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**NONFERROUS METALS INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

YS/T 95.2-2016

**Aluminum foil for air conditioner - Part 2: Precoated aluminum
foil**

(English Translation)

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Foreword

YS/T 95 "Aluminum foil for air conditioner radiator" consists of two parts.

- Part 1.Finstock;
- Part 2.Precoated aluminum foil.

This Part is Part 2 of YS/T 95.

This Part was drafted in accordance with the rules given in GB/T 1.1-2009.

This Part replaces YS/T 95.2-2009 "Aluminum foil for air conditioner - Part 2.

Precoated aluminum foil". Compared with YS/T 95.2-2009, the main technical changes in this Part are as follows.

- deleted product models of P14, P23, P24, P43, P44, P51, P52, P61, P62;
- added product models of P31, P32;
- tightened harmful element limit value;
- added requirements for coating resistances to bending and acid;
- added provisions for measuring the hydrophilic angle after immersion in oil resistance test method;
- modified requirements for coating appearance quality;
- the supplier and the purchaser are required to agree on the type of the no-clean volatile oil for the hydrophilic angle of the test process;

- specified that harmful elements or harmful substances are tested according to GB/T 26125, and antibacterial properties are tested according to GB/T 21866;
- modified test method for alkali resistance;
- modified test method for coating odor;
- added requirements for contact surface diameter of solvent resistant hammer.

This Part was proposed by and shall be under the jurisdiction of National Technical Committee on Non-ferrous Metal of Standardization Administration of China (SAC/TC 243).

The drafting organizations of this Part. Yitong Technology Group Co., Ltd., Guangzhou Huigu Chemical Co., Ltd., Zhenjiang Dingsheng Aluminum Industry Co., Ltd., Ruyuan Yao Autonomous County Yangzhiguang Hydrophilic Foil Co., Ltd., Jiangsu Chang Aluminum Co., Ltd., Xiamen Xiashun Aluminum Foil Co., Ltd.

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Versions of standard substituted by this Standard are.

- YS/T 95.2-2001, YS/T 95.2-2009.

Aluminum foil for air conditioner -

Part 2.Precoated aluminum foil

1 Scope

This Part of YS/T 95 specifies the requirements, test methods, inspection rules and marks, packaging, transport, storage, quality certificate and order form (or contract) content of precoated aluminum foil for air conditioner heat sink.

This Part is applicable to aluminum foil for air conditioner heat sink of which the surface is covered with a corrosion-resistant layer and a hydrophilic coating (hereinafter referred to as precoated foil).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 1740, Methods of test for resistance to heat and humidity of paint films

GB/T 1771, Paints and varnishes - Determination of resistance to neutral salt spray (fog)

GB/T 3199, Wrought aluminum and aluminum alloy products - Packing, marking, transporting and storing

GB/T 6461, Methods for corrosion testing of metallic and other inorganic coatings on metallic substrates - Rating of test specimens and manufactured articles subjected to corrosion tests

GB/T 6682, Water for analytical laboratory use - Specification and test methods

3.1.1 Coating structure

See Figure 1 for coating structure.

3.1.4 Marking

The marking of the precoated foil is expressed in the order of product name, standard number, product model, function code, designation, state, and size specifications. Marking examples are as follows.

3.2 Chemical composition

The chemical composition of the precoated foil (except Cd, Pb, Hg, Cr6+) shall comply with the requirements of YS/T 95.1. The limits of harmful elements or harmful substances in the precoated foil shall comply with the requirements of Table 2.

3.4 Adhesion

The precoated foil shall be easy to expand over the entire length of the roll, no sticking or tearing when unfolded.

3.5 Mechanical properties, process performance

The tensile mechanical properties and process properties of the precoated foil shall meet the requirements of YS/T 95.1.

3.7.1 The surface color of the precoated foil is determined by both parties. There

shall be no obvious chromatic aberration, leakage coating, corrosion, holes, etc., which affect the performance of the coating and the defects of the user. Defects such as subtle color points, imprints, etc. that do not affect the use are allowed.

4.2 Size deviation

The size deviation of precoated foil is inspected according to YS/T 95.1.

4.3 Adhesion

Adhesion is inspected by unrolling the precoated foil roll.

4.6 Hydrophilicity

Hydrophilicity is tested according to the method specified in GB/T 22638.9. The type of no-clean volatile oil used in the process of hydrophilic angle detection is negotiated between the supplier and the purchaser and specified in the order form (or contract). When the purchaser has special requirements on drying temperature and drying time, it shall be indicated in the order form (or contract).

4.7 Anti-cupping

Carry out the test according to the provisions of GB/T 9753. Indentation depth is 5mm.

4.9 Bending resistance

Make the end of the sample (in the length direction, the area 13mm~20mm from the end) bend 180°, that is, bend to the two planes of the sample (OT as shown