

ICS 47.020.20  
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**NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**GB/T 35176.1-2017**

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**Ships and marine technology -- Marine NOx reduction agent  
AUS 40 -- Part 1: Quality requirements**

船舶与海上技术 船舶氮氧化物还原剂AUS40 第1部分：质量要求

**(English Translation)**

**Issued on: December 29, 2017**

**Implemented on: July 1, 2018**

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**Issued by: General Administration of Quality Supervision, Inspection and  
Quarantine of the People's Republic of China, Standardization  
Administration of the People's Republic of China**

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### Foreword

GB/T 35176 "ship and marine technology nitrogen oxide reductant AUS40" is divided into three parts.

- Part 1. Quality requirements;
- Part 2. Test methods;
- Part 3. Handling, transport and storage;

This section GB/T 35176 Part 1.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the translation method identical with the international standard ISO 18611-1:2014 "ship and marine technology NOx reductant AUS40 Part 1 Quality Requirements ".

The documents of our country that are consistent with the corresponding international documents that are normative references in this section are as follows.

- GB/T 1884-1992 Crude petroleum and liquid petroleum products - Determination of density (Densitometer method) (eqvISO 3675.1998)
- SH/T 0604-2000 Determination of density of crude oil and petroleum products (U-tube method) (eqvISO 12185.1996) this part is proposed by China State Shipbuilding Corporation.

This part of the National Standardization Technical Committee marine machinery (SAC/TC137) centralized.

This part of the drafting unit. China Shipbuilding Industry and Technology Institute of Comprehensive Economic, Harbin Engineering University, Shanghai Molten Ship Marine Engineering Co., Ltd., Weichai Heavy Machinery Co., Ltd., Hudong Heavy Machinery Co., Ltd.

## 1 Scope

GB/T 35176 provisions of this part of the ship selective catalytic reduction system (SCR) used by the nitrogen oxides reducing agent --- concentration 40% aqueous urea solution (hereinafter referred to as AUS40) quality characteristics.

This section applies to the ship engine and boiler exhaust gas treatment using a selective catalytic reduction system (SCR).

## 2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

ISO 3675 Crude petroleum and liquid petroleum products - Determination of density test (Densometer method) (Crudepetroleumandliquid petroleumproducts-Laboratorydeterminationofdensity-Hydrometermethod) ISO 12185 crude oil and petroleum products densitometry (U-tube method) (Crudepetroleumandliquidpetroleum products-Determinationofdensity-OscilatingU-tubemethod) ISO 18611-2:2014 Marine and marine vessels - NOx reductant AUS40 - Part 2. Test methods (Ships andmarinetechnology-MarineNOxageuctionagentAUS40-Part 2. Testmethods)

## 3 Terms and definitions

The following terms and definitions apply to this document.

**NOx Reducing Agent AUS40** NOx reducing agent AUS40 from urea and pure water without any other additives mixed into the urea content of 40% aqueous urea solution, the quality of character the requirements of Chapter 5.

**NOTE** The addition of tracer in solution as required by Table 1 shall not apply.

**Industrial pure urea technicalypureurea** Commercially produced urea containing only trace amounts of biuret, ammonia, water, and small amounts of aldehydes or other substances (such as anticoagulants), sulfur-free, sulfurized Substances, chlorides, nitrates or other contaminants.

**Note:** The above-mentioned contaminants are not generated during the production of urea. The limits and analytical methods for the content of contaminants are not considered. Commonly used urea the inclusion of these chemical compounds is beyond the scope of this definition.

**Pure water**

With a single distillation, deionization, ultrafiltration or reverse osmosis and other processes

prepared from the corresponding level of water.

**Note:** This definition is based on Level 3 water definition in the ISO 3696 standard.

## **4 Logo**

The AUS40 logo includes the code AUS40 and the national standard, as follows.