

DATA SHEET

TYPE OF RUBBER

VITON G

DESCRIPTION

FKM
HIGH FLUORINE

HARDNESS

75° - 80°

TYPICAL PROPERTIES

TENSILE STRENGTH, Mpa.

16.4

ELONGATION AT BREAK %

250

MODULUS AT 100%

5.4

SHRINKAGE

3.2%

COMPRESSION SET 24 HRS

TEMP

200°C

% SET

32.7

ACID RESISTANCE

DILUTE

EXCELLENT

CONCENTRATED

EXCELLENT

SOLVENT RESISTANCE

ALIPHATIC HYDROCARBONS

EXCELLENT

AROMATIC HYDROCARBONS

EXCELLENT

OXYGENATED

POOR

LACQUER SOLVENTS

FAIR

OTHERS

LUBRICATING OILS

EXCELLENT

OIL & GASOLINE

EXCELLENT

ANIMAL & VEGETABLE OILS

EXCELLENT

WATER ABSORPTION

EXCELLENT

OXIDATIONS

EXCELLENT

OZONE

EXCELLENT

SUNLIGHT AGEING

EXCELLENT

HEAT AGEING

EXCELLENT

F.D.A 177 – 2000 STATUS

AQUEOUS

NO

MILK AND FATTY FOODS

NO

MAXIMUM WORK TEMP

175°C

PEAK TEMP

200°C

LOW TEMP

-15°C

DATA SHEET

TYPE OF RUBBER

HT NBR

DESCRIPTION

NITRILE
HIGH TEMP

HARDNESS

75° - 80°

TYPICAL PROPERTIES

TENSILE STRENGTH, Mpa.

11.9

ELONGATION AT BREAK %

244

MODULUS AT 100%

4

SHRINKAGE

2%

COMPRESSION SET 24 HRS

TEMP

125°c

% SET

11.8

ACID RESISTANCE

DILUTE

FAIR

CONCENTRATED

POOR

SOLVENT RESISTANCE

ALIPHATIC HYDROCARBONS

EXCELLENT

AROMATIC HYDROCARBONS

GOOD

OXYGENATED

POOR

LACQUER SOLVENTS

FAIR

OTHERS

LUBRICATING OILS

GOOD

OIL & GASOLINE

EXCELLENT

ANIMAL & VEGETABLE OILS

GOOD

WATER ABSORPTION

GOOD

OXIDATIONS

GOOD

OZONE

POOR

SUNLIGHT AGEING

POOR

HEAT AGEING

GOOD

LOW TEMPERATURE

FAIR

-25°c

F.D.A 177 – 2000 STATUS

AQUEOUS

NO

MILK AND FATTY FOODS

NO

MAXIMUM WORK TEMP

130°c

PEAK TEMP

150°c

LOW TEMP

-25°c

DATA SHEET

TYPE OF RUBBER

NBR

DESCRIPTION

NITRILE
GENERAL PURPOSE

HARDNESS

75° - 80°

TYPICAL PROPERTIES

TENSILE STRENGTH, Mpa.

11.7

ELONGATION AT BREAK %

313

MODULUS AT 100%

3.6

SHRINKAGE

2%

COMPRESSION SET 24 HRS

TEMP

125°C

% SET

8

ACID RESISTANCE

DILUTE

FAIR

CONCENTRATED

POOR

SOLVENT RESISTANCE

ALIPHATIC HYDROCARBONS

EXCELLENT

AROMATIC HYDROCARBONS

GOOD

OXYGENATED

POOR

LACQUER SOLVENTS

FAIR

OTHERS

LUBRICATING OILS

GOOD

OIL & GASOLINE

EXCELLENT

ANIMAL & VEGETABLE OILS

GOOD

WATER ABSORPTION

GOOD

OXIDATIONS

GOOD

OZONE

POOR

SUNLIGHT AGEING

POOR

HEAT AGEING

GOOD

LOW TEMPERATURE

FAIR

-25°C

F.D.A 177 – 2000 STATUS

AQUEOUS

NO

MILK AND FATTY FOODS

NO

MAXIMUM WORK TEMP

120°C

PEAK TEMP

140°C

LOW TEMP

-25°C

DATA SHEET

TYPE OF RUBBER

ES NBR

DESCRIPTION

NITRILE
AQUEOUS, FOOD QUALITY

HARDNESS

75° - 80°

TYPICAL PROPERTIES

TENSILE STRENGTH, Mpa.

20.4

ELONGATION AT BREAK %

296

MODULUS AT 100%

5.6

SHRINKAGE

2.5%

COMPRESSION SET 24 HRS

TEMP

125°C

% SET

9.0

ACID RESISTANCE

DILUTE

FAIR

CONCENTRATED

POOR

SOLVENT RESISTANCE

ALIPHATIC HYDROCARBONS

EXCELLENT

AROMATIC HYDROCARBONS

GOOD

OXYGENATED

POOR

LACQUER SOLVENTS

FAIR

OTHERS

LUBRICATING OILS

GOOD

OIL & GASOLINE

EXCELLENT

ANIMAL & VEGETABLE OILS

GOOD

WATER ABSORPTION

GOOD

OXIDATIONS

GOOD

OZONE

POOR

SUNLIGHT AGEING

POOR

HEAT AGEING

GOOD

LOW TEMPERATURE

FAIR

-25°C

F.D.A 177 – 2000 STATUS

AQUEOUS

YES

MILK AND FATTY FOODS

NO

MAXIMUM WORK TEMP

120°C

PEAK TEMP

140°C

LOW TEMP

-25°C

DATA SHEET

TYPE OF RUBBER

EPDM HT

DESCRIPTION

EPDM
AQUEOUS, FOOD QUALITY

HARDNESS

75° - 80°

TYPICAL PROPERTIES

TENSILE STRENGTH, Mpa.

10.8

ELONGATION AT BREAK %

225

MODULUS AT 100%

4.2

SHRINKAGE

2.5%

COMPRESSION SET 24 HRS

TEMP

150°C

% SET

7.8

ACID RESISTANCE

DILUTE

EXCELLENT

CONCENTRATED

FAIR

SOLVENT RESISTANCE

ALIPHATIC HYDROCARBONS

POOR

AROMATIC HYDROCARBONS

POOR

OXYGENATED

EXCELLENT

LACQUER SOLVENTS

FAIR

OTHERS

LUBRICATING OILS

POOR

OIL & GASOLINE

POOR

ANIMAL & VEGETABLE OILS

GOOD

WATER ABSORPTION

EXCELLENT

OXIDATIONS

EXCELLENT

OZONE

EXCELLENT

SUNLIGHT AGEING

EXCELLENT

HEAT AGEING

EXCELLENT

LOW TEMPERATURE

EXCELLENT

-40°C

F.D.A 177 – 2000 STATUS

AQUEOUS

YES

MILK AND FATTY FOODS

NO

MAXIMUM WORK TEMP

150°C

PEAK TEMP

175°C

LOW TEMP

-40°C

DATA SHEET

TYPE OF RUBBER

ES HT NBR

DESCRIPTION

HIGH TEMP NITRILE
AQUEOUS, FOOD QUALITY

HARDNESS

75° - 80°

TYPICAL PROPERTIES

TENSILE STRENGTH, Mpa.

20.4

ELONGATION AT BREAK %

296

MODULUS AT 100%

5.6

SHRINKAGE

2.5%

COMPRESSION SET 24 HRS

TEMP

125°c

% SET

9.0

ACID RESISTANCE

DILUTE

FAIR

CONCENTRATED

POOR

SOLVENT RESISTANCE

ALIPHATIC HYDROCARBONS

EXCELLENT

AROMATIC HYDROCARBONS

GOOD

OXYGENATED

POOR

LACQUER SOLVENTS

FAIR

OTHERS

LUBRICATING OILS

GOOD

OIL & GASOLINE

EXCELLENT

ANIMAL & VEGETABLE OILS

GOOD

WATER ABSORPTION

GOOD

OXIDATIONS

GOOD

OZONE

POOR

SUNLIGHT AGEING

POOR

HEAT AGEING

GOOD

LOW TEMPERATURE

FAIR

-25°c

F.D.A 177 – 2000 STATUS

AQUEOUS

YES

MILK AND FATTY FOODS

NO

MAXIMUM WORK TEMP

130°c

PEAK TEMP

150°c

LOW TEMP

-25°c

DATA SHEET

TYPE OF RUBBER

VITON A

DESCRIPTION
HARDNESS

VITON A
75° - 80°

TYPICAL PROPERTIES

TENSILE STRENGTH, Mpa.	15.0
ELONGATION AT BREAK %	218
MODULUS AT 100%	6.5
SHRINKAGE	2.8%

COMPRESSION SET 24 HRS

TEMP	200°c
% SET	10.3

ACID RESISTANCE

DILUTE	GOOD
CONCENTRATED	POOR

SOLVENT RESISTANCE

ALIPHATIC HYDROCARBONS	EXCELLENT
AROMATIC HYDROCARBONS	EXCELLENT
OXYGENATED	POOR
LACQUER SOLVENTS	POOR

OTHERS

LUBRICATING OILS	EXCELLENT
OIL & GASOLINE	EXCELLENT
ANIMAL & VEGETABLE OILS	EXCELLENT
WATER ABSORPTION	GOOD
OXIDATIONS	EXCELLENT
OZONE	EXCELLENT
SUNLIGHT AGEING	EXCELLENT
HEAT AGEING	EXCELLENT
LOW TEMPERATURE	POOR – FAIR 15°c

F.D.A 177 – 2000 STATUS

AQUEOUS	NO
MILK AND FATTY FOODS	NO
MAXIMUM WORK TEMP	175°c
PEAK TEMP	200°c
LOW TEMP	-20°c

DATA SHEET

TYPE OF RUBBER

FDA VITON

DESCRIPTION
HARDNESS

FKM FOOD QUALITY
73° - 78°

TYPICAL PROPERTIES

TENSILE STRENGTH, M.P.U.
ELONGATION AT BREAK %
MODULUS AT 100%
SHRINKAGE

15.0
218
6.5
2.8%

COMPRESSION SET 24 HRS

TEMP
% SET

200°C
10.3

ACID RESISTANCE

DILUTE
CONCENTRATED

GOOD
POOR

SOLVENT RESISTANCE

ALIPHATIC HYDROCARBONS
AROMATIC HYDROCARBONS
OXYGENATED
LACQUER SOLVENTS

EXCELLENT
EXCELLENT
POOR
POOR

OTHERS

LUBRICATING OILS
OIL & GASOLINE
ANIMAL & VEGETABLE OILS
WATER ABSORPTION
OXIDATIONS
OZONE
SUNLIGHT AGEING
HEAT AGEING
LOW TEMPERATURE

EXCELLENT
EXCELLENT
EXCELLENT
GOOD
EXCELLENT
EXCELLENT
EXCELLENT
EXCELLENT
POOR – FAIR
-15°C

F.D.A 177 – 2000 STATUS

AQUEOUS
MILK AND FATTY FOODS
MAXIMUM WORK TEMP
PEAK TEMP
LOW TEMP

YES
YES
175°C
200°C
-20°C

DATA SHEET

TYPE OF RUBBER

RCB

DESCRIPTION
HARDNESS

RESIN CURED BUTYL
75/80

TYPICAL PROPERTIES

TENSILE STRENGTH, Mpa.
ELONGATION AT BREAK %
MODULUS AT 100%
SHRINKAGE

N/A
N/A
N/A
N/A

COMPRESSION SET 24 HRS

TEMP
% SET

N/A
N/A

ACID RESISTANCE

DILUTE
CONCENTRATED

EXCELLENT
FAIR

SOLVENT RESISTANCE

ALIPHATIC HYDROCARBONS
AROMATIC HYDROCARBONS
OXYGENATED
LACQUER SOLVENTS

POOR
POOR
GOOD
GOOD

OTHERS

LUBRICATING OILS
OIL & GASOLINE
ANIMAL & VEGETABLE OILS
WATER ABSORPTION
OXIDATIONS
OZONE
SUNLIGHT AGEING
HEAT AGEING
LOW TEMPERATURE

POOR
POOR
GOOD
GOOD
EXCELLENT
EXCELLENT
GOOD
GOOD
GOOD
-35°C

F.D.A 177 – 2000 STATUS

AQUEOUS
MILK AND FATTY FOODS
MAXIMUM WORK TEMP
PEAK TEMP
LOW TEMP

NO
NO
120°C
150°C
-35°C

DATA SHEET

TYPE OF RUBBER	HYDROGENATED NBR
DESCRIPTION	HNBR
HARDNESS	75° - 80°
<u>TYPICAL PROPERTIES</u>	
TENSILE STRENGTH, Mpa.	N/A
ELONGATION AT BREAK %	N/A
MODULUS AT 100%	N/A
SHRINKAGE	N/A
<u>COMPRESSION SET 24 HRS</u>	
TEMP	N/A
% SET	N/A
<u>ACID RESISTANCE</u>	
DILUTE	GOOD
CONCENTRATED	POOR
<u>SOLVENT RESISTANCE</u>	
ALIPHATIC HYDROCARBONS	EXCELLENT
AROMATIC HYDROCARBONS	GOOD
OXYGENATED	N/A
LACQUER SOLVENTS	GOOD
<u>OTHERS</u>	
LUBRICATING OILS	GOOD
OIL & GASOLINE	EXCELLENT
ANIMAL & VEGETABLE OILS	GOOD
WATER ABSORPTION	GOOD
OXIDATIONS	EXCELLENT
OZONE	GOOD
SUNLIGHT AGEING	GOOD
HEAT AGEING	VERY GOOD
LOW TEMPERATURE	FAIR -20°c
<u>F.D.A 177 – 2000 STATUS</u>	
AQUEOUS	NO
MILK AND FATTY FOODS	NO
MAXIMUM WORK TEMP	150°c
PEAK TEMP	165°c
LOW TEMP	-25°c

DATA SHEET

TYPE OF RUBBER

SILICONE

DESCRIPTION
HARDNESS IRHD

SILICONE LOW SHRINK
80°

TYPICAL PROPERTIES

TENSILE STRENGTH, Mpa.	8
ELONGATION AT BREAK %	150
MODULUS AT 100%	N/A
SHRINKAGE	2.6%

COMPRESSION SET 24 HRS

TEMP	177°c
% SET	14

ACID RESISTANCE

DILUTE	POOR
CONCENTRATED	POOR

SOLVENT RESISTANCE

ALIPHATIC HYDROCARBONS	POOR
AROMATIC HYDROCARBONS	POOR
OXYGENATED	GOOD
LACQUER SOLVENTS	POOR

OTHERS

LUBRICATING OILS	POOR
OIL & GASOLINE	POOR
ANIMAL & VEGETABLE OILS	GOOD
WATER ABSORPTION	EXCELLENT
OXIDATIONS	EXCELLENT
OZONE	EXCELLENT
SUNLIGHT AGEING	EXCELLENT
HEAT AGEING	EXCELLENT
LOW TEMPERATURE	EXCELLENT

-50°c

F.D.A 177 – 2000 STATUS

AQUEOUS	YES
MILK AND FATTY FOODS	YES
MAXIMUM WORK TEMP	200°c
PEAK TEMP	220°c
LOW TEMP	-50°c

DATA SHEET

TYPE OF RUBBER

HYPALON

DESCRIPTION

HYPALON

HARDNESS, SHORE

75° - 80°

TYPICAL PROPERTIES

TENSILE STRENGTH, Mpa.

10

ELONGATION AT BREAK %

250

MODULUS AT 100%

4

SHRINKAGE

2%

COMPRESSION SET 24HRS

TEMP

80°C

% SET

13%

ACID RESISTANCE

DILUTE

GOOD

CONCENTRATED

FAIR

SOLVENT RESISTANCE

ALIPHATIC HYDROCARBONS

GOOD

AROMATIC HYDROCARBONS

POOR

OXYGENATED

LACQUER SOLVENTS

OTHERS

LUBRICATING OILS

GOOD

OIL & GASOLINE

POOR

ANIMAL & VEGETABLE OILS

GOOD

WATER ABSORPTION

GOOD

OXIDANTS

GOOD

OZONE

EXCELLENT

SUNLIGHT AGEING

EXCELLENT

HEAT AGEING

FAIR

LOW TEMPERATURE

-40°C

F.D.A. 177 – 2000 STATUS

AQUEOUS

NO

MILK & FATTY FOODS

NO

MAXIMUM WORK TEMP

100°C

PEAK TEMPERATURE

120°C

LOW TEMPERATURE

-40°C

DATA SHEET

TYPE OF RUBBER

VITON B

DESCRIPTION
HARDNESS

FKM B
75° - 80°

TYPICAL PROPERTIES

TENSILE STRENGTH, Mpa.	14.4
ELONGATION AT BREAK %	257
MODULUS AT 100%	5.6
SHRINKAGE	2.6%

COMPRESSION SET 24HRS

TEMP	200°c
% SET	15.3

ACID RESISTANCE

DILUTE	EXCELLENT
CONCENTRATED	FAIR

SOLVENT RESISTANCE

ALIPHATIC HYDROCARBONS	EXCELLENT
AROMATIC HYDROCARBONS	EXCELLENT
OXYGENATED	POOR
LACQUER SOLVENTS	POOR

OTHERS

LUBRICATING OILS	EXCELLENT
OIL & GASOLINE	EXCELLENT
ANIMAL & VEGETABLE OILS	EXCELLENT
WATER ABSORBTION	GOOD
OXIDANTS	EXCELLENT
OZONE	EXCELLENT
SUNLIGHT AGEING	EXCELLENT
HEAT AGEING	EXCELLENT
LOW TEMPERATURE	POOR
	-5°c

F.D.A. 177 – 2000 STATUS

AQUEOUS	NO
MILK & FATTY FOODS	NO
MAXIMUM WORK TEMP	175°c
PEAK TEMPERATURE	200°c
LOW TEMPERATURE	-5°c