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**BUILDING MATERIALS INDUSTRY STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**JC/T 1074-2021**

Replacing JC/T 1074-2008

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**Purificatory Performance of Coatings with Air Purification**

室内空气净化功能涂覆材料净化性能

**(English Translation)**

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### Foreword

This Document was drafted as per the rules specified in GB/T 1.1-2020 Directives for Standardization - Part 1: Rules for the Structure and Drafting of Standardizing Documents.

This Document replaced JC/T 1074-2008 Purificatory Performance of Coatings with Air Purification. Compared with JC/T 1074-2008, the major technical changes of this Document are as follows besides the structural adjustments and editorial modifications:

- a) Change the Scope of the standard (see Clause 1 of this Edition; Clause 1 of the 2008 Edition);
- b) Change the "Normative References" (see Clause 2 of this Edition; Clause 2 of the 2008 Edition);
- c) Change the definitions of "Air purification coating" and "Purificatory efficiency"; added the definition of "Purification durability" (see Clause 3 of this Edition; Clause 3 of the 2008 Edition);
- d) Change the content of "Classification and Marking". Air purification coatings are divided into Class I and Class II according to their use. Class I is further divided into Class IS and Class IF according to the material form; and Class W and Class G according to the purification principle (see Clause 4 of this Edition; Clause 4 of the 2008 Edition);

- e) Delete "Table 1 -- Purificatory Performance" and "Table 2 Purification Effect Durability"; add "Table 1 - Purificatory Performance of Indoor Air Purification Coating"; add "Purification durability" item; specify indicators of "Purificatory efficiency" and "Purification durability" projects according to Class IS, Class IF, Class II, Class W, and Class G (see Clause 5 of this Edition; Clause 5 of the 2008 Edition);
- g) Change "test device" to "test apparatus and reagents"; and change the content (see 6.2 of h) Add the content of the "gas collection and analysis" item (see 6.3 of this Edition); add the content of the "test substrate" item (see 6.5 of this Edition);
- i) Change the content of the "preparation of test sample plate" item (see 6.6 of this Edition;
- j) Change the test method and result calculation of the "purificatory efficiency" item (see 6.7 and 7.1 of this Edition; 6.5 of the 2008 Edition); change the test method and result calculation of the "purification durability" item (see 6.8 and 7.2 of this Edition; 6.6 of k) Change the content of "Test Report" (see Clause 8 of this Edition; Clause 7 of the 2008 Edition);
- 1) Change the content of "Inspection Rules" (see Clause 9 of this Edition; Clause 8 of the 2008 Edition);
- m) Add the content of "Appendix A (Normative) Test Chamber System" (see Appendix A of this Edition);
- n) Add The content of "Appendix B (Normative) Test Method of Purificatory Performance of Coatings with Non-Photocatalytic Air Purification" (see Appendix B of this Edition);
- o) Add the content of "Appendix C (Normative) Test Method of Purificatory Performance of Coatings with Photocatalytic Air Purification" (see Appendix C of this Edition).

Please note some contents of this Document may involve patents. The issuing agency of this Document shall not assume the responsibility to identify these patents.

This Document was proposed by China Building Materials Federation.

This Document shall be under the jurisdiction of Environmentally Friendly and Healthy Building Materials Standardization Technical Committee of Building Materials Industry.

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The historical edition replaced by this Document is as follows:

## 1 Scope

This Document specifies the classification and marking, requirements, test methods, result calculations, test reports and inspection rules of indoor air purification coatings.

This Document applies to indoor air purification coatings.

## 2 Normative References

The provisions in following documents become the essential provisions of this Document through reference in this Document. For the dated documents, only the versions with the dates indicated are applicable to this Document; for the undated documents, only the latest version (including all the amendments) is applicable to this Document.

### 3.2 Air purification coating

The coating that can reduce or remove one or more targeted pollutants from indoor air.

### 3.3 Purificatory efficiency

Under the specified test conditions, the ability of the coating to reduce the concentration of formaldehyde (or toluene) in the cabin.

### 3.4 Purification durability

Under the specified test conditions, after the indoor air purification coating is applied several times with the specified concentration of formaldehyde (or toluene) within the specified period (or time), the ability of the material's continuous purification against the target pollutant.

## 4.1 Classification

### 4.1.1

Products are divided into interior decoration (Class I) and treatment (Class II) according to their uses; Class I is further divided into water-based liquid coatings (IS) and powder inorganic coatings (IF) according to the coating form.

### 4.1.2

According to the principle of purification, the products are divided into coatings with nonphotocatalytic air purification function (Class W) and coatings with photocatalytic air purification function (Class G).

## 4.2 Marking

Products shall be marked in order of product name, document number, coating category, and purification principle.

function shall be marked as follows:

## 5 Requirements

The indoor air purification coatings should meet the requirements in Table 1 for the purificatory performance against certain target pollutants.

a Class I products can be tested for the purificatory performance of target pollutants such as toluene according to this standard test method, and one of the target pollutants of Class II can be selected.

b If the purificatory efficiency of the same coating is not up to standard, the purification durability test will not be carried out.

c C3 indicates the third test cycle.

d C6 indicates the sixth test cycle.