

February 26, 2008



**SUBJECT: Environmental, Health, Safety, Regulatory (EHSR) product testing of
3M™ Fire Barrier Duct Wrap 615-24 and 615-48.**

To Whom It May Concern:

Synthetic Vitreous Fibers are manmade fibers that are commonly used in insulating materials within the construction and fire protection industry. Synthetic Vitreous Fibers can have different compositions and are created from rock, clay, slag, or glass. The fibers contained within this product most closely resemble the Glass Wool (fiberglass) variety of Synthetic Vitreous Fibers. Further information about the composition of this product can be found on its Material Safety Data Sheet (MSDS).

To assess the potential worker inhalation of the Synthetic Vitreous Fibers contained within this product, 3M conducted air monitoring during the installation of 3M™ Fire Barrier Duct Wrap 615-24 and 615-48. The testing was conducted in a warehouse environment with a typical air exchange rate and was coordinated and supervised by certified industrial hygienists. The air samples were collected during simulated installation conditions that involved cutting, wrapping, banding, and manipulating 3M™ Fire Barrier Duct Wrap 615.

Air samples were taken from the breathing zone (area near to the mouth and nose) of the workers completing the installation task. The samples were evaluated for Glass Wool Fiber concentrations.

Details of the testing include the following:

- Personal samples were from each of the installers' breathing zones.
- Samples were taken during each of the (2) installation days.
- Samples represent a complete work day (8hrs).
- During the installation, the 3M™ Fire Barrier Duct Wrap 615 was cut using a knife.
- As is typical when wrapping a radial curve, the aluminum foil jacketing was cut open, the mat was trimmed, and then the mat was rewrapped in the jacketing before being placed on the duct.
- The installation occurred in a warehouse environment with a typical air exchange rate
- Fibers were counted under NIOSH Method 7400 with "B" counting rules. These rules provide for counting fibers longer than 5 µm and less than 3 µm in diameter. The fibers counted must have a length to width ratio equal to or greater than 5:1, as specified in the "B" counting rules. These rules are designed to include fibers of the appropriate size and diameter.

The personal air samples indicated that the airborne Glass Wool Fiber concentrations were below applicable Occupational Exposure Limits (OEL).

The samples were taken under the usage conditions of a warehouse environment with a typical air exchange rate. A professional installer may need to perform cutting in a smaller, enclosed space. It is recommended that during installation, the installer always consider ventilation to ensure airborne fiber concentrations remain below applicable OEL's and/or consider the use of an appropriate respirator. OEL's and respirator recommendations may be found on the product MSDS.

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