

TECHNICAL INFORMATION

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CRYOGENIC APPLICATIONS

The problem with all elastomer containing materials is, that they become hard and brittle at such low temperatures. For all materials Tesnit BA style we can say, that materials begins to lose its flexibility at temperatures below -40°C, which is glass transition temperature for NBR rubber in material. Below this temperature binder in materials loses its flexibility.

Also, due to thermal contraction of flange and gasket it can happens, that gasket surface stress decreases. Therefore retightening during operation may be necessary.

Unfortunately we do not have experience with cryogenic applications, but we have exposed our materials to cryogenic temperatures (-196°C) and we can say that temperature itself is not a problem. Main issue are thermal contractions of gasket-flange assembly which can unfortunately not be predicted.

Finally we can say that you can use all Tesnit BA styles gasket materials down to -40°C without any special consideration (normal assembly procedures).

Lower temperatures (cryogenic) does not harm the material but we recommend special consideration during the assembly.

*All information data are based on years of experience in production and operation of sealing elements. However, in view of the wide variety of possible installation and operating conditions one cannot draw final conclusions in all application cases regarding the behavior in gasket joint. The data may not, therefore, be used to support any warranty claims.
Whenever there is any doubt, our staff will be pleased to assist you in finding the optimum sealing solutions.*

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Donit Tesnit d.d.