SLOVENSKI STANDARD
SIST EN 2568:2019

01-september-2019

Aeronavtika - Fluorogljikove gume (FKM) - Trdota 90 IRHD

Aerospace series - Fluorocarbon rubber (FKM) - Hardness 90 IRHD

Luft- und Raumfahrt - Fluorcarbon-Elastomer (FKM) - Härte 90 IRHD

Série aérospatiale - Élastomère fluoré (FKM) - Dureté 90 DIDC

Ta slovenski standard je istoveten z: **EN 2568:2019**

ICS:

49.025.40 Guma in polimerni materiali Rubber and plastics

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Aerospace series - Fluorocarbon rubber (FKM) - Hardness 90 IRHD

Série aérospatiale - Élastomère fluoré (FKM) - Dureté 90 DIDC

Luft- und Raumfahrt - Fluorcarbon-Elastomer (FKM) - Härte 90 IRHD

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COMITÉ EUROPÉEN DE NORMALISATION
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Contents

Page

European foreword 3
1 Scope 4
2 Normative references 4
3 Terms and definitions 4
4 Application of the material 5
5 Properties 5
6 Designation 7
7 Technical specification 7

European foreword

This document (EN 2568:2019) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2019, and conflicting national standards shall be withdrawn at the latest by November 2019.

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1 Scope

This document specifies the properties of fluorocarbon rubber (FKM)[1)], hardness 90 IRHD, for aerospace applications.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 3207, *Aerospace series — Rubber compounds — Technical specification*

ISO 1629, *Rubber and latices — Nomenclature*

ISO 1817, *Rubber, vulcanized — Determination of the effect of liquids*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

1) Symbol as per ISO 1629.

4 Application of the material

4.1 General

The suitability of the material for a specific application shall be determined by complementary tests carried out on the finished product as the properties specified in this standard are obtained from standard test specimens.

4.2 Typical use

Application requiring resistance to air, hydrocarbon and synthetic oil, and fuels at elevated temperature.

4.3 Temperature range

— Continuous service: from –20 °C to 225 °C;

— Intermittent service: from –20 °C to 250 °C.

5 Properties

See Table 1 and Table 2.

For qualification, all tests shall be performed.

For batch acceptance, those identified "*" shall be performed.

Table 1 — Test methods

Line	Column 1 Properties	2 Units	3 Requirements
1	Hardness	IRHD	$90\ ^{+5}_{-4}$ *
2	–	–	–
3	Density	Mg/m³	[a] *
4	–	–	–
5	Tensile strength	MPa	11 min. *
6	–	–	–
7	Elongation at break	%	100 min. *
8	–	–	–
9	Modulus at ... % strain	MPa	–
10	–	–	–
11	Tear strength	N/mm	–
12	–	–	–
13	Resistance to low temperatures TR10	°C	– 12 max.
14	Crystallization	Point	–
15	Compression set	%	–
15.1	After 24 h to 200 °C		40 max. *
15.2	After 70 h to 200 °C		75 max.
16	–	–	–
17	Ozone resistance Ozone concentration : (... ± ...) pphm Elongation of test piece : ... % Time : ... h Temperature : ... °C	–	–
18	–	–	–
19	Corrosion and adhesion on metals in a dry atmosphere Time : 168 h Temperature : 200 °C	–	no corrosion no adhesion
20	Corrosion and adhesion on metals	–	–
20.1	Time : ... h Temperature : ... °C Humidity : ... %		
20.2	Time : ... h Temperature : ... °C Humidity : ... %		
30	–	–	–
39	–	–	–

* See Clause 5.

[a] The value determined for each batch shall not differ from that determined at qualification by more than 0,03 Mg/m³.