

SUPER FILTER COAT



AIR FILTER ADHESIVE

RP Super Filter Coat is a water soluble air filter adhesive that can be applied to RP aluminum air filters or other viscous impingement filters. RP air filters are constructed of layers of silt and expanded aluminum and can be used in a wide variety of filter applications. Any viscous impingement filter coated with this exclusive adhesive has an increase in efficiency and dust holding capacity.

Constant adsorption

Super Filter Coat adhesive has a unique physical structure. It is a low viscosity oil held in a gel-like structure that can be likened to a network or series of compartments formed by a jack-straw arrangement of fibers. This low viscosity oil constantly absorbs dirt particles trapped on the surface of the filter. As particles are trapped, they recede or are absorbed into the interior of the adhesive, and through the circulation of the low viscosity oil a renewed impurity absorbing surface is established. This is a continuous "flypaper" action which provides a constant impurity absorbing surface layer.

High viscosity

Super Filter Coat adhesive in the concentrate form has a viscosity similar to heavy grease. Because of its high viscosity, Super Filter Coat adhesive will not migrate at temperatures up to 150°F.

Suggested adhesive loads per filter thickness

The amount of adhesive that should be applied to various size filters to achieve optimum filter performance will vary. The type of impurities that are filtered will have an effect as well as the size and geometry of filter media. Also, the volume and velocity of air moving through the filters must be considered.

Because of the many variables involved, the following table containing information on adhesive concentrations for a 20" x 20" panel type aluminum air filter should only be considered as a guide.

| FILTER TYPE | FILTER DIMENSION | FILTER THICKNESS | *ADHESIVE CONCENTRATION | NO. OF FILTERS COATED WITH #412 (APPROX.) |
|-------------|------------------|------------------|-------------------------|---|
| Panel | 20 in. x 20 in. | 2 in. | 10 grm/sq.ft. | 6 |
| Panel | 20 in. x 20 in. | 1 in. | 3 grm/sq.ft. | 20 |
| Panel | 20 in. x 20 in. | ½ in. | 3 grm/sq.ft. | 20 |

*454 grms = 1#

Cleanability

For rapid and efficient cleaning, Super Filter Coat adhesive is easily washable in water. Dust, dirt, and other impurities are quickly washed away and the filter is restored to its original luster. After recoating with adhesive, filter is again ready for use.

Application methods

Adhesive may be applied by dipping or spraying

a. Dipping

For maximum amounts of adhesive and optimum filter performance, dipping of the filter in adhesive is generally recommended. After dipping, the filter can be drained either horizontally or vertically. However, horizontally draining is preferred to insure a more uniform distribution of the adhesive over the face of the filter.

With Super Filter Coat, centrifuging is not required. Because of the slight viscosity when applied and grease-like consistency after application, the necessity of a centrifuge is eliminated.

b. Spraying

Super Filter Coat may also be applied by spraying with a standard garden or paint spray gun. To obtain optimum filter performance and effective concentration of adhesive, the filter should be sprayed on both intake and exhaust sides. Filters of ½" thickness or under require adhesive spraying on one side only.

Mixing instructions

Use a clean, deep container having a capacity greater than the amount of the finished emulsion. Fill container with the proper volume of water, depending on the concentration required. (Example: for optimum performance of a 2-inch filter, a mixture of one part adhesive and two parts water (1:2) can be used when filters are drained horizontally. If drained vertically, a mixture of one part adhesive to one part water can be used.) This ratio of adhesive to water can be varied depending on filter thickness and filtration application. Use soft water at 50 to 60°F. ADD ADHESIVE SLOWLY TO WATER, preferably mixing with a high speed propeller type mixer.

Storage

a. Concentrate

Extreme temperatures, both hot and cold, should be avoided. Storage at room temperatures between 60°F and 95°F are desirable. Lids of adhesive drums or pails should be sealed to avoid contamination.

b. Emulsions (ready-to-use)

Protect the emulsion from both freezing and excessive heat. Room temperatures between 60° and 90° are desirable. However, no emulsion is 100% stable and after standing may require a small amount of mixing or stirring before use. Lids of adhesive drums or pails should be tightly sealed to avoid evaporation and contamination.

Product Information

| STOCK NO. | USE | SIZE | STD. PKG. | SHIPPING WEIGHT (LBS.) PER ITEM |
|-----------|------------------|--------|-----------|---------------------------------|
| 412 | Handi-Koter (a) | 10 oz. | 20 | .8 |
| 421 | Ready-to-use (b) | 5 gal. | 1 | 43 |
| 417 | Concentrate (c) | 5 gal. | 1 | 43 |

- (a) Contains 45% adhesive, 55% water by weight.
(b) Contains 60% adhesive, 40% water by weight.
(c) Contains 100% adhesive.

Technical data

Fire Point - Approximately 408°F.

Flash Point - Above 340° (Cleveland open cup).

Viscosity - Grease-like consistency (after application).

Migration - Highly thixotropic; no tendency to migrate, bleed or drip at temperatures below 150°F.

Wicking - Excellent wicking properties.

Washability - Dust and lint laden adhesive is self-emulsifiable in a stream of water.

Corrosive Resistant - Contains an inhibitor which protects filter from corrosion.

Certifications

1. Super Filter Coat Adhesive meets requirements of federal specification F-F-300B.
2. SFC meets requirements of sections of the National Fire Protection Association Standards 90A and 90B applicable to filter adhesive.
3. SFC meets Canadian Standards Association requirements for use on viscous impingement filters in warm air furnaces.

Cleaning filters

Remove excess dust and lint by rapping dirty side down or by vacuuming. Clean filters by flushing with a stream of water from both the exhaust and intake side. If filters are extremely dirty or linted, fill container with warm water and mild detergent, and “swish” filters in water. Rinse clean and allow to dry before recoating with RP Super Filter Coat.

Precautions

Never subject adhesive-diluted or concentrated-to heat. Do not contaminate adhesive with additional additives. Always add adhesive to water when mixing. Mix with water only.