



DONIFLEX® G-MD is an advanced composite material based on graphite and aramid manufactured under organic solvent-free conditions. DONIFLEX® G-MD combines the advantages of the chemical and thermal resistance of graphite with the strength of aramid. This "medium density" material has good stress resistance for gaskets with narrow-width. It is particularly suitable for steam and hot water supplies as well as for boilers or radiators.

## PROPERTIES

SUPERIOR				
EXCELENT				
VERY GOOD				
GOOD				
MODERATE				
	MECHANICAL RESISTANCE	THERMAL RESISTANCE	SEALABILITY PERFORMANCE	CHEMICAL RESISTANCE

## APPROPRIATE INDUSTRIES & APPLICATIONS

- GENERAL PURPOSE
- WATER SUPPLY
- STEAM SUPPLY
- PETROCHEMICAL INDUSTRY
- PAPER AND CELLULOSE INDUSTRY
- AUTOMOTIVE AND ENGINE BUILDING INDUSTRY
- SHIPBUILDING
- POWER PLANT
- HEATING SYSTEMS
- HIGH TEMP. APPLICATIONS

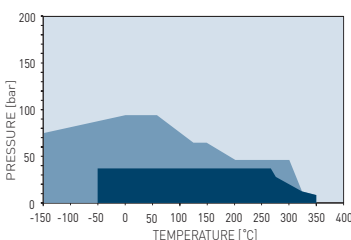
Composition	Aramid fibres, natural graphite, inorganic fillers, NBR binder.
Colour	Grey
Approvals	Please inquire.

## TECHNICAL DATA Typical values for a thickness of 1 mm

<b>Density</b>	DIN 28090-2	g/cm <sup>3</sup>	1.4
<b>Compressibility</b>	ASTM F36J	%	20
<b>Recovery</b>	ASTM F36J	%	32
<b>Tensile strength</b>	ASTM F152	MPa	9
<b>Stress resistance</b>	DIN 52913		
50 MPa, 16 h, 175 °C		MPa	45
50 MPa, 16 h, 300 °C		MPa	40
<b>Specific leak rate</b>	DIN 3535-6	mg/(s·m)	0.5
<b>Thickness increase</b>	ASTM F146		
Oil IRM 903, 5 h, 150 °C		%	5
ASTM Fuel B, 5 h, 23 °C		%	5
<b>Weight increase</b>			
Oil IRM 903, 5 h, 150 °C		%	20
ASTM Fuel B, 5 h, 23 °C		%	17
<b>Compression modulus</b>	DIN 28090-2		
At room temperature: $\epsilon_{KSW}$		%	17
At elevated temperature: $\epsilon_{WSW/200\text{ °C}}$		%	5
<b>Percentage creep relaxation</b>	DIN 28090-2		
At room temperature: $\epsilon_{KRW}$		%	2.6
At elevated temperature: $\epsilon_{WRW/200\text{ °C}}$		%	0.2
<b>Creep deformation</b>			
Change in thickness at 20 °C, 50 MPa		%	18
Change in thickness at 300 °C, 50 MPa		%	10
Change in thickness at 400 °C, 50 MPa		%	15

## P-T DIAGRAM

EN 1514-1, Type IBC, PN 40, DIN 28091-2 / 3.8, 2.0 mm



- General suitability - Under common installation practices and chemical compatibility.
- Conditional suitability - Appropriate measures ensure maximum performance for joint design and gasket installation. Technical consultation is recommended.
- Limited suitability - Technical consultation is mandatory.

Dimensions of standard sheets

Sheet size (mm): 1500 x 1480 | 2000 x 1480  
 Thickness (mm): 0.5 | 1.0 | 1.5 | 2.0 | 3.0  
 Other dimensions and thicknesses are available on request.

Acetamide	+	Dioxane	?	Oleic acid	+
Acetic acid, 10%	+	Diphytl (Dowtherm A)	+	Oleum (Sulfuric acid, fuming)	-
Acetic acid, 100% (Glacial)	?	Esters	?	Oxalic acid	+
Acetone	?	Ethane (gas)	+	Oxygen (gas)	+
Acetonitrile	-	Ethers	?	Palmitic acid	+
Acetylene (gas)	+	Ethyl acetate	?	Paraffin oil	+
Acid chlorides	-	Ethyl alcohol (Ethanol)	+	Pentane	+
Acrylic acid	+	Ethyl cellulose	?	Perchloroethylene	?
Acrylonitrile	-	Ethyl chloride (gas)	?	Petroleum (Crude oil)	+
Adipic acid	+	Ethylene (gas)	+	Phenol (Carbolic acid)	-
Air (gas)	+	Ethylene glycol	+	Phosphoric acid, 40%	?
Alcohols	+	Formaldehyde (Formalin)	?	Phosphoric acid, 85%	?
Aldehydes	?	Formamide	+	Phthalic acid	+
Alum	+	Formic acid, 10%	+	Potassium acetate	+
Aluminium acetate	+	Formic acid, 85%	?	Potassium bicarbonate	+
Aluminium chlorate	+	Formic acid, 100%	?	Potassium carbonate	+
Aluminium chloride	+	Freon-12 (R-12)	+	Potassium chloride	+
Aluminium sulfate	+	Freon-134a (R-134a)	+	Potassium cyanide	+
Amines	-	Freon-22 (R-22)	?	Potassium dichromate	?
Ammonia (gas)	?	Fruit juices	+	Potassium hydroxide	?
Ammonium bicarbonate	+	Fuel oil	+	Potassium iodide	+
Ammonium chloride	+	Gasoline	+	Potassium nitrate	+
Ammonium hydroxide	?	Gelatin	+	Potassium permanganate	?
Amyl acetate	?	Glycerine (Glycerol)	+	Propane (gas)	+
Anhydrides	?	Glycols	+	Propylene (gas)	+
Aniline	-	Helium (gas)	+	Pyridine	-
Anisole	+	Heptane	+	Salicylic acid	?
Argon (gas)	+	Hydraulic oil (Glycol based)	+	Seawater/brine	+
Asphalt	+	Hydraulic oil (Mineral type)	+	Silicones (oil/grease)	+
Barium chloride	+	Hydraulic oil (Phosphate ester based)	+	Soaps	+
Benzaldehyde	?	Hydrazine	-	Sodium aluminate	+
Benzene	+	Hydrocarbons	+	Sodium bicarbonate	+
Benzoic acid	+	Hydrochloric acid, 10%	?	Sodium bisulfite	+
Bio-diesel	+	Hydrochloric acid, 37%	-	Sodium carbonate	+
Bio-ethanol	+	Hydrofluoric acid, 10%	-	Sodium chloride	+
Black liquor	+	Hydrofluoric acid, 48%	-	Sodium cyanide	+
Borax	+	Hydrogen (gas)	+	Sodium hydroxide	?
Boric acid	+	Iron sulfate	+	Sodium hypochlorite (Bleach)	?
Butadiene (gas)	+	Isobutane (gas)	+	Sodium silicate (Water glass)	+
Butane (gas)	+	Isooctane	+	Sodium sulfate	+
Butyl alcohol (Butanol)	+	Isoprene	+	Sodium sulfide	+
Butyric acid	+	Isopropyl alcohol (Isopropanol)	+	Starch	+
Calcium chloride	+	Kerosene	+	Steam	+
Calcium hydroxide	+	Ketones	?	Stearic acid	+
Carbon dioxide (gas)	+	Lactic acid	+	Styrene	?
Carbon monoxide (gas)	+	Lead acetate	+	Sugars	+
Cellose	?	Lead arsenate	+	Sulfur	?
Chlorine (gas)	?	Magnesium sulfate	+	Sulfur dioxide (gas)	?
Chlorine (in water)	?	Maleic acid	+	Sulfuric acid, 20%	-
Chlorobenzene	?	Malic acid	+	Sulfuric acid, 98%	-
Chloroform	?	Methane (gas)	+	Sulfuryl chloride	-
Chloroprene	?	Methyl alcohol (Methanol)	+	Tar	+
Chlorosilanes	?	Methyl chloride (gas)	?	Tartaric acid	+
Chromic acid	-	Methylene dichloride	?	Tetrahydrofuran (THF)	?
Citric acid	+	Methyl ethyl ketone (MEK)	?	Titanium tetrachloride	+
Copper acetate	+	N-Methyl-pyrrolidone (NMP)	?	Toluene	+
Copper sulfate	+	Milk	+	2,4-Toluenediisocyanate	?
Creosote	?	Mineral oil (ASTM no. 1)	+	Transformer oil (Mineral type)	+
Cresols (Cresylic acid)	?	Motor oil	+	Trichloroethylene	?
Cyclohexane	+	Naphtha	+	Vinegar	+
Cyclohexanol	+	Nitric acid, 10%	?	Vinyl chloride (gas)	?
Cyclohexanone	?	Nitric acid, 65%	-	Vinylidene chloride	?
Decalin	+	Nitrobenzene	?	Water	+
Dextrin	+	Nitrogen (gas)	+	White spirits	+
Dibenzyl ether	?	Nitrous gases (NOx)	?	Xylenes	+
Dibutyl phthalate	?	Octane	+	Xylenol	-
Dimethylacetamide (DMA)	?	Oils (Essential)	+	Zinc sulfate	+
Dimethylformamide (DMF)	?	Oils (Vegetable)	+		

## CHEMICAL RESISTANCE CHART

The recommendations made here are intended to be a guideline for the selection of the suitable gasket quality. Because the function and durability of the products depend upon a number of factors, the data may not be used to support any warranty claims.

- + Recommended
- ? Recommendation depends on operating conditions
- Not recommended



DONIT TESNIT®, d.o.o.

Cesta komandanta Staneta 38  
 1215 Medvode, Slovenia

Phone: +386 (0)1 582 33 00

Fax: +386 (0)1 582 32 06  
 +386 (0)1 582 32 08

Web: [www.donit.eu](http://www.donit.eu)

E-mail: [info@donit.eu](mailto:info@donit.eu)

Copyright © 2015 DONIT TESNIT, d.o.o.

All rights reserved

Date of issue: 01.06.2015 / TDS-DGMD-05-2015