# Ferolite®

All information and recommendations given in this brochure are correct to the best of our Knowledge. Since conditions of use are beyond our control, the information provided can only serve as a guideline. Users must satisfy themselves that products are suitable for the intended processes and uses. We reserve the right to change product design and properties without notice.

## \* Graphite Coating & Antistick Coating available on request

Should you have any doubts about the choice of gasket material, please refer to us, Our Engineering cell will be happy to assist you.

Properties Applicable for

1.5 mm thick material

Tensile Strength

Compressibility

Stress Relaxation

Lgnition Loss

Mass Increase

FLUID ABSORPTION

In ASTM OIL No.3

Thickness Increase

Thickness Increase

Sulphuric Acid (96%)

Thickness Increase Tensile Strength Decrease

NItric Acid (95%)

Thickness Increase

Peak Temp. °C

Tensile Strength Decrease

Max. Operating Pressure Kg/cm

Mass Increase

Mass Increase

In FUEL B

Recovery

Water

# **GENERAL DATA**

1500 x 2000 mm 1500 x 1500 mm 1500 x 3000 mm

Standard Sheet Size

1500 x 4500 mm 2000 x 3000 mm

1500 x 4000 mm

Thickness

0.25 mm to 6.00 mm (For Non Metallic Range) 0.60 mm to 6.00 mm (For Metallic Range)

**Tolerances** Thickness

As per IS Length ± 50 mm ± 50 mm

- All metallic Jointing Sheets are treated on one side with graphite. Both Side graphite sheets can be supplied on request.
- 3△ finish can be provided on all Jointing Sheets i.e., anti stick, anti corrosion capabilities.

### **Performance Chart and Recommendation** Uncritical for application, provided Ferolite assembly rules are followed

- Only for short term temp, excursions
- Application might be okay, but is critical kindly consult ferolite technical support

For Low and medium For water, steam, air and various alkaline chemicals.

IS 2712/1998

1.7-2.2 gm/cm3

> 6.7 Mpa.

6-14 %

> 40%

< 28 %

333 Ferolite 33

e 333 Ferolite 333

For Low and medium

stress conditions.

solution, alkalies.

aggressive media

Specification Compliance Specification Compliance

ammonia and mildly

IS 2712/1998 Grade W/3 IS 2712/1998 Grade W/2,

IS 2712/1998

1.7-2.2 gm/cm<sup>3</sup>

> 7.5 Mpa.

6-14 %

> 40%

< 28 %

**Ferolite** 

For medium stress For water, steam, natural For air, water, steam, saline

**Ferolite** 

'Extra'

gas, petrol, saline solution.

other non-aggresive media

alkalies, ammonia and

0/2 DIN:3754 IT200 ASTM:

F104F112650 M6 BS2815-

IS 2712/1998

1.7-2.2 gm/cm

> 12.8 Mpa.

6-14 %

> 40%

> 17.5 Mpa

< 28 %

< 10%

1973 Grade B JIS:

R3453(1985)Type-2

 For high stress conditions. For water, steam, saline solution, alkalies,

ammonia propane.

aggressive media

IS 2712/1998 Grade W/1

ASTM:F104F112001 M7

IS 2712/1998

1.7-2.2 gm/cm<sup>3</sup>

> 24.0 Mpa.

6-14 %

> 40%

> 23.0 Mpa.

< 28 %

< 10%

BS2815-1973GradeA

DIN:3754 IT 300

producer gas and mildly

**Ferolite** 

**'IT-300'** 

For high stress conditions.

propane, producer gas and

mildly aggressive media

Specification Compliance | Specification Complia

IS 2712/1998 Grade W/1

ASTM:F104F 112001 M7

IS 2712/1998

1.7-2.2 gm/cm<sup>3</sup>

> 24.0 Mpa.

6-14 %

> 40%

< 23.0 Mpa

< 28 %

< 10%

BS2815-1973GradeA

DIN:3754 IT 400

**Ferolite** 

**'IT-400'** 

For medium to high stress solution, alkalies, ammonia For motor oil, Transmissions

and hydraulic fluids, low

temp, oil, Steam Alkalies.

Compressors, Pipes etc

IS 2712/1998 Grade W/2,

0/2 ASTM:F104F112340

IS 2712/1998

1.7-2.2 gm/cm<sup>3</sup>

> 13.0 Mpa.

6-14 %

> 40%

> 17.5 Mpa.

< 28 %

< 10%

< 35%

< 30%

< 30%

< 30 %

M6 JIS :R 3453 (1985)

For 1C Engines,

**Ferolit** 

 For low to medium stress For motor oil, transmissions and hydraulic fluids, low temp, oil, Steam Alkalies, anti freeze, refrigerating oil.

High oil and fuel resistance.

DIN: 3754 IT - 0

ASTM:F104F 112121 M7

JIS:R 3453 (1985) Type-3

ASTMF104

1.7-2.2 gm/cm<sup>3</sup>

> 24.0 Mpa.

7-12 %

> 50%

> 23.0 Mpa.

< 28 %

< 10%

< 10%

< 15%

< 10%

Ferolite 'F'

ate 'K' Ferolite 'K' Ferolic 'te Ferolite 'K' Ferolite ' 'K' Ferolite Fe For high stress conditions. hydrocarbon, Ammonia & refrigerating oils.

Specification Compliance

IS 2712/1998

1.7-2.2 gm/cm<sup>3</sup>

> 24.0 Mpa.

6-14 %

> 40%

> 23.0 Mpa.

< 28 %

\* (In refrigerating Oil)

< 5

Ferolite 'K'

ate 'K' Ferolite Fe

For high stress conditions. and hydraulic fluids, low temp, oil, Steam Alkalies, anti freeze, refrigerating oil. For IC Engines, compressors, chemical plants, hot oil tar oil & chlorinated & aromatic hydrocarbon.

**Ferolite** 

'Special

special' Ferolite

ite 'Special' Ferolite 'Speci

'e 'Special' Ferolite 'Spe

'necial' Ferolite

'al' Fer

IS 2712/1998 Grade W/1,

0/1 ASTM: F104F 112330

M7 JIS: R 3453 (1985)

BS: 2815-1973 Grade A

85:1832-1991 Grade A

IS 2712/1998

1.7-2.2 gm/cm<sup>3</sup>

> 24.0 Mpa.

6-14 %

> 40%

> 23.0 Mpa

< 28 %

< 10%

< 25%

< 20%

< 20%

with controlled swell For 1C Engines. compressors, pipes, oil pans, valve covers. Specification Compliance Specification Compliance

**Ferolite** 

olite 'CS' Ferolite

ite 'CS' Ferolite 'CS' Fer

Verolite 'CS' Ferolite 'C

'S' Ferolite 'CS'

For low sealing loads and

ASTMF104

1.7-2.2 gm/cm

> 24.0 Mpa.

6-14 %

> 40 %

> 23.0 Mpa

< 28 %

< 10 %

20-40 %

15-30 %

20-40 %

10-20 %

ASTM:F104F 112950 M7

Specification Compliance DIN: 3754 IT-0

**Ferolite** 

IT '0'

.f 'O' Ferolite IT

ite IT 'O' Ferolite IT 'O'

'te IT 'O' Ferolite IT 'O'

"'O' Ferolite IT

For high stress conditions.

hydraulic fluids, Steam,

refrigerating oil, solvents,

anti corrosion mixtures.

Alkalies, anti freeze.

DIN: 3754 IT-400 \* DIN, +IS 1.8-2.0 gm/cm<sup>3</sup> > 16.0 N/mm<sup>2</sup> 5-15 %

> 40 %

> 23.0 Mpa.

< 15 %

< 15 %

< 20 %

IS 2712/1998 IS 2712/1998 1.7-2.2 gm/cm<sup>3</sup> 1.7-2.2 gm/cm<sup>3</sup> > 24.0 Mpa. 6-14 % > 40 % > 23.0 Mpa.

< 20 %

< 15 %

< 15 %

< 15 %

**Ferolite** 

IT 'C' Universal

.iversal Ferolite 1.

ersal Ferolite IT 'C' Unive.

'te IT 'C' Universal Ferol'

'versal Ferolite'

plite IT

For high stress conditions.

alkalies, alcohols, esters,

Specification Compliance

For air, water, steam,

Suitable for most fluids

ketones, etc.

DIN: 3754 IT-0

DIN: 3754 IT-S

**Ferolite** 

'Acid'

ACID' Ferolite 'Ac

ate 'ACID' Ferolite 'ACID

'te 'ACID' Ferolite 'ACID'

Y Ferol'

'CID' Ferolite

For low to medium stress

For aggressive organic and

inorganic acids, alkalies,

alcohols, esters and ketons.

Specification Compliance

IS: 2712/1998 Grade A/1

> 24.0 Mpa. 6-14 % > 40 % > 23.0 Mpa. < 28 % < 28 % < 10 %

> 8.0 Mpa. 6-14 % > 40 % < 28 %

**Ferolite** 

'Steel'

For low and medium stress

For air, water, steam, saline

mildly aggressive media

solution, alkalies, ammonia and

Specification Compliance

NO STANDARD EXIST FOR

WIRE REINFORCED SHEETS.

IS 2712/1998

1.8-2.2 gm/cm3

With wire reinforcement.

1.8-2.2 gm/cm<sup>3</sup> > 12.8 Mpa. 6-14 % > 40 %

**Ferolite** 

"Extra Steel"

erolite 'EXTRA ST

'EXTRA STEEL' Fei

For medium stress conditions.

For water, steam, natural gas,

petrol, saline solution, alkalies.

**Specification Compliance** 

NO STANDARD EXIST FOR

WIRE REINFORCED SHEETS.

IS 2712/1998

ammonia and other non-

With wire reinforcement.

Ferolite

'IT-300 Steel

For high stress conditions.

For water, steam, saline

solution, alkalies, ammonia,

propane, producer gas and

Specification Compliance

NO STANDARD EXIST FOR

WIRE REINFORCED SHEETS.

IS 2712/1998

mildly aggressive media

1.8-2.2 gm/cm<sup>3</sup> 1.9-2.2 gm/cm<sup>3</sup> > 24 Mpa. > 24.0 Mpa. 6-14 % 6-14 % > 40 % > 40 % > 23 Mpa. < 26 % < 28 % < 10 %

< 25 %

< 20 %

< 20 %

< 20 %

 For high stress conditions Close wire mesh insertion For motor oil, transmissions and hydraulic fluids, low temp, oil. With 3A Finish. Steam Alkalies, anti freeze,

**Ferolite** 

**'IGV**'

Close Stainless Steal wire mesh For water, air, fuels, alcohols, IC Engines, compressors etc. For water, air, fuels, alcohols, IC

**Ferolite** 

**'ISS'** 

**Specification Compliance** 

Specification Compliance NO STANDARD EXIST FOR

NO STANDARD EXIST FOR

WIRE REINFORCED SHEETS. WIRE REINFORCED SHEETS

IS 2712/1998 IS 2712/1998

1.9-2.2 gm/cm<sup>3</sup> > 24.0 Mpa. 6-14 % > 40 % > 23 Mpa

< 26 %

< 10 %

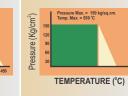
< 25 %

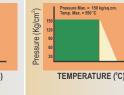
< 20 %

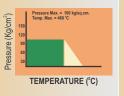
< 20 %

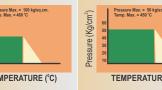
< 20 %

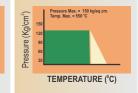
Max. Values of Temperature and Pressure should not be used simultaneously, they are given only as guidance. Max. Temperature and Pressure depends not only on the type of gasket material but also on the application conditions such as thickness of material, nature of service medium, type of flange, surface stress etc. \* DIN, + is



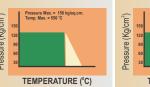


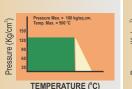


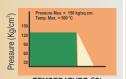


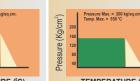


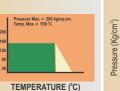
-80 to +450

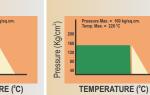


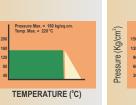












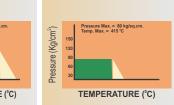
< 8 %

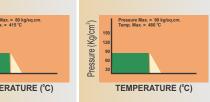
> 16.5 %

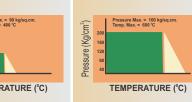
< 20 %

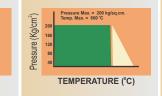
> 5.5 Mpa.

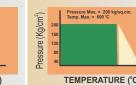
220











AII DATA QUOTED ABOVE ARE BASED ON YEARS OF EXPERIENCE IN PRODUCTION & OPERATION OF SEALING ELEMENTS, IN VIEW OF THE WIDE VARIETY OF POSSIBLE INSTALLATION & OPERATION CASES REGARDING THE BEHAVIOUR IN GASKET JOINT. THE DATA MAY NOT THE DATA MAY NOT THE DATA MAY NOT THE DATA MAY NOT THE WIDE VARIETY OF POSSIBLE INSTALLATION & OPERATION CASES REGARDING SOLUTIONS ON EXPERIENCE IN PRODUCTION & OPERATION CASES REGARDING SOLUTIONS ON EXAMINATION CASES REGARDING SOLUTIONS ON THE WIDE VARIETY OF POSSIBLE INSTALLATION & OPERATION CASES REGARDING SOLUTIONS ON THE WIDE VARIETY OF POSSIBLE INSTALLATION & OPERATION CASES REGARDING SOLUTIONS ON THE WIDE VARIETY OF POSSIBLE INSTALLATION & OPERATION CASES REGARDING SOLUTIONS ON THE WIDE VARIETY OF POSSIBLE INSTALLATION & OPERATION CASES REGARDING SOLUTIONS ON THE WIDE VARIETY OF POSSIBLE INSTALLATION & OPERATION CASES REGARDING SOLUTIONS ON THE WIDE VARIETY OF POSSIBLE INSTALLATION & OPERATION CASES REGARDING SOLUTIONS ON THE WIDE VARIETY OF POSSIBLE INSTALLATION & OPERATION CASES REGARDING SOLUTIONS ON THE WIDE VARIETY OF POSSIBLE INSTALLATION & OPERATION CASES REGARDING SOLUTIONS ON THE WIDE VARIETY OF POSSIBLE INSTALLATION & OPERATION CASES REGARDING SOLUTIONS ON THE WIDE VARIETY OF POSSIBLE INSTALLATION & OPERATION CASES REGARDING SOLUTIONS ON THE WIDE VARIETY OF POSSIBLE INSTALLATION & OPERATION CASES REGARDING SOLUTIONS ON THE WIDE VARIETY OF POSSIBLE INSTALLATION OF THE WIDE VARIETY OF POSSIBLE INSTALLATION OF THE WIDE VARIETY OF THE WIDE VA