

fusion[®]

PIPES AND TANKS



PRODUCT CATALOG





Corporate Office



A saga written by innovation

Fusion since 2001, has been a pioneer leader in the field of plastic pipes and fittings, FUSION INDUSTRIES LIMITED is one of the largest manufacturer of CPVC, uPVC, PPR, PVC, SWR Pipes & Fittings, COLUMN PIPES, Water Tanks, Electrical Conduit Pipes, Garden Pipes and Teflon tape with the brand name of "fusion".

It has grown many fields since its inception in 2001. Fusion has set up manufacturing units at Roorkee, Uttarakhand & Pali Faridabad, Haryana and marketing office at New Delhi.

fusion® offers following products

- CPVC PIPE : IS : 15778:2007
- CPVC FITTINGS : IS : 17546:2021
- PPRC PIPE : IS : 15801:2008
- PPRC FITTINGS : AS PER DIN STANDARD
- ASTM PIPES : ASTM D-1785
- ASTM FITTINGS : ASTM D-2467
- PVC PIPES : IS : 4985:2000
- PVC AGRICULTURE FITTINGS : IS : 7834:1987
- SWR PIPES : IS : 13592
- SWR FITTINGS : IS : 14735
- PVC COLUMN PIPES
- PPRC SUBMERSIBLE PIPES
- ELECTRICAL CONDUIT PIPES : IS : 9537:1983 (Part 3) & IS : 3419
- GARDEN PIPES
- WATER TANKS
- TEFLON TAPE



fusion® is an ISO 9001:2015 certified company. Also its products are ISI Quality certified.

FUSION INDUSTRIES LIMITED is equipped with world's best Battenfeld-German Microprocessor controlled injection moulding machine and fully advanced tool-room and team of highly experienced engineers.

We have complete facilities of Lab to ensure Quality.

Always on the look for new ideas and progress through modernization, diversification and expansion.

FUSION INDUSTRIES LIMITED



Mr. T.C. Chandna
CMD

From the Managing Director's Desk

A cruise of success always entails the qualities of insight, tactic and awareness. All these, along with the power of belief, are imbibed at the nucleus of all our operations. Our brainwave comes from the trust of our stakeholders, customers, suppliers, and shareholders who believe in our potential to deliver world class Plumbing Products.

Fusion has acquired an incredible and diversified presence in Different Plumbing, Agriculture products Like PPRC, PVC, CPVC, uPVC, Fiber Therm Composite pipes and offering Next Generation SWR Pipe – fittings system and Column Pipes. New and innovative window of opportunities are opening up and the company is geared up for an exciting future marked with important milestones. At fusion, we are influenced by our rich past to take up projects inhand for the present with an objective to construct the future.

Our commitment, hard work, common sense and determination have helped the company to be at par with multinational companies in terms of standards of performance, safety & quality of products. The journey towards distinction is stirred by what fusion has always done - Deliver superior value and quality services for all those who depend on us, work with us and invest in us.

In the process to take the organization to newer horizons, the chairman is very well supported by the core team of ambitious, enthusiastic and visionary directors Mr. Yunik Chandna and Mr. Karan Chandna. They have been leading dedicated team of professionals who work relentlessly to achieve the milestones in the fast growing organization.



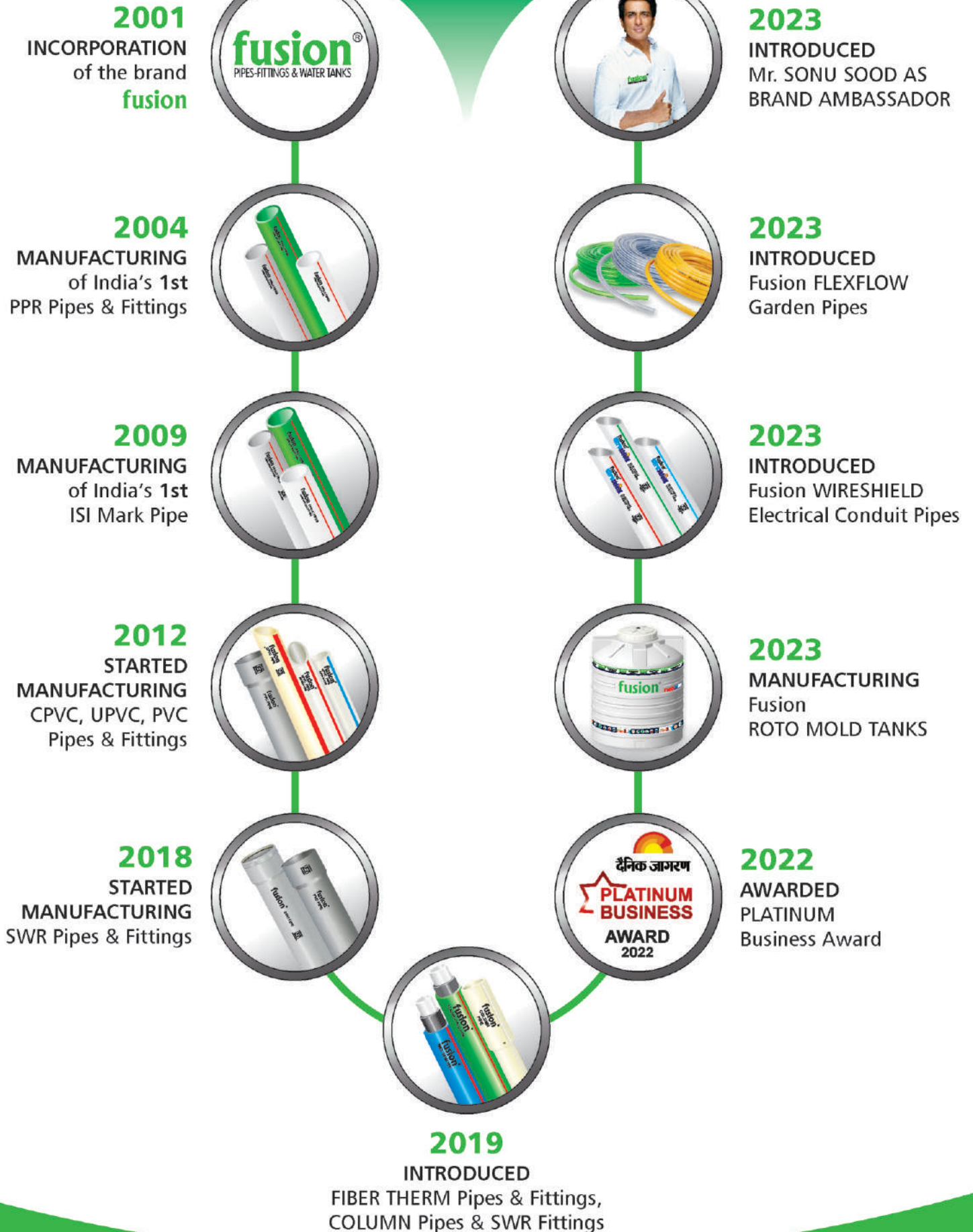
Vision & Mission

Vision-We desire to accomplish business excellence through the highest standard of ethics, assuring the best quality product & services, innovation, productivity and customer satisfaction.

Mission-To provide next generation plumbing and Agricultural products to Indian industries which are sustainable, energy efficient, cost effective and in turn a good life to all people associated with fusion.

FUSION TIMELINE

A Saga Written by Innovation



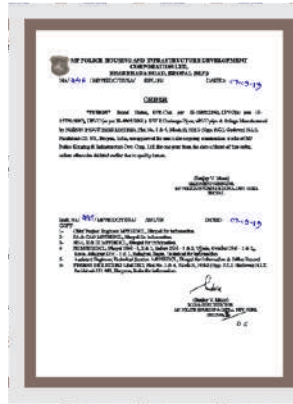
Certificates & Appreciations



IIT Roorkee - Pressure Test



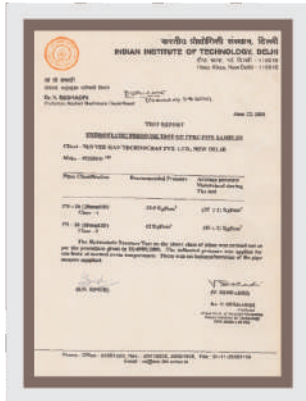
ISO Certificate



M.P. Housing Approval



Rajpur Development Authority Approval



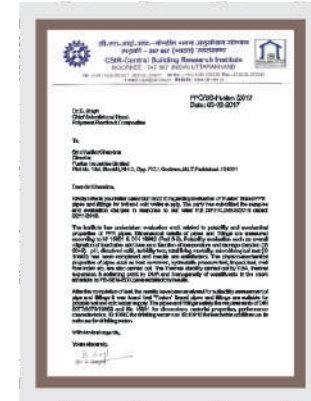
IIT Delhi - Pressure Test



Haryana Govt. Approval (Agri.)



CIPET - Temp. Test



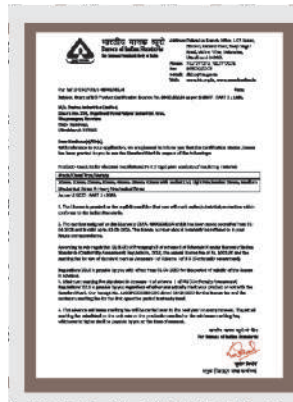
CSIR Certificate



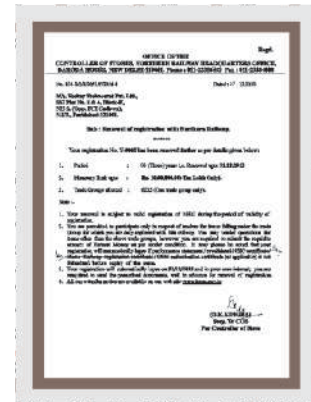
SHRIRAM - Food Grade



MES - Approval



BIS-License



Northern Railway - Approval

Clientele :



& many more.....

CPVC PRO

PIPE & FITTINGS

Raw Material

Kaneka

KANEKA TEXA CORPORATION, JAPAN

Machine

MILACRON, USA



PIPE
IS:15778:2007



CM/L-4827476

FITTING
IS:17546:2021



CM/L-8300156317



LEADFREE



Complete
COLD & HOT
Water Plumbing Solution



Pipe available in
SDR 11 & SDR 13.5

Fusion CPVC pipe and fittings are manufactured according to IS : 15778 :2007 in pipes and IS:17546:2021 in fittings respectively. The choice of the raw material, the structural accuracy and the strict quality control impart a high degree of reliability to Fusion CPVC Pipes & fittings making the most suitable. Easy and economic solution for transportation and distribution of potable water. It has numerous advantages over G. I. and other conventional piping system.

Pipes are manufactured in copper tube size (CTS) from 1/2" to 2" with two different standard dimensional ratios SDR-11 and SDR-13.5 fusion CPVC Pipes & Fittings in SDR-11 & SDR-13.5 are made from the equivalent CPVC compound having similar physical properties.

Apart from having the same physical properties, SDR-11 and SDR-13.5 have different wall thickness and therefore, at any given temperature, have different pressure rating.

SALIENT FEATURES



Corrosion Resistant



High Strength



UV Resistant



Fire Resistant



Maintenance Free



Withstands Temp. up to 83°C

APPLICATIONS



Hot & Cold Plumbing



Carrying Corrosive & Chemical Fluids



Carrying Drinking Water



Residential Use



Industrial Use

Slots in the corrosion-resistant Brass insert where the CPVC material fills in during the moulding process, Forming an inter-locking system which enables higher torque-bearing capacity

Fusion's CPVC FTA (Round)
Corrosion-resistant Female threaded Brass Insert with 1 EPDM "O" Ring

Cross Section View of Fusion's Trans FTA

Fusion's CPVC MTA (Round)
Corrosion-resistant Male threaded Brass Insert with 1 EPDM "O" Ring

Fusion's Hexa Design Brass MTA
is one of the heaviest and the best in the industry

Fusion's CPVC MTA (Hexa)
Corrosion-resistant Male threaded Brass Insert with 1 EPDM "O" Ring

Fusion's CPVC FTA (Hexa)
Corrosion-resistant Female threaded Brass Insert with 1 EPDM "O" Ring

CPVC PIPING

uPVC

PIPES & FITTINGS (ASTM Standard)



uPVC PLUMBING SYSTEM

Fusion uPVC ASTM-D Pipes & Fittings are an innovatively designed piping system. It has an array of advantages which promise low thermal conductivity, fire resistant, chemical and corrosion free pipes. They are strong, durable and long lasting, cost effective than any other material. Also resistant to weathering environment impact, shock and abrasion.

At Fusion, our endeavour is to continually develop newer, better and more innovative ways to bring you the best of products and solutions, for all your needs. Concurring with our philosophy of developing eco-friendly, products for a greener world, we bring you uPVC pipe and fittings - a more eco-friendly, far superior replacement for the widely used GI pipes.

Fusion uPVC can be used upto 60°C (140°F), makes it ideal for cold water applications. Furthermore, it is flexible enough for bending, thereby enabling use in a wide variety of process applications. It is also non-toxic, fire and chemical-resistant, and exhibits a higher impact and tensile strength. In addition, it has excellent resistance towards acids and bases.

ASTM plumbing pipes are manufactured as per ASTM D 1785 and are available in Sch-40 and 80 pressure classes. The pipes are available in a standard length of 3 meters and 6 meters in both plain and threaded ends, Threads are compatible with GI fittings as per IS-554. ASTM threaded pipes are cheaper to conventionally used G.I. pipes.

The maximum continuous service temperature for Fusion PVC-U plumbing pipes is 60°C. The ASTM Pipes' abrasion resistance, light weight, mechanical strength, toughness and durability are the key reasons for it's used in construction and building applications.



Fusion's uPVC pipes and fittings bring you 3 key Benefits

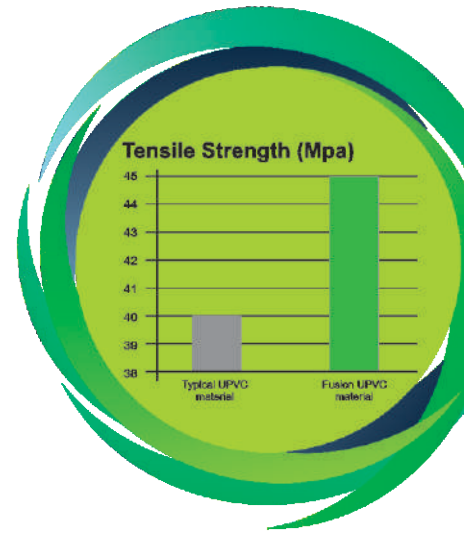
Technology for 100% Leak-proof Joints

Fusion's uPVC pipes and fittings assures a perfect fit, making them absolutely leak-proof. We manufacture our pipes and fittings with extreme care, to ensure 100% leak-proof joints. All our pipes and fittings are designed to close tolerance, with the help of our state-of-the-art manufacturing facilities.



Top-notch Raw Materials to Deliver High-end Quality Products

Fusion's uPVC pipes and fittings are produced from a specially formulated compound. The material used is a special, virgin, heavy metal-free unplasticized polyvinyl chloride (UPVC) compound as per ASTM D1785



Uniquely Designed Corrosion-resistant Brass Fittings to Deliver High Torque-bearing Capability

Fusion's uPVC corrosion-resistant trans fitting incorporates specially designed corrosion-resistant brass inserts, which have a serrated internal brass surface with grooves of high precision and deep knurling. This ensures a far more superior torque bearing capability. This innovative design ensures a very high pull-out resistance making leakage due to thermal expansion, almost impossible. The serrated internal brass surfaces helps in a very strong UPVC brass.



SALIENT FEATURES



APPLICATIONS



uPVC PIPING

PPRC

PIPES & FITTINGS

India's **1st**  PPR-C Pipe
IS:15801:2008
CML-3097038

Advantages :

- Health : Hygienic and low bacterial growth
- High durability with minimum 50 years of life span
- High Flow : Smooth interior surface results no friction giving high flow
- Taste and odour neutral
- Heat preservation and energy saving
- Resistant to high temperature (95°)
- Less Insulation required
- No Blockages : No crystallization for Lime deposits to clog
- Easy Installation



Available in White, Green & Grey colour

Polypropylene Random Copolymer :

Fusion pipe & fittings are produced from Polypropylene Random Copolymer Type 3 as raw material having low melt flow rate, high molecular weight, good flexibility & made from food grade raw material. This raw material is recommended for the production of pressure pipes including potable water transfer lines, hot and cold water transfer lines, floor heating and also for chemical industry application.

Water system made of PPR pipes an alternative to the traditional system.
Polypropylene Random Copolymer Type 3 corresponds to German DIN standards.

- 1) PIPES as per IS 15801:2008,
- 2) DIN 8078 Pipes general quality requirement & testing
- 3) DIN 16962 for PPR fittings

Technical Specifications

Recommended time for fusion welding

| OD | Insert length in mm | Heating Sec. | Processing Sec. | Cooling Min. |
|-----|------------------------|-----------------|--------------------|-----------------|
| 20 | 14 | 6 | 4 | 2 |
| 25 | 16 | 7 | 4 | 3 |
| 32 | 18 | 8 | 6 | 4 |
| 40 | 20 | 12 | 6 | 4 |
| 50 | 23 | 18 | 6 | 5 |
| 63 | 26 | 25 | 8 | 6 |
| 75 | 28 | 30 | 10 | 8 |
| 90 | 30 | 40 | 11 | 8 |
| 110 | 33 | 50 | 15 | 8 |

Working Pressure SDR

| VALUE TEMP. 0° C | SERVICE LIFE Yrs. | PIPE SERIES | | |
|-----------------------------------|-------------------------|--------------|---------------|-------------|
| | | SDR 11/PN-10 | SDR 7.4/PN-16 | SDR 6/PN-20 |
| ALLOWABLE WORKING PRESSURE | | | | |
| 10° C | 50 | 8.2 | 28.8 | 36.3 |
| | 100 | 17.7 | 28.1 | 35.4 |
| 20° C | 50 | 15.5 | 24.5 | 30.9 |
| | 100 | 15 | 23.8 | 29.9 |
| 30° C | 50 | 13.1 | 20.7 | 26.1 |
| | 100 | 12.8 | 20.2 | 25.5 |
| 40° C | 50 | 11 | 17.5 | 22 |
| | 100 | 10.7 | 16.9 | 21.3 |
| 50° C | 50 | 9.3 | 14.7 | 18.5 |
| | 100 | 8.9 | 14.2 | 17.8 |
| 60° C | 25 | 8 | 12.6 | 15.9 |
| | 50 | 7.7 | 12.1 | 15.3 |
| 70° C | 25 | 6.1 | 9.6 | 12.1 |
| | 50 | 5.1 | 8.1 | 10.2 |
| 80° C | 10 | 4.8 | 7.6 | 9.6 |
| | 25 | 3.8 | 6.1 | 7.6 |
| 90° C | 5 | 3 | 4.8 | 6.1 |
| | 10 | 2.6 | 4 | 5.1 |

Various material comparison chart

| PROPERTIES | Fusion PPR-C | GALVANIZED IRON | COPPER | C-PVC |
|-----------------------------|--|--|---|---|
| Diameter Range (mm) | 20-315mm | 1/2" - 6" | 1/2" - 6" | 20-110mm |
| Service Life (Years) | >50 | 5 - 15 | 10 - 30 | 30-40 |
| Standard Length (Meter) | 3, 6 | 6 | 5 | 5 |
| Joining Method | Heat Fusion (Socket Welding) | Threaded Joint | Hard or Soft Soldering or Welding Joint | Solvent Cement |
| Skill | Simple Heat Fusion | Required Expert Plumber | Required Expert Plumber | Required Special Attention |
| Joining Time | Few Seconds | Few Hours | Few Hours | Few Minutes |
| Strength of Joints | Though Homogeneity | Surface Homogeneity | Surface Homogeneity | Surface Homogeneity |
| Brittleness Characteristics | Resistant | Resistance | Worrisome | Non-Resistant |
| Corrosion Resistance | Highly Resistant | Very weak | Very Weak | Resistance |
| Chemical resistance | Excellent | Not suitable for all type of chemicals | Not suitable for all type of chemicals | Good |
| Easiness in Installation | Excellent | Not Easy | Not easy | Comfortable |
| Joining Reliability | Excellent | Good | Average | Very Good |
| Eco-Friendliness | Eco friendly, No Harmful Substances produced during processing | No | No | High percentage of chlorine and toxic gases in case of fire |

(For more Technical Details of PPRC product, please ask for PPRC Detailed Profile from company executive)

Field of Application :

- Potable water pipe networks for Cold & Hot water installation i.e. in residential buildings, hospitals, hotels, offices & school buildings, ship buildings etc.
- Pipe Networks for rainwater utilization systems
- Pipe Networks for Compressed - Air Plants
- Pipe Networks for Swimming pool facilities
- Pipe Networks for Solar Plants
- Pipe Networks in Agriculture and Horticulture
- Heating Pipes for Residential House
- Pipe Networks for Industry, i.e. Transport of aggressive fluids (acids, lays etc.)
- Transport for Liquid Foods



PPR PIPING

PVC-U

PIPES & FITTINGS

IS:4985 : 2000



CM/L-2582664



AGRICULTURE PIPES

PVC PRESSURE PIPING SYSTEM

For Potable Water Supply



IS:7834 : 1987



CM/L-2591160

PVCu Pressure Piping System (Agri Piping System)

Fusion offers an exhaustive range of PVCu pressure pipes and fittings. Pressure pipes are manufactured as per IS 4985:2000 standard and are available in 20mm to 315mm size in different pressure class. Pipes with both types of joints i.e. solvent cement weld type and elastomeric rubber seal type joints are available. Varieties of moulded fittings are manufactured as per IS 7834:1987. These pipes and fittings are used for variety of applications like, agriculture, irrigation, water supply, industrial process lines, swimming pools and fire fighting mains etc.

TABLE 1:1

Mechanical properties of PVC-U at 20°C

| | |
|-----------------------------------|--|
| Density | 1400-1460 kg/m ³ |
| Minimum ultimate tensile strength | 45 Mpa |
| Compressive strength | 66 Mpa |
| Shear strength | 39 Mpa |
| Tensile (Youngs) modules | 2750 Mpa (at high loads) |
| Hardness (Shore) | 85 (ASTM D2240) |
| hardness (Brinnell) at 23°C | 12-15 |
| Impact (Charpy) -20°C | 20 kJ/m ² (250 μm notch radius) |
| Impact (Charpy) -0°C | 8 kJ/m ² |
| Elongation at break | 50-80% |
| Poissons ratio | 0.35 - 0.4 |

TABLE 1:2

Thermal Properties

| | |
|---------------------------------|---|
| Max. continuous service temp | 60°C |
| Specific heat | 1047 J / kg / °C |
| Coefficient of linear expansion | 7 x 10-5 / °C |
| thermal conductivity | 0.13 - 0.15 W / m ² °C |
| Flame resistant | Self-extinguishing PVC-U does not support combustion when the source of ignition is removed. At the fabrication temperature, it can be shaped by deformation. |
| Primary softening point | Not less than 80°C (AS 1462) |
| Vicat. softening temperature | 80°C to Bs2782 |

TABLE 1:3

| | |
|-----------------------|--------------------|
| Electrical properties | 12 - 38 kV / mm |
| Dielectric strength | 3.0 - 3.2 @ 106 Hz |
| Dielectric constant | 0.02 @ 106 Hz |
| Surface resistivity | 2000Volts / mm |



PVC Pipe



PVC Fittings

SALIENT FEATURES



Corrosion Resistant



High Strength



UV Resistant



Light Weight



Chemical Resistant

APPLICATIONS



Irrigation



Chemical Distribution



Suitable for Sandy & Saline Water



Industrial Mining



Industrial Use

AGRI PIPING

COLUMN PIPES

Fusion Column Pipes are meticulously designed for bore well submersible pumps. The properties and advantages of column pipe have enabled them to replace the galvanized steel pipes for column applications.

Our high performance Column Pipes are most preferred amongst the widely used uPVC Column Pipes application.

Fusion pipes blend the combination of technology and quality that guarantees trouble free performance, Stringent quality check is done at every stage of production that ensures the highest standard which forms the hall mark of Fusion uPVC Column Pipes quality.

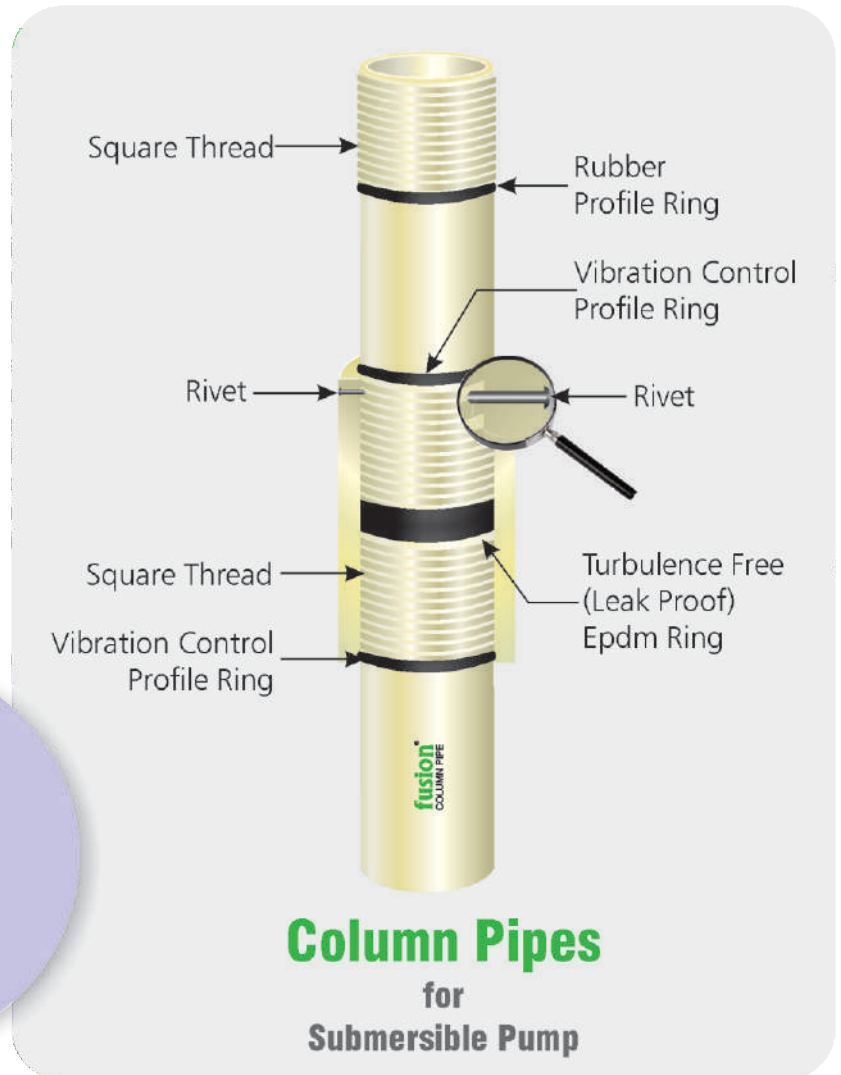
Fusion brings best-in-class expertise and unrivalled passion for customer satisfaction. Fusion's portfolio represent one of the most extensive product range.

- ◆ Wide range of V4-15, Medium, Standard & Super Heavy depending on depth of bore and pump pressure & heavy pipes are available.
- ◆ Committed to After-Sales-Service.
- ◆ All India dealers Network.



Advantages

- ◆ Long Life : Durable
- ◆ Cost Saver : Cost economics/effective
- ◆ Non Toxic : Purity to water is guaranteed
- ◆ Power Saver : Energy Efficient
- ◆ Moisture Proof : Weather resistant
- ◆ Tough & Strong : Reliable
- ◆ Termite Proof : Long Life
- ◆ Impact Resistant : Non breakable
- ◆ Light Weight, thus easy handling & installation
- ◆ Self-extinguishing
- ◆ Smooth internal surface and hence reduced frictional loss leading to higher discharge
- ◆ No electrolytic/galvanic deposition/erosion since made of inert material
- ◆ High thermal & electrical insulation
- ◆ Quick & Easy coupling between pipes



APPLICATIONS & ADVANTAGES



Life Span of
30 years and more



Low Operational cost
and performance



Maintenance
Free



Locking System



Leakage Resistant



Easy to Install

COLUMN PIPING

Fusion SWR PVC-U Pipes & Fittings are light weight, therefore are easy in handling and installation. The pipes are of high quality and can withstand any drastic climatic conditions. They are highly durable and do not age with time. Its varied applications add to its advantage.

Fusion SWR PVC-U Pipes & Fittings are manufactured from highly selective source of 'Virgin' raw material, at our ultra modern plant equipped with the latest machineries with high-end technology and precision.

Our on-line quality checks ensures consistent quality products at utmost competitive price. The near polish smooth finish of the inside surface ensure optimum flow characteristics & eliminates the problem of clogging or choke-up of the drain.

Fusion SWR PVC-U Pipes & Fittings are made in four different sizes 75 mm, 90 mm, 110 mm & 160 mm in Self-Fit and Ring-Fit for varied applications.

Right from the inherent properties of PVC-U to a virtual lifetime of trouble-free performance, 'FUSION' SWR piping system is far more superior to all other conventional drainage systems.

Corrosion Resistant : PVC-U material is unaffected by most of the chemicals & is rustproof, durable and has superior mechanical properties. Also, it remains unharmed by insects or rodents.

Fire Resistant : PVC-U is self-extinguishing and no special precautions are necessary during installation.

Smoothness : Smooth inside surface ensure effective discharge, high flow rate and eliminates clogging and choking.

Light weight : Easy to transport & handle.

Easy to install : Easy to install & less time is consumed than other conventional piping system.

Strength : Strong with high impact strength can with stand rough handling.

Easy to maintain : Smooth inside bore and threaded door caps provide ease of inspection and cleaning.

Durability : No scale formation.

Low-cost : Economical in every way. All these advantages add up to significant cost reductions.

FEATURES



Light Weight



UV Resistant



Leak Proof Joints



Yellow Ring Co-Moulded Technology

APPLICATIONS



Sewage & Waste Water Lines



Rainwater Drainage



Residential Purpose



Industrial Use

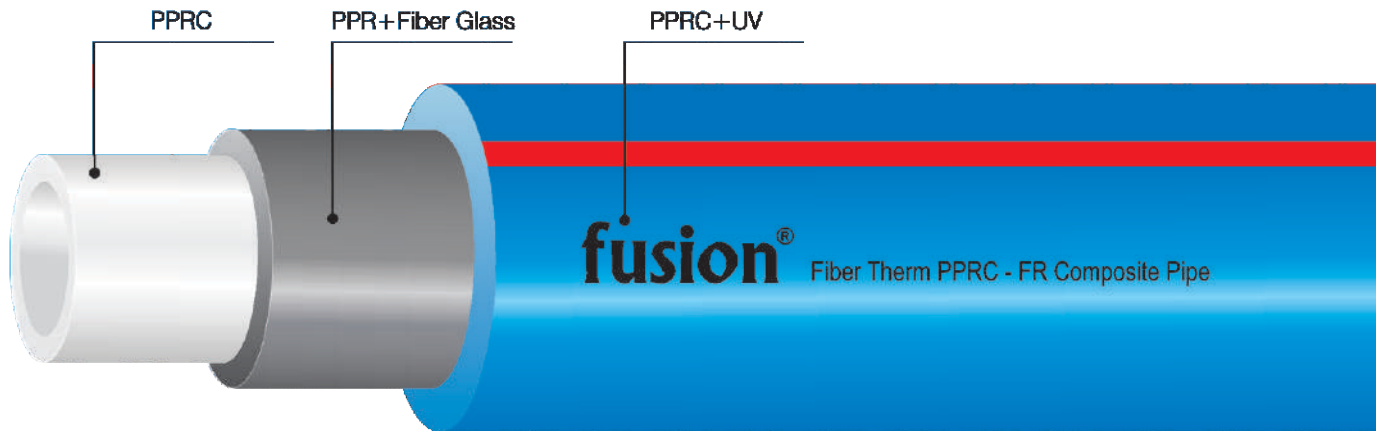


Offices



FIBERTHERM

PPRC-FR Composite Pipe



fusion® FIBERTHERM PPRC-FR Blue Composite Pipe

Applications :

- Compressed Air
- Pneumatic Control
- Instrumental Line
- Vacuum Line
- Nitrogen Air Line

fusion® FIBERTHERM

Unique 3 layer Pipe reinforced with glass fiber, made from the next generation PPRC-FR Composite, An unrivalled Product



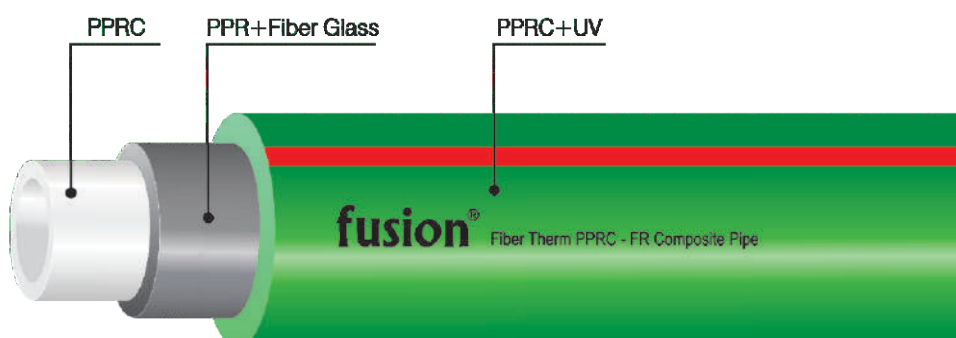
fusion® fibertherm pipe

Fusion fibertherm consists of 3 layers, outer layer is UV resistant & the middle layer is with reinforced glass fiber layer & the inner layer is pure PPRC food grade.

Advantages over ordinary PPR & other polymer pipes

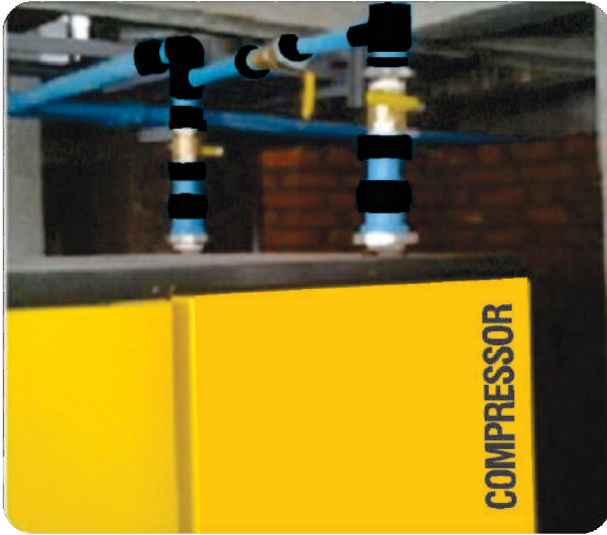
1. 4x lower linear thermal expansion
2. Higher pressure up to 25% than normal PPRC pipes
3. Higher flow rate 25% (Bigger ID)
4. Energy saving up to 25%
5. Fibertherm pipes reduces passive heat loss by around 20% for non insulated pipes.

fusion® FIBERTHERM Composite Green pipes for industry



Applications :

- Potable water Hot and Cold
- Cooling and Chilled Water
- HVAC & Air Conditioning
- Chemical & Acid
- Hydraulic Oil (Pressure 20kgf)
- Geo thermal application
- Recycle water



Fusion Industries Limited feels proud to introduce an innovative product- **fusion**® PPRC-FR composite pipes for compressed air. Modern process equipment, pneumatic controls and instrumentation, however, demand a supply of clean, uncontaminated air and maintenance of the cleanliness of this air, from source right up to the point of use is obviously essential. The system is designed specifically for the conveyance of compressed air and with its new and unrivalled properties becomes the ideal choice for critical applications.

fusion® Fiber Therm composite pipe for AIR-LINE PIPES KEEPS AIR CLEAN –RIGHT UP TO THE POINT OF USE.

The middle layer Fiber Glass Reinforced within the two layers of PPRC act as an agent to reduce extension capability and produce durability to high pressure at high temperature.

fusion® **FIBERTHERM** Composite Blue Pipe for Airline

In ordinary PPR pipe inner dia is smaller & air flow is less but in **fusion**® fiber therm PPRC-FR Composite Pipe Air flow will be 25% higher.



COMPARISON OF fusion® **FIBERTHERM** COMPOSITE PIPES & ALLUMINIUM PIPES

| PIPING VIEW | FIBER THERM COMPOSITE PIPE | ALLUMINIUM PIPE |
|---|--|--|
| JOINING SYSTEM RELATED TO LEAKAGES | Socket Fusion Joining system assuring 0% leakage | 100% chances of leakages due to Push Fit joints depending on O-rings |
| RA VALUE RELATED TO FRICTION LOSS | 0.1 Micron RA Value insures Negligible friction loss and assures good amount of energy saving | 0.7 micron RA value leads to higher friction loss which creates high energy consumption |
| C VALUE RELATED TO HIGH FLOW | 150 C Value gives higher and smoother fiber reducing the energy consumption | 130 C Value depending on O-rings consumes more energy |
| PRESSURE HOLDING TEST | Glass Fiber Reinforcement composition with Polypropylene is successful in pressure holding test | Push Fit joints depending on O-rings fails in Pressure holding test |
| THERMAL CONDUCTIVITY RELATED TO MOISTURE | Moisture Free Fusion brand pipe having 0.013 Btu/hr F thermal conductivity assures Moisture free and 100% Non-corrosive pipeline | Higher thermal conductivity 27.09 Btu /hr F creates moisture in the pipeline ultimately leading to corrosion |
| MAINTENANCE RELATED TO CORROSION | NIL maintenance owing to 100% leak proof element and NIL corrosion | Very high maintenance due to push fit joints |
| LIFE EXPECTANCY RELATED TO CORROSION | 25 years of life without sagging and with nice esthetic view | Maximum 5 years of life with maintenance due to leakages and higher thermal conductivity |
| ENERGY SAVING | Energy Saving due to 0% leakages | Higher Energy consumption Due to Friction Loss & leakages |



25%

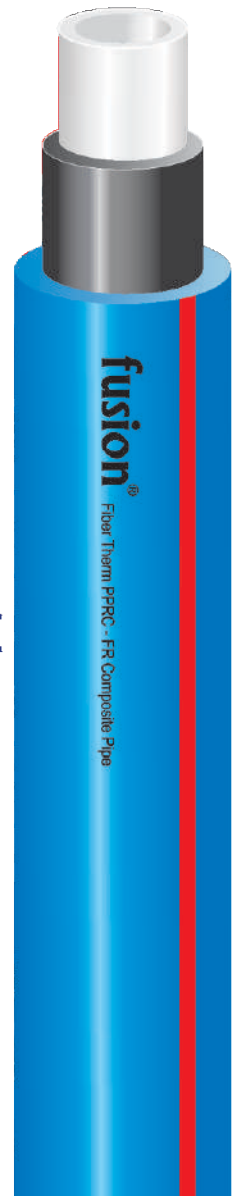
High pressure resistance At higher temperatures by Up to 25% then normal PPRC pipes.

-6° to 95°C

temperatures resistance -6°C to -95°C

20%

Higher flow rate by up to 20% (Energy saving 20%)





MOLD TANKS

THE NEW GOLD STANDARD OF ROTO MOULD WATER TANK



neo 3 LAYER WATER TANK

GOLD 4 LAYER WATER TANK

PRO 5 LAYER WATER TANK



SHIELD TECHNOLOGY

AIR
VENTILATION

Allows the water to maintain natural oxygen level, hence keeps it fresh and helps avoid deformations.



Ensures the water is always dust-free and hygienic. It also has inner lid to provide protection from sunlight and keep the water safe and algae free.



Inner layer manufactured with special Anti-Bacterial inner layer prevents bacterial, fungal, algae or Virus growth and keeps water fresh.



The water stored is safe for drinking.



BUILT STRONGER

Added ribs enhance durability incase & tank is full of water thereby reducing the risk of bursting under pressure.



UV PROTECTION

The UV stabilized layer prevents degradation and helps to fight any environmental stresses, cracking, chalking or loss in the physical properties of the tank.



LAYER 1- COLORED/WHITE -OUTER LAYER

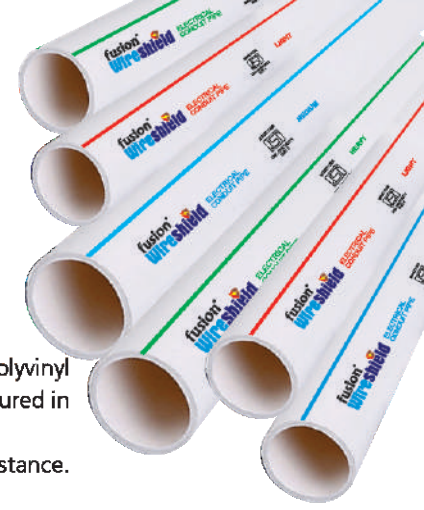
This is a white or coloured (Blue/ Yellow / Green) UV resistant layer of the highest quality protecting water from harsh UV rays and reduces overall heat absorption from the sunlight. It also helps to prevent breakdown of polymer chain and enables longer service life.

LAYER 2-BLACK-MIDDLE LAYER

The middle layer is black in colour and designed to provide barrier for the sunlight to penetrate through the wall of the tank. This will prevent microbial growth/activity taking place in water due to sunlight.

LAYER 3- SKY BLUE-ANTI BACTERIAL SHIELD LAYER

AS this layer is in indirect contact with stored water, it is made using 100% food-grade quality raw material.



ENSURE TOTAL PROTECTION OF YOUR WIRES & CABLES

Fusion Electrical Conduit PVC Pipes & Fittings are manufactured from a specially formulated unplasticised polyvinyl chloride (uPVC) to meet the most stringent Indian and International standards. The products are manufactured in accordance with IS: 9537 Part 3 for PVC conduits pipes, IS: 3419 for PVC conduit fittings. Fusion Wire Shield conduit pipes and fittings have good impact strength, low conductivity and chemical resistance. They have high heat deflection temperature and ductile behaviour even at low temperatures. Fusion Wire Shield conduit pipes are available in three different wall thicknesses with the thin-wall variety being suitable for embedded use in concrete and heavier grades suitable for direct burial and exposed work.

- Minimum filters used
- Unplasticised PVC formulation
- Adaptable to Standard concealed wiring system as per IS : 9537 : 1983 (Part 3) & BS: 3419.

Dimensions

| S. No. | Normal Size (in mm) | Max. O.D. (in mm) | Min. O.D. (in mm) | Minimum Internal Diameter | | |
|--------|---------------------|-------------------|-------------------|-----------------------------------|------------------------------------|-----------------------------------|
| | | | | Light Mechanical Strength (in mm) | Medium Mechanical Strength (in mm) | Heavy Mechanical Strength (in mm) |
| 1 | 20 | 20 | 19.70 | 17.40 | 16.90 | 15.80 |
| 2 | 25 | 25 | 24.60 | 22.10 | 21.40 | 20.60 |
| 3 | 32 | 32 | 31.60 | 28.60 | 27.80 | 26.60 |
| 4 | 40 | 40 | 39.60 | 35.80 | 35.40 | 34.40 |
| 5 | 50 | 50 | 49.50 | 45.10 | 44.30 | 43.20 |
| 6 | 63 | 63 | 62.40 | 57.00 | — | — |



Impact Testing

Mechanical Properties

- Percentage of Compression meaning specified load less than 25%
- Percentage of Compression without load less than 10%
- High Impact Strength
- Tensile Strength - 390-420 Kg/cm²

Electrical Properties

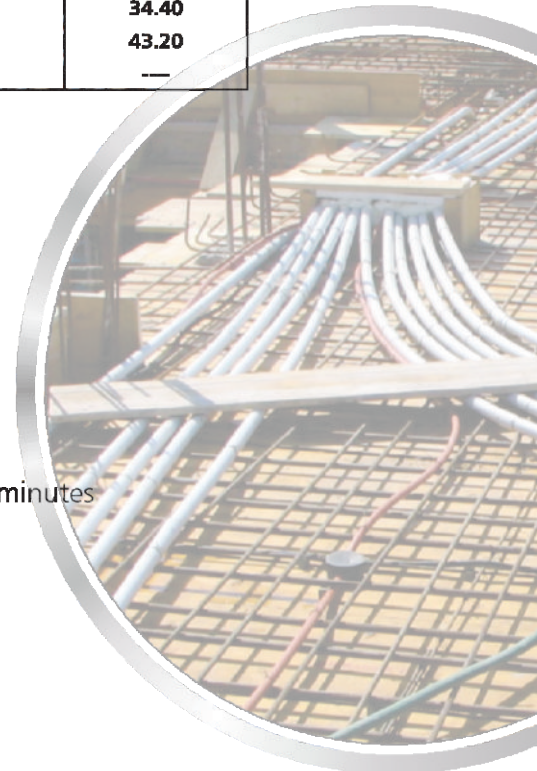
- Dielectrical Strength = 36 Kv/mm
- Specific resistance = 6.1 x 10¹⁴ ohm cm
- Electric Strength = No breakdown at 2 Kv x 50 hz. for 15 minutes

Thermal Properties

- Working Temp. = 70°C
- Burning rate = Self Extinguishing
- Flammability = UL94V-0
- Flame Die out Time = Less than 30 seconds



Compression Testing for Mechanical Strength



Bend Test at Zero Degree Temp. & at Ambient Temp.

SALIENT FEATURES



Corrosion Resistant



High Strength



Fire Resistant



Maintenance Free



Easy Installation



Non Conductive



High Quality Raw Material



UV Stabilised

fusion[®] FLEX FLO GARDEN PIPES

Fusion garden pipes are developed using premium-grade materials and cutting-edge technologies, ensuring that they are durable, flexible, easy to use, and promise to be of the highest Quality.

Fusion garden Pipes are known for their widespread use to flush out the water for all gardening and landscaping purposes.

Fusion Garden Pipes are made as per European Union Guidelines on non-hazardous substances & RoHS Compliant; Our Garden Pipes are free from any kind of heavy metals and are eco friendly. They are built to withstand all weather conditions. Moreover, without melting or getting stiff, our Garden Pipe does not damage or twist, has no oiliness on the surface in high-temperature conditions, and is immune to all types of tangles or cracks regardless of the fact whether kept unused or used regularly.



APPLICATIONS :

- Garden pipes are commonly used to transport water for gardening, lawn care, and other landscaping purposes.
- They are also used for outdoor cleaning of items such as vehicles, equipments, building exteriors and animals.

The pipes are available in a variety of sizes 1/2 inch to 1 1/2 inches and colours, allowing you to find one that fits your specific needs.

Technical Parameters :

INNER DIAMETER (ID)

| Size (Inch) | Size (mm) | Wall Thickness (mm) |
|-------------|-----------|---------------------|
| 1/2" | 12 | 2.2 |
| 3/4" | 19 | 2.6 |
| 1" | 25 | 2.9 |
| 1 1/4" | 32 | 3.2 |
| 1 1/2" | 38 | 4.2 |

SALIENT FEATURES



Flexible



Long Term
Protection



Long Lasting



Leak proof

fusion®

TEFLON TAPES



Fusion PTFE Thread Seal Tape is a high purity, high density tape manufactured using premium grade virgin PTFE (polytetrafluoroethylene). Fusion PTFE Tapes are resistant to a broad range of corrosive chemicals, gases, acids, and liquids.

PTFE (Teflon) Thread Seal Tape is made from highly versatile lubricating material used as a sealant in plumbing for pipes and ductwork. This lubricating property of these tapes helps for the deep and prolonged setting of the thread and helps in preventing thread seizures after being unscrewed.

It is mainly used in pipe and fitting applications and is also known as a plumber's Seal Tape. Like other types of professional adhesive tapes, it is also sold pre-cut to a range of specified widths on small rolls or spools.

The main characteristics of PTFE include hydrophobic and extremely low friction. This makes it highly useful for many different pipe & fitting and plumbing applications.

Features:

- Lower porosity due to high density.
- Compatible with broad range of gases, and liquids across various piping materials.
- Does not harden / crack on joints.
- Easily removable for maintenance.
- Effective across wide range of temperatures and pressures.
- Prevents electrolytic corrosion of threaded joints.
- Zero curing time, unlimited shelf life, non-flammable.

Salient Features:



Grips well



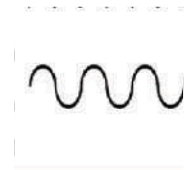
Durable



Easy to Use



Leak Proof



Flexible

Applications:

Fusion PTFE Thread Sealant Tapes are used for various media applications ranging from corrosive chemicals, water, gas, lubricants, oil solvents.

Main Technical Indexes:

- Heat Resistance: +370° C
- Cold Resistance: -190° C
- High Pressure Resistance: 150-220 Kg/Cm²
- Tensile Strength: 8 N/mm²
- Percentage Elongation: >> 75 %

| WIDTH | THICKNESS | LENGTH |
|-------|-----------|---------|
| 12 mm | 0.1 mm | 10 Mtr. |

fusion®



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Note : All information contained in this manual is given in good faith and believed to be accurate and reliable. But because of many factors which are outside our knowledge and control and affect use of product, no warranty is given or is to be implied with respect to such information, nor we offer any warranty of immunity against patent infringement. No responsibility can be accepted for any error, omissions or incorrect assumptions. Any specification can change without prior notice.