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

GB/T 17529.5-2023

Replacing GB/T 17529.5-1998

**Acrylic acid and acrylates for industrial use - Part 5:
2-Ethylhexyl acrylate for industrial use**

工业用丙烯酸及酯 第5部分：工业用丙烯酸2-乙基己酯

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Foreword

This document complies with the provisions of GB/T 1:1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting: This document is Part 5 of GB/T 17529 "Acrylic acids and esters for industrial use": GB/T 17529 has published the following parts:

---Part 1: Acrylic acid for industrial use;

---Part 2: Methyl acrylate for industrial use;

---Part 3: Ethyl acrylate for industrial use;

---Part 4: n-Butyl acrylate for industrial use;

---Part 5: 2-ethylhexyl acrylate for industrial use: This document replaces GB/T 17529:5-1998 "Industrial 2-ethylhexyl acrylate": Compared with GB/T 17529:5-1998, except for the structure In addition to adjustments and editorial changes, the main technical changes are as follows:

- a) Changed the scope (see Chapter 1, Chapter 1 of the:1998 edition);
- b) Added appearance requirements and test methods (see 4:1 and 5:1);
- c) Cancel product classification, delete first-class product indicators, and change the content of 2-ethylhexyl acrylate (see Table 1,:1998 version Table 1);
- d) Changed the colorimetric index requirements (see Table 1, Table 1 of the:1998 edition);
- e) The requirements for polymerization inhibitor content indicators have been changed (see Table 1, Table 1 of the:1998 edition);
- f) Added the tristimulus colorimetric method for colorimetry (see 5:3:2);
- g) Added inspection rules (see Chapter 6): Please note that some content in this document may be subject to patents: The publisher of this document assumes no responsibility for identifying patents: This document is proposed by China Petroleum and Chemical Industry Federation: This document is under the jurisdiction of the National Chemical Standardization Technical Committee (SAC/TC63): This document was drafted by: Satellite

Chemical Co., Ltd.; Sinopec (Beijing) Chemical Industry Research Institute Co., Ltd.; Shanghai Huayi New Materials Co., Ltd.; Co., Ltd.; Pinghu Petrochemical Co., Ltd.; Nanxiong Wotai Chemical Co., Ltd.; and Zhejiang Shaxing Technology Co., Ltd: The main drafters of this document: Gao Jun, Rosa, Li Jun, Wei Yunhuai, Cui Yaosen, Sun Zhijun, Guo Changzhou, Cai Libin: The previous versions of this document and the documents it replaces are as follows:

---First published in:1998 as GB/T 17529:5-1998;

1 Scope

GB/T 17529.5-2023 is the Chinese national standard on acrylic acid and acrylates for industrial use - part 5: 2-ethylhexyl acrylate for industrial use, in the field of chemical technology. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 27 November 2023 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 June 2024. Classification: ICS 71.080.70, CCS G17. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies the requirements, test methods, inspection rules and marking, packaging, transportation and storage of 2-ethylhexyl acrylate for industrial use: This document applies to industrial 2-ethylhexyl acrylate produced by the esterification reaction of acrylic acid and 2-ethylhexanol:

Note: The molecular formula of 2-ethylhexyl acrylate is $C_{11}H_{20}O_2$, the structural formula is as follows, and the relative molecular mass is 184.28 (according to the 2022 international relative atomic mass):

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, the dated quotations For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document:

GB 190 Dangerous goods packaging markings

GB/T 191 Packaging, storage and transportation pictorial mark

GB/T 6283 Determination of moisture content in chemical products Karl Fischer method

(general method) GB/T 6324:

6 Test methods for organic chemical products Part 6: Determination of liquid colorimetric method Tristimulus value colorimetry

GB/T 6678 General principles for sampling of chemical products

GB/T 6680 General rules for sampling of liquid chemical products

GB/T 8170 Numerical rounding rules and expression and determination of limit values

GB/T 17530:

2 Test methods for industrial acrylic acid and esters Part 2: Determination of organic impurities and purity of industrial acrylic acid esters fixed gas chromatography GB/T 17530:

3 Determination of color of industrial acrylic acid and esters GB/T 17530:

4 Determination of acidity of industrial acrylates GB/T 17530:

5 Determination of polymerization inhibitors in industrial acrylic acids and esters

3 Terms and definitions

There are no terms or definitions to be defined in this document: