

SHANDONG WEIRAN BUILDING MATERIALS CO., LTD

TEST REPORT

SCOPE OF WORK

MAGNESIUM OXIDE BOARD

REPORT NUMBER

220328005SHF-003

TEST DATE(S)

2022-05-30- 2022-08-01

ISSUE DATE

2022-08-01

PAGES

7

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Intertek Testing Services Shenzhen Ltd. Shanghai Fengxian Branch



Test Report

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Test Report

Issue Date: 2022-08-01 Intertek Report No. 220328005SHF-003
 Applicant: SHANDONG WEIRAN BUILDING MATERIALS CO., LTD
 THE INTERSECTION OF CHANGSHEN EXPRESSWAY AND 225 PROVINCIAL HIGHWAY, QINGYUN
 Address: TOWN ECONOMIC DEVELOPMENT ZONE, LINSHU COUNTY, LINYI CITY, SHANDONG PROVINCE,
 CHINA
 Attn: Aaron Zhao
 Manufacturer: SHANDONG WEIRAN BUILDING MATERIALS CO., LTD
 THE INTERSECTION OF CHANGSHEN EXPRESSWAY AND 225 PROVINCIAL HIGHWAY, QINGYUN
 Address: TOWN ECONOMIC DEVELOPMENT ZONE, LINSHU COUNTY, LINYI CITY, SHANDONG PROVINCE,
 CHINA
 Test Type: Performance test, samples provided by the applicant.

Product Information

Product Name	MAGNESIUM OXIDE BOARD	Brand	MGOTECH
Sample Description	Good Condition	Sample Amount	10 pcs
		Received Date	2022-05-30
Sample ID	Model	Specification	
S220328005SHF.003	/	/	

Test Methods And Standards

Test Standard	With reference to ASTM D5116-17
Specification Standard	/
Test Conclusion	The samples were tested according to the above standards, and the results are shown in the following page.

Note:

1.This report relates specifically to the sample(s) that were drawn and provided by the applicant or their nominated third party. The reported result(s) provide no warranty or verification on the sample(s) representing any specific goods and/or shipment and only relate to the sample(s) as received and tested.

Report Authorized


 Name: Flora Fan
 Title: Approver


 Name: Erin Huang
 Title: Project Engineer




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Test Items, Method and Results:

Test Item: Volatile organic compounds content analysis

Test Method: With reference to
ASTM D5116-17 Small-Scale Environmental Chamber Determinations of Organic Emissions From Indoor
Materials/Products.

Test Procedure:

The sample was tested in the emission test chamber. After 7 days, chamber air samples were collected. Samples analyzed for individual VOCs and TVOC were collected on sorbent tubes Tenax TA, and were detected by Automatic Thermal Desorption-Gas Chromatography/Mass Spectrometric (ATD-GC/MS). Samples analyzed for aldehydes were collected on DNPH cartridge, and were detected by High Performance Liquid Chromatography (HPLC).

Test condition:

Test chamber: 0.060 m³

Supply air temper: 23°C±1°C

Supply air humidity: 50%±5% R.H.

Air exchange rate: 1.0 h⁻¹

Loading factor: 1.0 m²/m³

Sampling: Tenax TA & DNPH cartridge



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Table 1 7 Days Chamber concentration and Emission Factor of all Target VOCs and TVOC

No.	Compound Name	CAS Number	Chamber Concentration ($\mu\text{g}/\text{m}^3$)	Emission Factor ($\mu\text{g}/\text{m}^2\cdot\text{hr}$)
1	Acetaldehyde [#]	75-07-0	<2.0	<2.0
2	Benzene	71-43-2	<2.0	<2.0
3	Carbon disulfide	75-15-0	<2.0	<2.0
4	Carbon tetrachloride	56-23-5	<2.0	<2.0
5	Chlorobenzene	108-90-7	<2.0	<2.0
6	Chloroform	67-66-3	<2.0	<2.0
7	Dichlorobenzene (1,4-)	106-46-7	<2.0	<2.0
8	Dichloroethylene (1,1)	75-35-4	<2.0	<2.0
9	Dimethylformamide (N,N-)	68-12-2	<2.0	<2.0
10	Dioxane (1,4-)	123-91-1	<2.0	<2.0
11	Epichlorohydrin	106-89-8	<2.0	<2.0
12	Ethylbenzene	100-41-4	<2.0	<2.0
13	Ethylene glycol	107-21-1	<2.0	<2.0
14	Ethylene glycol monoethyl ether	110-80-5	<2.0	<2.0
15	Ethylene glycol monoethyl ether acetate	111-15-9	<2.0	<2.0
16	Ethylene glycol monomethyl ether	109-86-4	<2.0	<2.0
17	Ethylene glycol monomethyl ether acetate	110-49-6	<2.0	<2.0
18	Formaldehyde [#]	50-00-0	<2.0	<2.0
19	Hexane (n-)	110-54-3	<2.0	<2.0
20	Isophorone	78-59-1	<2.0	<2.0
21	Isopropanol	67-63-0	<2.0	<2.0
22	Methyl chloroform	71-55-6	<2.0	<2.0
23	Methylene chloride	75-09-2	<2.0	<2.0
24	Methyl t-butyl ether	1634-04-4	<2.0	<2.0
25	Naphthalene	91-20-3	<2.0	<2.0
26	Phenol	108-95-2	<2.0	<2.0
27	Propylene glycol monomethyl ether	107-98-2	<2.0	<2.0

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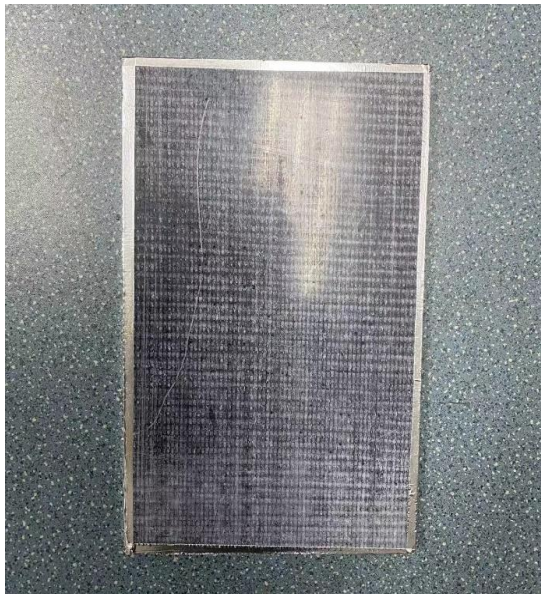
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28	Styrene	100-42-5	<2.0	<2.0
29	Tetrachloroethylene	127-18-4	<2.0	<2.0
30	Toluene	108-88-3	<2.0	<2.0
31	Trichloroethylene	79-01-6	<2.0	<2.0
32	Vinyl acetate	108-05-4	<2.0	<2.0
33~35	Xylenes, technical mixture (m-, o-, p-xylene combined)	108-38-3 95-47-6 106-42-3	<2.0	<2.0
36	1,2,4-trimethylbenzene	95-63-6	<2.0	<2.0
37	Ethanol, 2-butoxy	111-76-2	<2.0	<2.0
38	TVOC	/	<20.0	<20.0

Remark:

- # = indicates compound identified and quantified by DNPH derivitization and HPLC/DAD analysis.
- Detection limit of individual compound = 2 µg/m³
- Detection limit of TVOC = 20 µg/m³
- TVOC means sum of the concentrations of all identified and unidentified VOCs elute between and including n-pentane through n-heptadecane (i.e., C₆-C₁₆) as measured by the GC/MS TIC method and expressed as a toluene equivalent value.
- Test location: Central Chemical Lab of Intertek Testing Services Ltd., Wuxi
Address: No. 8, Fubei Road, Xishan Economic Development Zone, Wuxi, China

Test Photos:

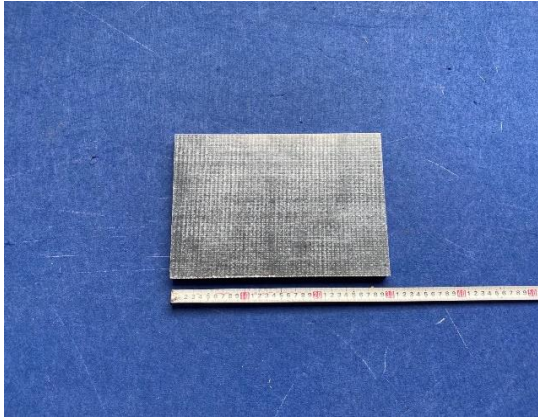


Test Report

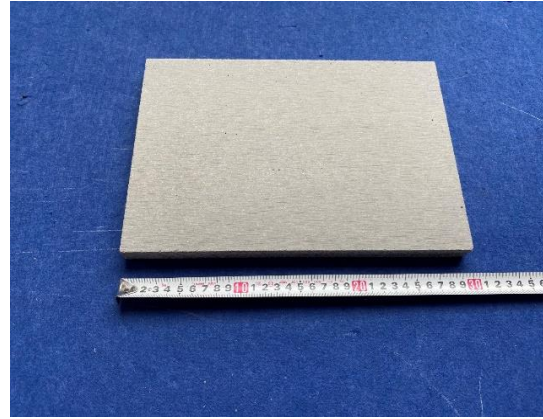
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Appendix A: Sample Received Photo



Front view



Back view



Revision:

NO.	Date	Changes
220328005SHF-003	2022-08-01	First issue