

ICS 77.120.10  
CCS H 61



**NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**GB/T 17171-2008**

Replacing GB/T 17171-1997

---

**Aquosity aluminium paste**

水性铝膏

**(English Translation)**

**Issued on: June 17, 2008**

**Implemented on: December 1, 2008**

---

**Issued by: Standardization Administration of China**

## Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 4 Requirements
- 4.2 Particle size distribution, chemical composition

### Foreword

This standard is part of the United States ASTM D962-1981 "coating aluminum and aluminum paste," and the Russian GOST 5494-1995 "aluminum coating Powder" in the content.

This standard replaces GB/T 17171-1997 "aqueous aluminum paste." This standard compared with GB/T 17171-1997, the main changes are as follows.

- Abolition of the "scope" of oil well cementing uses.
- Added "the term, the definition of" regulations.
- Original standard grade "GLS1" to "GLS65", added the designation "GLS70".
- Cancel the active aluminum of not less than 56% requirement.
- Canceled Aqueous aluminum paste stability.
- According to GOST 5494-1995 "aluminum paint" the provisions of the revised water-dispersible wettable, developed test methods and acceptance in accordance with.
- Revised the time period specified on the quality of opposition.
- Increasing the batch weight requirements.
- Revised the test results to determine the method.
- Simplifies aqueous aluminum paste packing provisions.

The standard proposed by China Nonferrous Metals Industry Association.

This standard Nonferrous Metals by the National Standardization Technical Committee.

This standard was drafted. Aluminum Corporation of China Northwest Aluminum Processing Branch.

Participated in the drafting of this Standard. China Nonferrous Metals Industry Standards and Metrology Institute for Quality.

## 1 Scope

This standard specifies the aqueous aluminum paste terminology, definitions, technical requirements, test methods, inspection rules, packaging, labeling, transportation, storage and Order Content manifest.

This standard applies to aqueous aluminum paste with water as a medium for the wet milling of aerated concrete production and use of water-based paint.

## 2 Normative references

The following documents contain provisions which, through reference in this standard and become the standard terms. For dated references, subsequent Amendments (not including errata content) or revisions do not apply this standard, however, encourage the parties to reach an agreement on this standard is Whether the latest versions of these documents. For undated reference documents, the latest versions apply to this standard.

GB/T 3199 aluminum and aluminum alloy products - Packing, marking, transportation and storage Measured YS/T 617.1 aluminum, magnesium and alloy powder Determination of physical and chemical properties - Part 1 active alumina, active magnesium, aluminum-magnesium amount of activity Given gas volumetric method YS/T 617.3 aluminum, magnesium alloy powder measuring methods for determination of physical and chemical properties - Part 3 moisture loss on drying method YS/T 617.6 aluminum, magnesium alloy powder Determination of physical and chemical properties and the first part of the 6 measuring particle size distribution by sieving

## 3 Terms and Definitions

The following terms and definitions apply to this standard.

It refers to the degree of freedom of the dispersed hydrophilic stirred in water.

It refers to the blocking phenomenon easily dispersed particles bonded to each other is formed.

## 4 Requirements

Grade 4.1

### 4.1.1

Aqueous aluminum paste grades using "GLS" increase the solids content in the form of representation. Grade "GLS" means "paste, aluminum and water."

#### 4.1.2

Aqueous aluminum paste according to a solids content divided into GLS65, GLS70 two grades.

#### 4.2 Particle size distribution, chemical composition

Aqueous aluminum paste particle size distribution, chemical composition shall comply with the requirements in Table 1.

Table 1

Trademark

| Particle size distribution | Particle size/ $\mu\text{m}$ | mass fraction /% | Chemical composition (mass fraction) /% | Solids content (nonvolatile heating) | solids content of active aluminum |
|----------------------------|------------------------------|------------------|-----------------------------------------|--------------------------------------|-----------------------------------|
| GLS65                      | +80                          | $\leq 1.5$       | +45                                     | $\leq 6.0$                           | $\geq 65.0$                       |
| GLS70                      | +80                          | $\leq 1.5$       | +45                                     | $\leq 6.0$                           | $\geq 70.0$                       |
|                            |                              |                  |                                         |                                      | $\geq 85.0$                       |