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3M[™] Fire Barrier Rated Foam FIP 1-Step Frequently Asked Questions July 30, 2013

- 1. **Accidental spills.** What do you do if product spills out of the cartridge before it is mixed? Refer to MSDS section 6.
- Adhesion. What does it adhere to? Bonds to most construction surfaces including concrete, metal, wood, plastic and cable jacketing.
- 3. Application temperatures. What are the application temperatures? Application temperature range is 50° to 120°F (10° to 49°C). Ideal application temperature range is 65° to 85°F (18° to 30°C). When the material temperature is below 50F damage to both the dispensing gun and the cartridge may occur.
- Asbestos. <u>Is there asbestos in FIP 1-Step?</u> FIP 1-Step is formulated without asbestos.
- 5. **ASTM E 84.** What is the ASTM E 84 rating of FIP 1-Step? Flame spread index is 10 and the smoke developed index is 50.
- 6. **Backer Material.** Do I need to use a backer material with FIP 1-Step? No, FIP 1-Step was designed to be used without backer material such as mineral wool or backer rod.
- 7. **Battery.** How long does a battery last? At room temperature a fully charged battery will dispense at minimum 50 cartridges (approximately 100 minutes).
- 8. **Case Configuration.** How many cartridges of FIP 1-Step come in one case? There are six cartridges and 12 nozzles in one case.
- 9. Clean up. How do you clean up excess material that is on the floor, wall, caulk guns? Let FIP 1-Step cure and then scrape off surface.
- 10. **Color.** What color is the foam? It is maroon in color.
- 11. **Compatibility.** Are there compatibility issues? There are no known compatibility issues with all penetrants and surrounding substrates that are in FIP 1-Step UL systems.
- 12. **Composition.** What is FIP 1-Step made of? FIP 1-Step is a polyurethane based composition using a Part A and Part B component. Refer to MSDS section 2.
- Cure time. What is the cure time? Skin forming or tack-free time is about one minute. Full cure depends upon ambient conditions and volume of foam. Typical full cure at 75°F (24°C) is approximately 2 minutes.
- 14. **Dispensing Tools.** Can you use a "regular" caulk gun with this product? No, a 5:1 ratio, co-axial gun must be used.

- 15. **Dispensing.** Can you dispense ½ tube, stop for a while, put another mixing nozzle on and then dispense it later? Yes but follow instruction for installing before initial application.
- 16. **Dispensing.** How long do I have while dispensing before product turns to a solid in the mixing nozzle? At 75°F, if you stop dispensing the product before the cartridge is finished, you have approximately 30 to 45 seconds before you will need to replace the mixing nozzle with a new one. Do not try to force the dispensing of material in a clogged cartridge. Damage to both the dispensing gun and the cartridge may occur.
- 17. **Dispense Time.** How long does it take to dispense 1 cartridge of FIP 1-Step? It takes approximately two minutes to fully dispense 1 cartridge of FIP 1-Step.
- Disposal. How do you dispose of the excess material? See MSDS section 13 for disposal recommendation
- 19. **Extension tubes.** Can an extension tube be added to the mixing nozzle and if so, how long of a tube can I use? When dispensing at room temperature, an extension tube up to 24" in length may be added to the mixing nozzle.
- 20. **FM.** Does it have FM approval? At this time there is no testing through FM for FIP 1-Step.
- 21. **F-Rating.** What is the F Rating? See specific systems for details. FIP 1-Step has achieved up to 2 hour F ratings. 3 hour testing is planned for future release.
- 22. Freeze thaw. Can FIP 1-Step freeze? It is not recommended to freeze FIP 1-Step during storage. FIP 1-Step has been tested through several freeze thaw cycles with internal 3M testing. If freezing does occur, allow time for the material to fully return to room temperature. Do not try to dispense material while only partially thawed. Damage to both the dispensing gun and the cartridge may occur.
- 23. **Gloves.** Do you need to wear gloves when installing? See MSDS section 8.2.2 for glove recommendation.
- 24. **Halogens.** Are there halogens in FIP 1-Step? FIP 1-Step is formulated without halogens.
- 25. **LEED.** <u>Does it meet LEED?</u> FIP 1-Step meets the intent of LEED® VOC environmental quality requirements.
- 26. **L-Rating.** What is the L Rating? See specific systems for details. FIP 1-Step has achieved up to < 1 cfm/sq ft.



- 27. **Moisture.** Can FIP 1-Step be applied to wet surfaces or surfaces that have frost? The surface of the opening and any penetrating items should be cleaned and dried to allow for the proper adhesion of the FIP 1-Step. Ensure that the surface of the substrates is not wet and is free from dust, debris and frost.
- 28. **Mold.** Has FIP 1-Step been tested to ASTM G 21 for mold? FIP 1-Step has not been tested for mold to this standard but future testing is planned.
- 29. Movement. What is the movement capability? FIP 1-Step has not been tested for movement capabilities. When cured, FIP 1-Step has a soft spongy consistency. It has not been tested for movement in a construction joint nor has it been tested for through penetration pipe vibration since there is no test standard for this application.
- 30. **Nozzles.** How many nozzles come in one case of FIP 1-Step? There are 12 nozzles and six cartridges of FIP 1-Step in one case.
- 31. Nozzles. What is the best way to remove the mixer out of a nozzle so that it can be used as an extension? Using a screwdriver, enter from tip of the nozzle and push the mixer out of the larger end.
- 32. **Nozzles.** Can extra nozzles be purchased? Not at this time.
- 33. **One Side Applications.** Can I install FIP 1-Step from one side of the wall? Yes, you must follow the depth required by the tested and listed system.
- 34. **Overhead applications.** Can you install FIP 1-Step in overhead applications? Overhead applications are challenging but can be done.
- 35. **Paintable.** Is it paintable? Yes, it is paintable with a primer.
- 36. **Pallet configuration.** How many are on a pallet? 720 units/pallet. 6 units/case.

- 37. **Re-enterability.** Is the foam re-enterable? Yes. Since the material is spongy in consistency it is easy to cut an opening in the cured FIP 1-Step and install new cables or piping. After installing the new cables or piping, remaining opening space must be refilled with FIP 1-Step.
- 38. **Shelf Life.** What is the shelf life? FIP 1-Step shelf life is 12 months in original unopened containers from date of packaging when stored above 68°F (20°C) and below 90°F (32.2°C).
- 39. **Sleeves.** Do I need to use a sleeve with FIP 1-Step? No sleeves are required for this product.
- 40. **Solvents.** Are there solvents in FIP 1-Step? There are less than 250 g/L VOC contents (less H20 and exempt solvents).
- 41. **STC Ratings.** What is the STC rating? See specific systems for details. FIP 1-Step has received an STC of 57 when tested in an STC 57 rated wall assembly.
- 42. **T-Rating.** What is the T Rating? See specific systems for details. FIP 1-Step has achieved up to 60 minute T ratings.
- 43. **Volume.** How many penetrations can I get out of one cartridge of FIP 1-step? One 12.85 oz cartridge of FIP 1-Step equates up to 116 cubic inches in dispensed state when dispensed at room temperature. The number of penetrations vary depending on the application.
- 44. **Volume.** How many tubes of caulk equal one cartridge of foam? One 12.85 oz cartridge of FIP 1-Step equals more than six tubes of 10.1 oz caulk.
- 45. **Expansion.** What is the expansion rate from the time it is installed to when it finally cures? FIP 1-Step expands up to five times and is typically fully cured at 75°F (24°C) in approximately 2 minutes.
- 46. **W-Rating.** What is the W Rating? There are no W ratings for FIP 1-Step.