



DESCRIPTION:

Flame Control No. 180 is an intumescent type, fire resistant coating. The fire protective characteristics of No. 180 are equal to No. 173. When attacked by fire, the coating puffs up (intumesces) and forms a thick dense fire barrier, thus affording maximum burn through (fire) protection. This foam layer retards the penetration of heat to the substrate, thus insulating the surface. Aluminum panels 0.050 inches thick coated with No. 173 to a dry film thickness of 0.033 inches, and spot repaired with No. 180, have successfully passed the standard FAA 2000°F fire test, while panels were being subjected to simulated engine take off and operating conditions. The coated panels completed the FAA 15 minute requirement, with approximately a 50% time safety margin (in excess of 22 minutes before failure).

RECOMMENDED USES:

It was developed primarily for the aircraft industries for use as an in-field touch-up coating, on surfaces which have previously been coated with Flame Control No. 173 Intumescent Fire Resistant Coating Compound.

PRODUCT SPECIFICATION:

- Fineness of Grind**
(ASTM D 1210). 1 N. S., maximum
- Solids, non-volatile**
(Fed test method STD. 141, method 4041.1). 72% minimum
- Specific Gravity**
(ASTM D 1475) 1.35 ± 0.03
- Viscosity**
(ASTM D 562, procedure "A")
. Thixotropic
- Certificate of Test**
A certificate of test will be forwarded upon Request for each lot of material supplied

CHARACTERISTICS:

- Colors** White
Special colors are available upon request
- V.O.C.** 2.84 lbs/gal (340 g/L)
- Drying Time @ 77°F (25°C) & 50%**
- R.H.** see application section
- Type of Cure** Coalescence/Heat cure
- Flash Point.** 40°F (4.4°C)
(Pensky-Martens Closed Cup)
- Reducer/Cleaner** No. 173 Reducer
- Shelf Life** 1 year (unopened)
- Packaging** 1 & 5 gal. containers
- Weight/Gal** 11.3 ± 0.2 lbs.
- Shipping Weight.** 4 gals. - 48 lbs.
5 gals. - 60 lbs.
- Application** Brush

PRECAUTIONS:

WARNING! FLAMMABLE LIQUID & VAPOR: CONTAINS XYLENE & PETROLEUM DISTILLATES

VAPOR HARMFUL. MAY AFFECT THE BRAIN OR NERVOUS SYSTEM CAUSING DIZZINESS, HEADACHE OR NAUSEA. CAUSES EYE, SKIN, NOSE AND THROAT IRRITATION. NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal. Keep away from heat, sparks and flame. VAPORS MAY CAUSE FLASH FIRE. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Prevent build-up of vapors by opening all windows and doors to achieve cross-ventilation.

USE ONLY WITH ADEQUATE VENTILATION. Do not breathe vapors or spray mist. Ensure fresh air entry during application and drying. If you experience eye watering, headache or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear an appropriate, properly fitted respirator (NIOSH/MSHA approved) during and after application. Follow respirator manufacturer's directions for respirator use. Close container after each use.

Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

FIRST AID: If you experience difficulty in breathing, leave the area to obtain fresh air. If continued difficulty is experienced, get medical assistance immediately. In case of eye contact, flush immediately with plenty of water for at least 15 minutes and get medical attention; for skin, wash thoroughly with soap and water. If swallowed, get medical attention immediately. If spilled, contain spilled material and remove with inert absorbent. Dispose of contaminated absorbent, container and unused contents in accordance with local, state and federal regulations.

Read MSDS before opening containers.

KEEP OUT OF REACH OF CHILDREN

SURFACE PREPARTION:

When specified, follow applicable aircraft painting specifications and procedures; if not specified, proceed as follows. To assure proper adhesion, it is of the utmost importance that the surfaces be CLEAN, free of all oils, fuels, grease, and other foreign matter. Remove all loose and poorly bonded coating from the areas to be repaired, thoroughly clean all metal surfaces with Flame Control No. 173 Reducer.

After the surfaces have been cleaned (free of all old intumescent coating and foreign matter), allow the surface to air dry for a minimum of one hour before proceeding with the application of No. 180.

NOTE: "Important". All wiping cloths used for surface cleaning must be free of oil and other contaminating residue.



APPLICATION:

When specified, follow applicable aircraft painting specifications and procedures; if not specified, proceed as follows. Brush apply one full bodied coat of No. 180 (approximately 25 mils wet film thickness), allow the coating to air dry one to two hours, followed by 'forced drying'* for approximately three hours or until hard dried. Allow the surface to cool, then apply another full-bodied coat, followed by air and 'forced drying'* as specified above.

The total minimum dry film thickness must be no less than 35 mils (0.035 inches) or as specified in the applicable aircraft service manual. If the dry film thickness is less than the required film thickness, then additional coat(s) must be applied, and dried as specified above until the minimum mil film thickness is obtained.

After the required film thickness has been obtained and the coating is thoroughly dry, apply one thin brush coat of Flame Control No. 190 white polyurethane overcoat or other overcoat as may be specified in the aircraft service manual. Air-dry ½ hour, followed by 'forced drying'* for one hour. Apply a second coat of overcoat, followed by an additional drying cycle.

*For forced drying, we suggest the use of small electric heaters with fan, electric heat guns or infrared lamps.

As we cannot anticipate all conditions under which this information and our products, or the products of other manufacturers in combination with our products, may be used, we accept no responsibility for results obtained by the application of this information or the safety or suitability of our products, either alone or in combination with other products. Users are advised to make their own tests to determine the safety and suitability of each such product or product combination for their own purposes. We sell the products without warranty or guarantee, and buyers and users assume all responsibility and liability for loss or damage from the handling and use of our products, whether used alone or in combination with other products.