENDATIONS**

**Important** - Consult FAA Specifications P-623 for mix design and application rate. All mix designs must include clean, quartz, angular sand. The following is a commonly recommended mix design.

	<u>US</u>	<u>METRIC</u>
STAR MICRO-PAVE AVIATOR®	100 Gal.	100 Liters
Water (Clean, Potable)	20 Gal. Max	20 Liters Max
Sand/Aggregate 50-70 AFS*	400-600 Lbs.	48-72 Kg.

\* Crushed slag (i.e. Black Beauty) may be used as the aggregate, provided it is clean, angular and within 50-70 AFS gradation.

## **APPLICATION RATES**

Must be applied to structurally sound pavements. The application rates shall be dictated by the traffic pattern and usage. Consult FAA Specifications P-623

#### 1 For Low to Medium Traffic Areas Apply Two (2) Coats:

- a) Concentrated Sealer the total coverage rate of 0.18 0.20 Gal./Sq. Yd. or 45 50 Sq. Ft./Gal. (1.1 1.22 Sq. Meter/Liter).
- b) Mixed Sealer 0.26 0.29 Gal./Sq. Yd. or 31 35 Sq. Ft./Gal. (0.76 -0.86 Sq. Meter/Liter).

#### 2 For High Traffic Areas Apply Three (3) Coats:

a) **Concentrated Sealer** - the total coverage rate of 0.25 - 0.28 Gal./Sq. Yd. or 32 - 36 Sq. Ft./Gal. (0.8 - 0.9 Sq. Meter/Liter).

b) Mixed Sealer - 0.36 - 0.40 Gal./Sq. Yd. or 23 - 25 Sq. Ft./Gal. (0.56 - 0.61 Sq. Meter/Liter).

# **IMPORTANT WEATHER LIMITATIONS**

- Surface and air temperature should be a min. 50° F (10° C) and rising.
- Do not apply on rainy, foggy, or extremely humid days, or when rain is in the forecast within 24 hours.
- If the pavement temperature is over 100° (38°C) dampen the pavement with a fine mist of water to facilitate even spreading. Do not allow water to puddle on the surface.

# **APPLICATION TOOLS**

- Use conventional tools; Brush, rubber squeegee or spray rig.
- Clean up with Water. Do not discard washings in the bodies of water or down sewer drains.
- Dried sealer on tools Wire brushing, scarping and peeling.
- Keep stored containers sealed tightly.

## **CURING TIME**

Cure time will vary according to temperature and humidity at the time of application. Insufficiently cured films wear prematurely. Lower temperatures, high humidity and lack of direct sunlight will prolong the cure time. Higher temperatures, lower humidity and direct sunlight accelerate the cure process. If a second coat is to be applied, allow the first coat to dry sufficiently to withstand light vehicular and pedestrian traffic without damaging or scuffing the coating. After the application of the last coat, allow the coating to cure at least 20-24 hours under good drying conditions.

## **SPECIAL INSTRUCTIONS**

Apply only on unsealed asphalt or surfaces previously sealed with either Asphalt Emulsion or Refined Tar based sealers. Do not apply over surfaces sealed with gilsonite and other solvent based seal coatings. New asphalt pavements must be allowed to cure at least 90 days in hot weather. Perform a water break free test to confirm that the surface oils have dissipated. Not recommended for steeply inclined surfaces, as they may become slippery when wet.

## **CAUTIONS**

#### KEEP FROM FREEZING / KEEP OUT OF REACH OF CHILDREN

Wear gloves and protective clothing. In case of contact, flush skin or eyes immediately with fresh water. If the product gets in the mouth or eyes see a physician immediately. Consult a Safety Data Sheet for details.

## **PACKAGING & AVAILABILITY**

5-Gallon plastic pails, 55-gallon drums & 275-gallon plastic totes, and bulk at all STAR plant locations.

WARRANTY & DISCLAIMER Using additives not manufactured by S.T.A.R., Inc. may result in inconsistent or undesired results. STAR's additives are designed specifically for use with the RTS and AE sealcoatings our Member Plants produce. The suggestions and related data contained on these pages are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use of our products are beyond our control. S.T.A.R., Inc. will not be responsible for any indirect or consequential damages. We will either replace or refund the purchase price in the event the products are proved to be defective, at our option.



WORLD-WIDE HEADQUARTERS 1150 Milepost Drive, Columbus, OH 43228 +1-800-759-1912 • www.starseal.com