

QB

**LIGHT INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

QB/T 4576-2023

Replacing QB/T 4576-2013

Sodium hyaluronate

透明质酸钠

(English Translation)

Issued on: December 29, 2023

Implemented on: July 1, 2024

**Issued by: Ministry of Industry and Information Technology of the
People's Republic of China**

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Foreword

This document was issued on 29 December 2023 by the Ministry of Industry and Information Technology of the People's Republic of China, and has applied since 1 July 2024.

It replaces QB/T 4576-2013.

It is a QB/T standard: a recommended industry standard of China's light industry.

1 Scope

This document specifies the requirements for identification, sensory properties, physicochemical properties and safety of sodium hyaluronate, describes the corresponding test methods, specifies the inspection rules, marking, packaging, transportation and storage, and provides information on the molecular formula, relative molecular mass and structural formula.

This document is applicable to the production, inspection and sale of sodium hyaluronate produced by fermentation of *Streptococcus equi* subsp. *zooepidemicus* using glucose, yeast extract, peptone, etc. as raw materials.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions 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 191 Packaging - Pictorial marking for handling of goods

GB/T 601 Chemical reagent - Preparations of reference titration solutions

GB/T 602 Chemical reagent - Preparations of standard solutions for impurity

GB/T 603-2023 Chemical reagent - Preparations of reagent solutions for use in test methods

GB 4789.2 National food safety standard - Food microbiological examination - Aerobic plate count

GB 4789.3 National food safety standard - Food microbiological examination - Enumeration of coliforms

GB 4789.15 National food safety standard - Food microbiological examination - Enumeration of moulds and yeasts

GB 5009.3 National food safety standard - Determination of moisture in foods

GB 5009.4 National food safety standard - Determination of ash in foods

GB 5009.11 National food safety standard - Determination of total arsenic and abio-arsenic in foods

GB 5009.12 National food safety standard - Determination of lead in foods

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

GB 7718 National food safety standard - General standard for the labeling of prepackaged foods

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

sodium hyaluronate

sodium salt of hyaluronic acid, a chain-like high-molecular acidic mucopolysaccharide composed of disaccharide structural units formed by beta-D-N-acetylglucosamine and beta-D-glucuronic acid linked via beta-1,3-glycosidic bonds, which are further linked via beta-1,4-glycosidic bonds

Note: Commercial sodium hyaluronate is also referred to as "hyaluronic acid", etc.

4.1 Molecular formula

$(C_{14}H_{20}NNaO_{11})_n$.