



**International
Standard**

ISO 23648

**Plastics — Impinging flame test on
water-filled plastic pipes**

*Plastiques — Essai de flamme incidente sur des canalisations
plastiques remplies d'eau*

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Foreword

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This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 4, *Burning behaviour*.

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Introduction

Plastic pipes and fibre reinforced plastics pipes (FRP pipes) exhibit corrosion resistance against water, including sea water and liquid chemicals. These pipes have been used on ships in various applications, such as piping for supplying fresh water, sanitary and drain piping, sea-water piping and liquid cargo piping.

The International Maritime Organization (IMO) adopted guidelines on use of plastic pipes (IMO Assembly resolution A.753(18) as amended^[1]). These guidelines contain requirements on the fire performance of plastic pipes and of FRP pipes to be used on-board ships. These guidelines also contain a brief explanation of the test procedures on a fire performance test for liquid-filled plastic pipes in the Appendix 2 of IMO A.753(18). However, the description of the fire test in the current guideline is very short and insufficient to conduct the test in a uniform and consistent manner.

This document was developed based on the IMO A.753(18)^[1] and provides detailed descriptions of the fire test methods applicable to plastic pipes and FRP pipes used on ships.

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