
**Ships and marine technology —
Marine NO_x reduction agent AUS 40 —**

**Part 1:
Quality requirements**

Navires et technologie marine — Agents réducteurs NO_x marins AUS 40 —

Partie 1: Exigences de qualité

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 8, *Ships and marine technology*, Subcommittee SC 2, *Marine environment protection*.

ISO 18611 consists of the following parts, under the general title *Ships and marine technology — Marine NOx reduction agent AUS 40*:

- *Part 1: Quality requirements*
- *Part 2: Test methods*
- *Part 3: Handling, transportation and storage*

Introduction

In order to protect the environment and to enhance air quality, exhaust emissions regulations around the world are continuously strengthened. For ships with large combustion engines, particulate matter (PM), nitrogen oxide (NO_x) emissions, and sulfur dioxide emissions are the main concern, and efforts have been focused on the development of technology that can reduce them effectively with minimum fuel economy penalty. Selective catalytic reduction (SCR) converters using a urea solution as the reducing agent is considered to be a key technology for reducing NO_x emissions. The quality of the urea solution used for that technology needs to be specified to ensure reliable and stable operation of the SCR converter systems. The ISO 18611 series provides the specifications of urea solution for quality characteristics, handling, transportation, and storage, as well as the test methods needed by manufacturers of SCR converters, by engine manufacturers, by producers, distributors, and by fleet operators/ship owners.

Efficient expanding of the use of urea SCR technology requires a consolidated framework that can be followed by producers, end users, OEMs, and catalyst suppliers.

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