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

GB/T 39327-2020

**Rubber and plastics hoses for marine-engine wet-exhaust
systems. Specification**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this standard is equivalent to ISO 13363.2016 ``Rubber and Plastic Hose Specifications for Wet Exhaust System of Marine Engines

Fan. The Chinese documents that have a consistent correspondence with the international documents cited in this standard are as follows.

---GB/T 528-2009 Determination of tensile stress-strain properties of vulcanized rubber or thermoplastic rubber (ISO 37.2005, IDT);

---GB/T 1690-2010 Liquid resistance test method for vulcanized rubber or thermoplastic rubber (ISO 1817.2005, MOD);

---GB/T 3512-2014 Hot air accelerated aging and heat resistance test of vulcanized rubber or thermoplastic rubber (ISO 188.2011, IDT);

---GB/T 5563-2013 Rubber and plastic hoses and hose assemblies hydrostatic test method (ISO 1402.2009, IDT);

---GB/T 6031-2017 Determination of the hardness of vulcanized rubber or thermoplastic rubber (10IRHD~100IRHD) (ISO 48.2010, IDT);

---GB/T 7528-2019 Rubber and plastic hoses and hose assemblies terminology (ISO 8330.2014, IDT);

---GB/T 7759.1-2015 Determination of the compression set of vulcanized rubber or thermoplastic rubber Part 1.Under normal and high temperature conditions (ISO 815-1.2008, IDT);

---GB/T 7759.2-2014 Determination of the compression set of vulcanized rubber or thermoplastic rubber Part 2.Under low temperature conditions (ISO 815-2.2008, IDT);

---GB/T 9573-2013 Rubber and plastic hoses and hose assemblies hose size and hose assembly length measurement method (ISO 4671.2007, IDT);

---GB/T 14905-2020 Determination of the adhesive strength between layers of rubber and

plastic hoses (ISO 8033.2016, IDT);

---HG/T 4458-2012 Determination of plasticizer loss in plastics activated carbon method (ISO 176.2005, MOD).

This standard has made the following editorial changes.

---Delete the "bar" unit expression in the text, and only keep the "MPa" unit expression.

This standard was proposed by the China Petroleum and Chemical Industry Federation.

This standard is under the jurisdiction of the National Rubber and Rubber Products Standardization Technical Committee (SAC/TC35).

Drafting organizations of this standard. Shenyang Rubber Research and Design Institute Co., Ltd., Penglai Linge Rubber and Plastic Products Co., Ltd., China Light Industry Association (Dalian) Package

Installation Research Institute Co., Ltd.

1 Scope

This standard specifies the requirements for three types and two categories of hoses. These hoses are intended for use in the wet exhaust system of marine engines (here The exhaust gas is mixed with the discharged cooling water). The three types are as follows.

---1 type. soft wall hose, made of oil-resistant material, reinforced with synthetic fiber;

- Type-2. Hard-walled hose, made of oil-resistant material, reinforced with synthetic fiber and embedded with spiral steel wire;

---3 type. hose or non-reinforced hose (soft connection), made of oil-resistant material, with or without reinforcement or outer coating, intended for short length use

To prevent mechanical damage to the connector.

The two categories are as follows.

---Class A, used for diesel engines;

---B category, used for gasoline engines and diesel engines with very high exhaust temperature.

This standard does not apply to outboard engines and (or) personal watercraft.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this document.

For undated references, the latest version (including all amendments) applies to this document.

GB/T 5565.1-2017 Measurement of flexibility and stiffness of rubber and plastic hoses and non-reinforced hoses Part 1.Room temperature bending test

GB/T 24134-2009 Evaluation of ozone resistance of rubber and plastic hoses under static conditions (ISO 7326.2006, IDT)

ISO 37 Determination of tensile stress-strain properties of vulcanized rubber or thermoplastic rubber

ISO 48 Determination of hardness of vulcanized rubber or thermoplastic rubber

ISO 176.2005 Determination of Plasticizer Loss in Plastics Activated Carbon Method

ISO 188 Hot air accelerated aging and heat resistance test of vulcanized rubber or thermoplastic rubber

ISO 815 Determination of the compression set of vulcanized rubber or thermoplastic rubber Part 1.Under normal and high temperature conditions

ISO 1402 Rubber and plastic hoses and hose assemblies hydraulic test

ISO 1817 Test method for liquid resistance of vulcanized rubber or thermoplastic rubber