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

GB/T 37222-2018

**Determination of spray flame persistence of fire-resistant fluids
-- Hollow-cone nozzle method**

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Foreword

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

This standard uses the redrafting method to refer to ISO 15029-1.1999 "Determination of the combustion properties of flame retardant liquids for petroleum and related products.

Part 1. Preparation of the test method for jet-burning persistent air-cone jet nozzles, the degree of conformity with ISO 15029-1.1999 is non-

Equivalent.

This standard is proposed and managed by the National Petroleum Products and Lubricants Standardization Technical Committee (SAC/TC280).

This standard was drafted. Coal Science and Technology Research Institute Co., Ltd., Sinopec Lubricating Oil Co., Ltd. Synthetic Oil Company.

1 Scope

This standard specifies methods for determining the durability of flame retardant hydraulic fluid jet combustion using an empty cone jet nozzle test. Liquid for pressurized injection

The flow is ignited by applying a source of ignition at its different locations, and the combustion characteristics of the flame retardant hydraulic fluid are evaluated by its flame burning durability.

This standard applies to flame retardant hydraulic fluids.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this

document.

GB/T 394.1-2008 Industrial Alcohol

GB 1922-2006 Solvent oil for paints and cleaning

GB/T 4756 manual sampling method for petroleum liquids (GB/T 4756-2015, ISO 3170.2004, MOD)

GB/T 21449-2008 Water-glycol type flame retardant hydraulic fluid

SH/T 0553-1993 Industrial Propane, Butane (ISO 9162.1989, REF)

3 Terms and definitions

The following terms and definitions apply to this document.

3.1

Jet combustion persistent sprayflamepersistence

Under the test conditions specified in this standard, the liquid is injected by pressurized injection to form a jet, which is applied at different positions in the longitudinal direction of the liquid jet.

The source of ignition ignites the liquid for the longest time from the removal of the source of ignition until the combustion of the jet is completely extinguished.

4 Method summary

The liquid sample is pressurized and heated to a prescribed pressure and temperature to form a jet through a specific nozzle. Not along the length of the jet

In the same position, a propane flame is used to ignite the liquid jet. After the jet is burned, remove the ignition source and turn on the timer at the same time to measure the jet flow.

The time of burning. The result of each position measurement is the maximum time (s) at which the jet continues to burn after the source of ignition is removed.