

TD1310 sealing materials is compounded with special nitrile (NBR) rubber. This product is ideal for electrical bushing applications and is suitable for most transformer oils at application temperatures

DATI TECNICI/TECHNICAL DATA

Temperature Range	(* Ref.Pag2 - low temperature performance)	-50 (-60*) / +110	°C
Stress range		3 to 20	MPa
Compressive Strength		>70MPa	
Density	ASTM D297	1040	Kg/m ³
Hardness	ASTM D2240	70	SHORE A
Tensile strength	ASTM D414,DIEC	2,5	MPa
Elongation	ASTM D414,DIEC	100	%

TDF1310 conforms to all present regulations for hazardous substances:

- Asbestos Free
- Heavy Metals (Pb, Cd, Hg, and Cr(VI)) Free
- Polycyclic Aromatic Hydrocarbons (PAH) Free
- RoHS Compliant

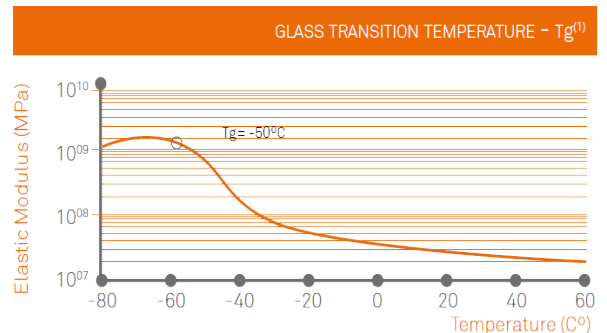
Fluid contact:

- Mineral OIL (Suitable)
- Natural Ester OIL (Suitable)
- Silicone OIL (Suitable)
- SF6 GAS (ACCETTABLE)

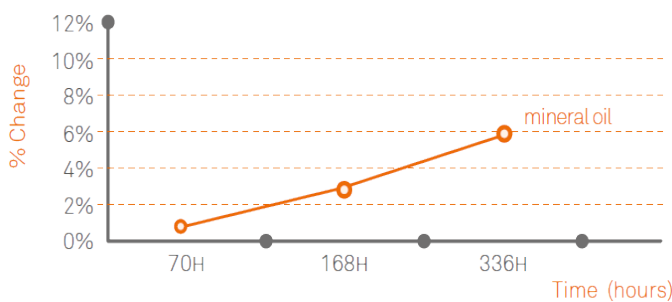
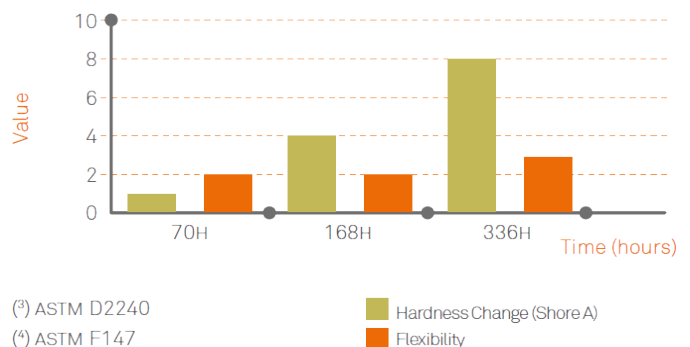
TD1310 is suitable for Mineral and Silicone oil according to:

ASTM D3455: Test methods for compatibility of Construction Materials with electrical Insulating Oil of Petroleum origin.

ASTM D5282: Test Methods for compatibility of Construction Materials with silicone fluid used for electrical insulation.


OIL AGEING DATA ⁽²⁾

VOLUME CHANGE @ 100°C:

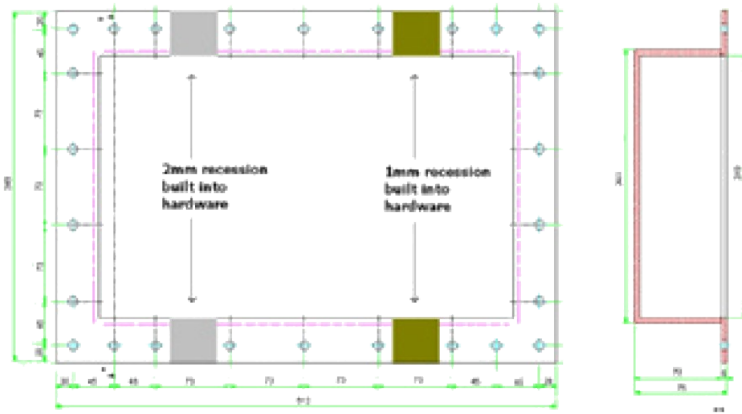

HEAT AGEING DATA, AIR @ 100°C: ^(3&4)


Guarnizioni piane in sugherogomma SCONSIGLIATE per pressioni superiori ai 6/8 bar.

1 The values shown here are given for guidance and are to be considered as a guideline for the selection of the material and not an absolute truth. The parameters described refer to tests carried out under certain conditions and with certain characteristics of the gasket, the coupling, the type of clamping and by heat shock / mechanic. that can be specified only for guidance. The Company assumes no responsibility, however improper use of the product.

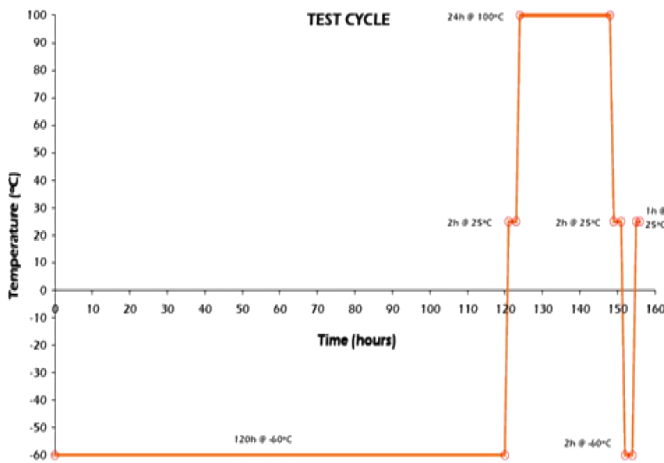
In general the limits of temperature and pressure do not apply simultaneously. They also depend on a variety of factors (state of the joints, dimensions, clamping, fluid, thermal shock or mechanical) for which can only be shown for orientation purposes.

Low temperature performance



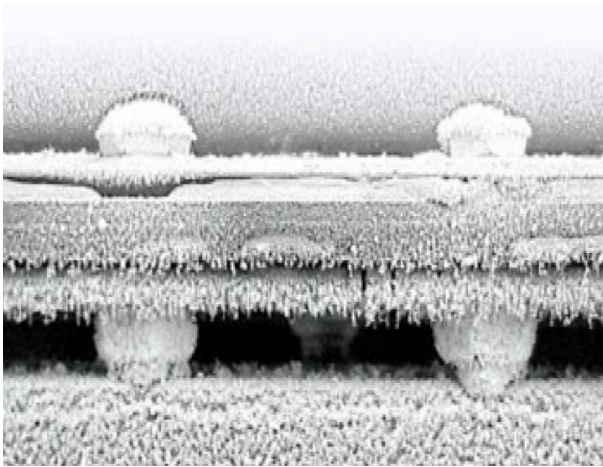
DETAIL:

Functional performance of TD1310 low temperature nitrile material at -60°C . Objective is to simulate the transformers storage/transportation in extreme cold conditions.



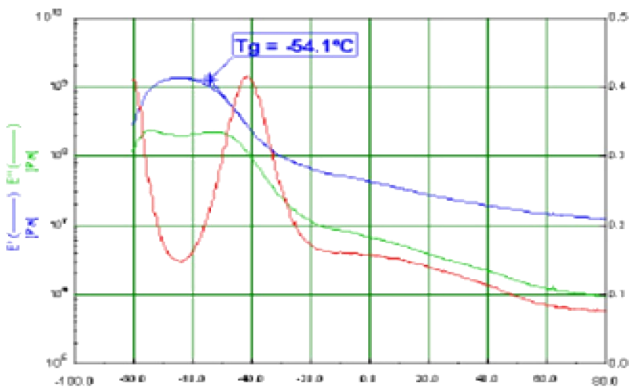
Thermal Cycle with observation steps at 25°C :

Test fixture with 1 and 2 mm recesses, was assembled with TD1310 @9 mm thick and filled with mineral transformer oil. Load was applied through a 49N m torque.



EVALUATION:

During the entire thermal cycle no leakages were observed at any point. Material responds to the temperature gradient of -60°C top 100°C , even though the lower limit temperature is stated at -50°C



GLASS TRANSITION TEMPERATURE (TG):

Material subjected to the application conditions, such as the performed test, under a compressed state often surpass the materials stated temperature limit (TG TD1310 = -50°C) (DMTA output)

OMOLOGAZIONI

I manufatti da noi realizzati sono ottenuti con processo di taglio a freddo che non altera le proprietà chimico/fisiche del materiale. E' però un processo industriale NON asettico che può lasciare traccia di polveri (Talco, ...) che non ne alterano le proprietà. Si rende quindi necessaria la pulizia/sterilizzazione prima del suo utilizzo dove necessario.

ATTENZIONE: Le guarnizioni ed i nostri manufatti in genere non sono dispositivi di sicurezza. Ove siano presenti pericoli per la sicurezza delle persone (alte pressioni, alte temperature, fluidi pericolosi, ...) prevedere dispositivi aggiuntivi di sicurezza certificati.

E' compito del progettista dell'impianto scegliere il tipo di materiale adeguato e valutare eventuali pericoli di rottura del manufatto (Guarnizione, bandella, paracolpi, ...) e prevenirli.

Seguono le omologazioni disponibili:

--