# FKM General 75B

**FKM-GEN75B-01** · FKM · 75 Shore A · Bisphenol cure · −20 °C to +200 °C ○ NO POLE MARK

## The fluoroelastomer reference grade, with the data to prove it.

**READ THE CODE** FKM-GEN75B-01 = FKM, GEN duty (general reference grade), 75 Shore A, B for bisphenol cure, recipe 01.

**DEVELOPMENT TARGETS: NOT MEASURED RESULTS.** Every value on this sheet is a design target or a release limit for development. Replace targets with measured typical values (mean of production lots, with the number of lots) and the test report reference before external use.

## Description

A 75 Shore A bisphenol-cured FKM for general O-ring and seal duty in oils, fuels and hydrocarbons to 200 °C. Low compression set and a stable lot-to-lot record make it the base of a seal maker's catalogue.

## Applications

- AS568 and ISO 3601 O-rings in oils, fuels and hydrocarbons
- Valve and pump seals in refineries and terminals
- Power plant lube oil and fuel systems
- Gaskets and moulded seals

| | |
|---|---|
| POLYMER | FKM (fluoroelastomer) |
| DUTY | GEN: reference grades |
| CHEMISTRY | Bisphenol-cured fluoroelastomer (dipolymer type), about 66 % fluorine |
| CURE | Bisphenol |
| HARDNESS | 75 Shore A nominal |
| DESIGN RANGE | −20 °C to +200 °C |
| COLOUR | Black |
| PORTFOLIO | Wave 1, must-have |
| POLE MARKS | None |

## Properties: targets and release limits

| PROPERTY | TARGET | RELEASE LIMIT | UNIT | TEST METHOD |
|---|---|---|---|---|
| Hardness | **75** | **70 to 80** | Shore A | ASTM D2240 / ISO 48-4, 1 s |
| Specific gravity | **1.85** | **±0.02 of approved value** | — | ASTM D297 / ISO 2781 |
| Tensile strength | **13** | **min 10** | MPa | ASTM D412 die C / ISO 37 type 2 |
| Elongation at break | **220** | **min 160** | % | ASTM D412 die C / ISO 37 type 2 |
| Modulus at 100 % | **5** | **4 to 7** | MPa | ASTM D412 die C / ISO 37 type 2 |
| Compression set, 22 h at 200 °C | **12** | **max 18** | % | ASTM D395 method B, button |
| TR10 | **−17** | **max −15** | °C | ASTM D1329 / ISO 2921 |
| Heat ageing 70 h at 250 °C, hardness change | **+3** | **0 to +5** | points | ASTM D573 / ISO 188 |
| IRM 903, 168 h at 150 °C, volume change | **+3** | **max +6** | % | ASTM D471 / ISO 1817 |
| ASTM Fuel C, 70 h at 23 °C, volume change | **+4** | **max +8** | % | ASTM D471 / ISO 1817 |

**Typical values are indicative and are not a warranty.** Targets are design values, not measured results. The user is responsible for confirming suitability in the actual application. Pascalor · Compounds with a paper trail.

## Qualification plan

The grade code says what this compound is designed for. This table says what it has passed: a duty is claimed only once its report is on file. Evidence for the GEN duty: Standard property data (an ASTM D2000 line call-out where one applies).

| TEST | STANDARD OR METHOD | CONDITIONS | STATUS |
|---|---|---|---|
| **O-ring compression set** | ISO 3601 / AS568-214 O-rings | 22 h and 1,000 h at 200 °C | Planned |
| **Specification call-out** | ASTM D2000 line call-out | To be issued with the first production data | Planned |
| **Customer approvals** | Seal maker qualification | Per customer | Planned |

## Processing

Press cure guide: 8 min at 177 °C. Post-cure guide: 4 to 16 h at 230 °C depending on section. Confirm on the rheometer curve.

## Storage and lot record

Target 9 months at or below 25 °C. Every lot ships with its Passport: results against these limits, the rheometer cure curve and the raw-material lots.

## How to read this sheet

**Target:** the value the compound is designed to reach, used until measured data exists.

**Typical:** the mean of measured production lots, stated with the number of lots. Replaces the target.

**Release limit:** the window every lot is tested against. A lot outside it does not ship.

**Method:** the standard, specimen and conditions behind each number.

## Supply

Supplied as uncured compound by the batch, with the lot Passport. Test slabs, buttons and trial quantities are available for qualification.

Tell us the fluid, the temperature range, the pressure and the seal design, and we will say whether this grade fits, and which one does if it does not.

## Pole marks

This is a reference or general grade and carries no pole mark. The red HPHT mark is for high-pressure duty at 160 °C or above; the blue HPLT mark is for sealing under pressure at −30 °C or below.