

GASKET MATERIAL TEST DATA

TRP COMPOUND REFERENCE N°: F177

POLYMER TYPE: FLUROELASTOMER FOR HIGH TEMPERATURE STEAM

DESCRIPTION:

This compound is a peroxide cured fluoroelastomer designed specifically for high temperature steam applications. It is characterised by outstanding resistance to permanent set. F177 has excellent resistance to a wide range of media but not to the level of high fluorine GF types. F177 has the benefit of low shrinkage making it suitable for moulds designed for NBR & EPDM materials.

TEMPERATURE LIMITS

MAX. CONTINUOUS TEMPERATURE: +200°C
INTERMITTENT MAX. TEMPERATURE: +210°C
MIN. CONTINUOUS TEMPERATURE: -10°C

THESE TEMPERATURES ARE FOR AQUEOUS MEDIA. SLIGHTLY HIGHER TEMPERATURES CAN BE TOLERATED IN HYDROCARBON MEDIA.

TYPICAL PHYSICAL PROPERTIES

Typical values are achieved during testing to standard ISO methods under standard laboratory conditions, the results reflect those achieved consistently by the compound.

PROPERTY	TYPICAL VALUES & TOLERANCE	TEST STANDARD
HARDNESS (IRHD)	77-83IRHD(Typical 82 IRHD)	ISO 48
TENSILE STRENGTH (MPa)	13.9 MPa	ISO 37
MODULUS @ 100% (MPa)	10.3 MPa	ISO 37
ELONGATION @ BREAK (%)	160%	ISO 37
TEAR STRENGTH (N/mm)	41 N/mm	ISO 34
SPECIFIC GRAVITY	1.76	ISO 2781
MOULDING SHRINKAGE	STANDARD	
24 HRS COMPRESSION SET @ 150°C UNDER 25% STRAIN	8.3%	TRP CONTROL TEST

Note: Compression set result is from TRP standard profile and may not reflect actual product results (standard profile drawing available on request).

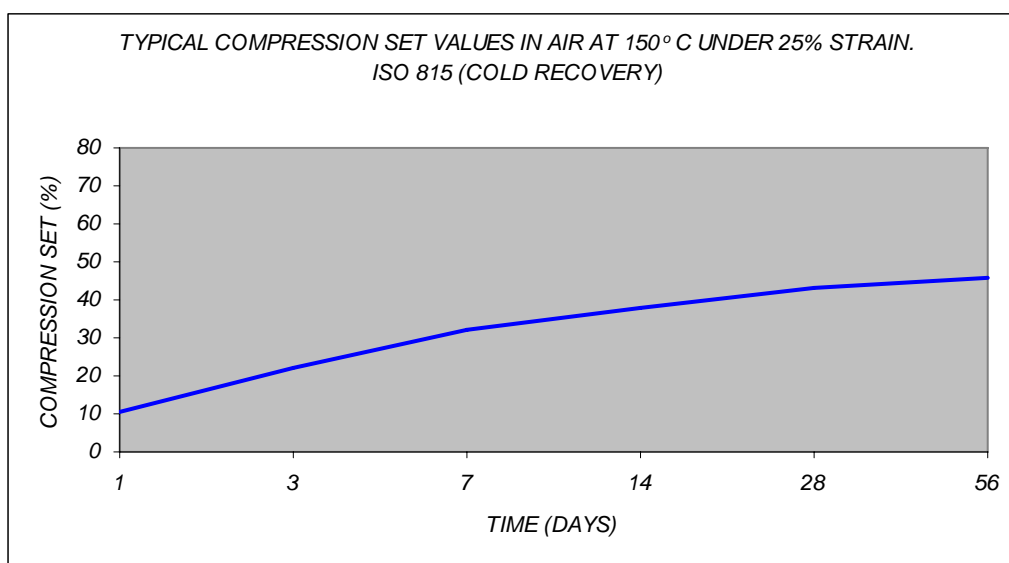
DATA SHEET: GM 106	PAGE: 1 OF 2	ISSUE DATE: 01.04.08	ISSUE N°: 3	ISSUE BY: WLF
------------------------------	------------------------	--------------------------------	-----------------------	-------------------------

GASKET MATERIAL TEST DATA

AIR AGEING

PROPERTY (AFTER 336 HRS AT 225°C)	TYPICAL VALUES	TEST STANDARD
HARDNESS CHANGE (IRHD)	+1 IRHD	ISO 188
TENSILE CHANGE (%)	+5%	ISO 188
ELONGATION CHANGE (%)	-11%	ISO 188

LONG TERM COMPRESSION SET



ABSORPTION TESTS

PROPERTY	TYPICAL VALUES	TEST STANDARD
98% SULPHURIC ACID, 336 HRS AT 110°C, 24 HRS IN WATER AT AMBIENT. VOLUME CHANGE	+25.8%	ISO 1817
69% NITRIC ACID, 336 HRS AT 90°C VOLUME CHANGE	+6.9%	ISO 1817

DATA SHEET: GM 106	PAGE: 2 OF 2	ISSUE DATE: 01.04.08	ISSUE N°: 3	ISSUE BY: WLF
-----------------------	-----------------	-------------------------	----------------	------------------

The information contained in this data sheet is provided by TRP Sealing Systems Ltd in good faith and believed to be accurate. It is however intended for general guidance only and customers must therefore carry out their own tests and evaluations to ensure that the products are fit and suitable for the purpose for which they are intended. All products supplied by TRP Sealing Systems Ltd are subject to the companies standard terms and conditions of sale.