

Mr. Devendran Non-asbestos



GENERAL BUILDING RESEARCH CORPORATION OF JAPAN

FUJISHIRODAI 5-8-1, SUITA-SHI, OSAKA-FU JAPAN

TEL. 06-872-0391 FAX. 06-872-0784

Receipt number : VB - 88 - 777 (b)

Date of receipt : 25th January, 1988

Date of report : 14th February, 1988

The report of the analysis for a rockwool acoustic board

Report approved by :

Dr. Minoru Wakabayashi

Minoru Wakabayashi

Director of the laboratory of

General Building Research Corporation

2/8

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1. Purpose

Confirm the presence of asbestos fibres in a rockwool acoustic board.

2. Name and address of the client

Daiken Trade & Industry Co., Ltd. Okayama Mill
(5-8, 2-chome, Kaigandori, Okayama, Japan)

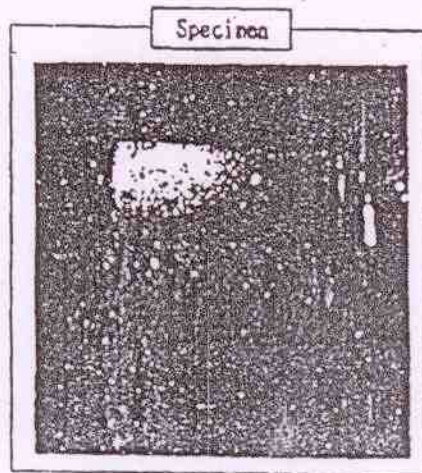
3. Date of the test

30th January, 1989.

4. Specimen

A piece of rockwool acoustic board of
300×300×15mm

(Trade name : Dal-laton
(date of manufacture : 14th September, 1988))



5. Test items and Test methods

1) X-ray powder diffraction

Identify constituents in finely powdered specimen by means of X-ray diffractometer.

2) Examination under polarizing microscope

Examine fibrous material in a thin section of specimen under polarizing microscope.

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3/3

6. Results

1) X-ray powder diffraction

X-ray diffraction pattern of the rockwool acoustic board (Fig.1) does not show the presence of asbestos fibres.

2) Examination under polarizing microscope.

Photomicrograph of a thin section (Photo.1) shows the presence of rockwool and organic fibres.

The above results show that there are no asbestos fibres in the rockwool acoustic board.

Persons in charge of testing :

Hiroshi Tamura, Hiroshi Saito and Satsuki Fukushina of the GBRC.

4/8

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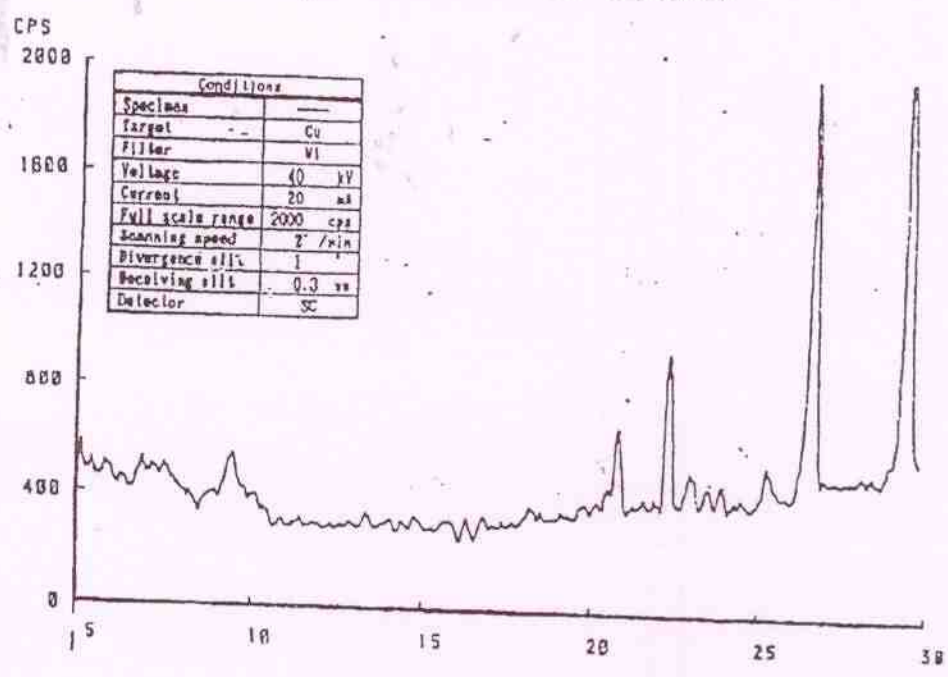
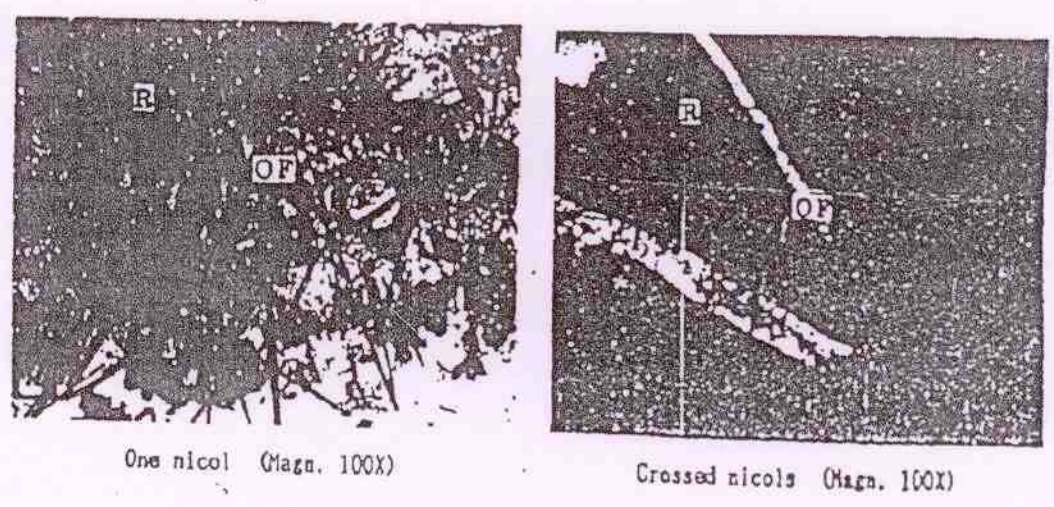


Fig. 1 X-ray diffraction pattern

Photo. 1 Photo micrograph



R = rockwool
 OF = organic fibres

Product group : Excel-Tone MR
Ref No. TKXX-001-OK

issued 1999/3/20
revised 2002/6/18

5/8

SAFETY DATA SHEET

1. CHEMICAL AND COMPANY INFORMATION

(Name of Products) Dai-Lotone, Excel-Tone MR

(Name of Item, general) Rock wool acoustical ceiling panel

(summary of product) this product contents of rock wool, binder, and other materials to form fissured, semi-perforated, or concave convex surface pattern. Rock wool is made of slag, basalt or other rocks, those are melted and fibered

(company/factory)

Name : Daiken corporation

Address : 2-8-8, Kaigando-ri, Okayama-shi, Okayama Pref.

Dept : Okayama factory, quality control dept.

Person in charge : Yoshihito Fujino

Phone : 086-262-1130

Fax : 086-262-4596

2. PHYSICAL DATA

Components : Rock wool 80%, binder and other 20%

Approval no. : NIL

Cas No : NIL

3. summary of harmfulness

Dangerousness : NIL

Harmfulness : It may have an effect if it gets in eyes or on skin. It will also affect circulatory organs when much dust or powder are inhaled for a long period.

Effect to environment : NIL

4. first aid measure : to be washed with clean water when dust gets in ones eyes and should not scratch. If one has a foreign body sensation, wash with soap and see a doctor when needed.

5. Measure in case of fire

detergents : water, powder, first-aid measures

This item is approved by ministry of construction

6/8

and no special measure is requested. However the product may produce harmful gas due to adhesive agent included when it is exposed to high temperature and should avoid to inhale those gases.

6. Measure in case on defluxion

There is no special measure is needed since it shapes in placibus

7. Cautions when handled.

There is not a special instruction unless otherwise one make a further processing or cutting on the product.

When one cut the product,

- ① Use cutter knife or other manual tools.
- ② Put dust mask and equip dust cleaner or vacuum when needed.
- ③ Wear long sleeve work clothes and gloves, and protection glasses when needed.
- ④ Wash hands and goggle after work.

There is not a special instruction for storing, but to be stored in normal temp. and humidity area and cared not to get wet.

8. Prevention of Exposure and Protection

Controlled dust cardinality : dust (to be inhaled) 2.9mmg/m²

Maximum dust cardinality : ACGIH(2001) 1 f/cm³

(fibers which has a length: larger than 5 μ m, diameter : larger than 3 μ m, and aspect ratio (length/diameter) more than 3)

Protector :

Dust mask : Wearing dust mask is recommended, when the dust cardinality is more that the above guided.

Anti dust mask Cartridge type is recommended in the area dust cardinality is higher, and disposable mask can be used in the area where dust cardinality is comparatively lower.

Goggle : wear goggle or protection glasses with side seal when needed.

Clothes : put on gloves and long sleeve work clothes which suit for Works.

9. Physical and chemical character

- appearance : in placis
- colour : white
- smell : nil
- density : less than 500kg/m³
- sound absorption : 0.3M ~ 0.7M

10. Stability

Stable. Alkali resistant but weak against acid

11. Harmfulness

Acute effect : may have foreign body sensation when it gets into eyes.
 may have an effect when it gets on skins, but its acute effect and will not effect inveteracy

topical effect : not specially

inveteracy effect : It will affect circulatory organs when much dust or powder are inhaled for a long period.

Carcinogen : rock wool material is categorized as group 3 (in Accordance with IARC method) which does not have clear result for carcinogen.

12. effect for environments : there is no particular study concerning an effect for environment is reported for the product, but the product does not contain endocrine disrupter.

13. Cautions for disposal : To care not to make dust expose in the environment surrounded and can be treated as originally industrial disposals. (but to follow local laws about disposal)

14. Cautions for transportation : there is not a special instructions.

15. Act of congress : rock wool is categorized as 'mineral' based on pneumoconiosis law and mine dust regulation and those law and regulation are applied in areas where the following works are proceeded.

- ① to cut, carve, or finishing mineral.
- ② to fracture mineral or putting them through a sieve.

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1/8

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