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REPORT ON

CHEMICAL TESTS

FOR

einsulation.com, inc

MINERAL FIBER

PIPE INSULATION

TESTED

IN ACCORD WITH

REGULATORY GUIDE 1.36

USING ASTM C871 TEST METHODS

PREPARED FOR einsulation.com, inc 508 North Second St. Fairfield, IA 52556

TUTCO SCIENTIFIC REPORT NO. einsul\871.002 October 9, 2002

Reported by

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President of Operations

CHEMICAL TESTS

<u>Subject:</u> This report covers ASTM C871 Chemical Tests (Standard Test Method for Chemical Analysis of Thermal Insulation Materials for Leachable Chloride, Fluoride, Silicate, and Sodium Ions). The material tested was Mineral Fiber Pipe Insulation submitted by einsulation.com, inc. The results may be used to determine the qualification of the insulation to the requirements of Nuclear Regulatory Commission, Regulatory Guide 1.36 (NRC RG 1.36).

<u>Samples:</u> The samples were received from einsulation.com and designated einsulation.

<u>Sample Preparation:</u> Thin strips were cut from the submitted sample such that the test samples were representative of the entire cross section of the material. Exactly 20.0 g samples were prepared for the duplicate extractions.

Each weighed sample was placed in a one (1) quart blender jar containing 500 ml of demineralized water. After blending to completely disperse and break up the solids, the sample slurry was quantitatively transferred to a 1-liter stainless steel beaker and quickly heated to boiling. The slurry was maintained at boiling for 30 minutes after which time it was cooled in a water bath. The liquid weight was brought to 500 grams and filtered to produce the extraction solution for chemical tests.

Chemical Test Procedures: Testing was conducted in accord with ASTM C871.

Test Results: Given in parts per million(mg/kg).

Sample	Sodium	Silicate	<u>Chloride</u>	<u>Fluoride</u>	<u>pH</u>
1A	253	720	<12*(7)	13	9.6
1B	255	692	<12*(6)	13	9.6

^{*} Less than the accurate low determination limit for the techniques and analytical equipment used.

<u>Chemical Test Conclusion:</u> The sample of Mineral Fiber Pipe Insulation submitted by einsulation.com, inc. met the chemical requirements of Regulatory Guide 1.36, falling within the "acceptable" range of the "acceptability curve".