



National Standards Authority of Ireland

IRISH STANDARD

**I.S. CEN/TR 14489:2005**

ICS 75.120

**FIRE-RESISTANT HYDRAULIC FLUIDS -  
CLASSIFICATION AND SPECIFICATION -  
GUIDELINES ON SELECTION FOR THE  
PROTECTION OF SAFETY, HEALTH AND THE  
ENVIRONMENT**

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*This Irish Standard was  
published under the  
authority of the National  
Standards Authority of  
Ireland and comes into  
effect on:  
December 7, 2005*

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TECHNICAL REPORT  
RAPPORT TECHNIQUE  
TECHNISCHER BERICHT

**CEN/TR 14489**

October 2005

ICS 75.120

English Version

**Fire-resistant hydraulic fluids - Classification and specification -  
Guidelines on selection for the protection of safety, health and  
the environment**

Fluides difficilement inflammables - Classification et  
spécification - Principes directeurs de sélection de fluides  
et de considération des risques de sécurité et  
d'environnement

Schwerentflammbare Druckflüssigkeiten - Klassifikation  
und Spezifikation - Auswahlrichtlinien zur Gewährleistung  
von Sicherheit, Gesundheit und Umweltschutz

This Technical Report was approved by CEN on 24 September 2005. It has been drawn up by the Technical Committee CEN/TC 19.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
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## **Foreword**

This CEN Technical Report (CEN/TR 14489:2005) has been prepared by Technical Committee CEN/TC 19 “Petroleum products, lubricants and related products”, the secretariat of which is held by NEN.

This document has been prepared under mandate M/238 given to CEN by the European Commission and the European Free Trade Association along with other standards on fire-resistant hydraulic fluids to be complementary to the regulatory measures contained in various EU Directives.

The mandated work of CEN/TC 19 is to develop European Standards for specifications and testing conditions applicable to fire-resistant hydraulic fluids.

## **Introduction**

The function of this Technical Report is to provide suppliers and users of equipment guidance on how compliance with the essential health and safety requirements (EHSR's) incorporated in both Product (Article 95) and User (Article 137/138) Directives issued by the European Union may be achieved in respect of the use of fire-resistant hydraulic fluids. It builds upon the guidance provided in EN 1050 on the principles of risk assessment. EN 1050 in turn supports Directive 92/104/EEC [1].

The document was considered necessary because the specialised nature of fire-resistant fluids and the tests used to quantify their properties may not in general be familiar to prospective machinery manufacturers and users. Because several Directives deal with the prevention of fire it is necessary to consider other aspects in addition to the tests used to quantify fire properties.

The use of fire-resistant hydraulic fluids is a fire protection measure. A fire occurs if combustible materials or explosive gases, oxygen and an ignition source are all present at the same time. If there is a danger of an ignition source being present when hydraulic installations are in use, one method of improving safety may be to replace more combustible mineral oil by a fire-resistant hydraulic fluid. Fire-resistant fluids provide fire protection. Their use, however, shall not jeopardise other safety measures as, in addition to requirements for fire resistance, there are additionally requirements for assessing effects on the health of workers and, increasingly, on potential effects on the environment. Guidance on the information needed is contained in this Technical Report.

**IMPORTANT — This document does not purport to address all of the safety problems associated with the use of hydraulic systems. It is concerned with the use of fire-resistant fluids as a means of reducing the risk of fire. It is the responsibility of the user of this document to establish appropriate safety and health practices to reduce other safety risks and to determine the applicability of regulatory regimes.**

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