



Insights on

# **RUBBER PRODUCTS FOR PIPE INDUSTRY**

An informative monthly Newsletter

Vol.- 01 Issue.- 09/18 Dt.- 12/09/18



- Features of EPDM Rubber Sealing Rings used in Pipe Industry
- EPDM Rubber (Ethylene Propylene Diene Monomer Rubber), a type of synthetic rubber, is an elastomer compatible with polar substances, e.g.fireproof hydraulic fluids, ketones, hot and cold water, and alkalis.
- EPDM rubber is one of the most versatile and durable rubbers available, providing outstanding heat, weather, and ozone resistance. EPDM compounds are not recommended for gasoline, petroleum oil and grease, and hydrocarbon environments.
- This EPDM Rubber is widely used in sealing rings for Pipe Industry.
- The jointing of Polyvinyl Chloride (PVC) pipelines is achieved by means of a EPDM rubber sealing ring seated in the pipe bell to effectively prevent leakage between two adjoining pieces of pipe after the spigot (male end) is inserted into the bell (female end).
- This EPDM Elastomeric sealing ring is homogenous, flexible, and can be manually installed into a pre-belled pipe, either at the construction site or at the manufacturing facility.
- For the end-user, the joint system offers high resistance, withstands high internal pressures and vacuum, and prevents leakage.
- PVC Pipes using EPDM Elastomeric sealing rings are generally made as per IS:4985. The said IS prescribes usage of Rubber Rings as per IS:5382.
- The EPDM sealing rings are marked with ISI mark, manufacturer's name, CML No and the size of the ring.
- These rings are available in various sizes from 63mm to 400mm.
- These rings are available in various hardness as per IS 5382 from Type I to Type VI.
- For PVC Pipes EPDM rings are recommended as per Type II and Type III.



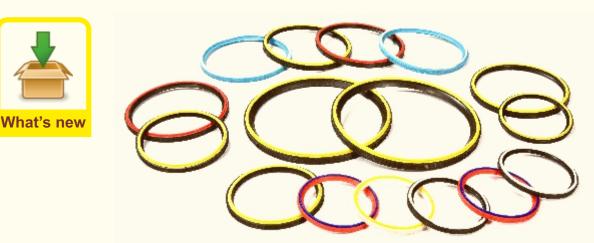
#### Advantages of using EPDM Elastomeric Sealing Rings in Pipe Industry

- Excellent Low Temperature Flexibility.
- Excellent Ozone & Weathering Resistance.
- Excellent Water Resistance.
- Excellent Ageing Resistance.
- Low compression set.
- Good mechanical properties.
- Resistant to Chemical, Termite and Microbiological attack.

### Ideal Properties of EPDM Elastomeric Sealing Rings as per IS: 5382

SR. NO.	TEST PARTICULARS	(TYPE -   )	(TYPE -    )
01	HARDNESS (IRHD)	46-55	56-65
02	TENSILE STRENGTH (MIN.)	11 MPA	11 MPA
03	ELONGATION AT BREAK (MIN.)	400 %	325 %
04	COMPRESSION SET [A] FOR 24+0/-2 HRS. AT 70±1°C (MAX.) PERCENTAGE [B] FOR 72+0/-2 HRS. AT 27±2°C (MAX.) PERCENTAGE	25 % 12 %	25 % 12 %
05	AFTER AGEING AT 70°C FOR 168 HRS. [A] CHANGE IN HARDNESS [B] % CHANGE IN T.S. (MAX.) [C] % CHANGE E.B. (MAX.)	-5 TO +8 ± 20 % -30/+10	-5 TO +8 ± 20 % -30/+10
06	WATER IMMERSION, CHANGE IN VOLUME AFTER IMMERSION IN NEUTRAL WATER FOR 7 DAYS AT 70°C (MAX.) PERCENTAGE	8 %	8 %
07	COLD RESISTANCE FOR 72 HRS. AT 0°C INCREASE IN HARDNESS	+ 5	+ 5
08	WATER ABSORPTION AT 100°C FOR 168 HRS. (M/M) (MAX.) PERCENTAGE	10 %	10 %





## Rubber Rings for SWR Pipe with fusion of top quality Thermo Plastic Elastomers (TPE)

- SWR Pipes are generally made as per IS:13592 and the said pipes receive standard quality sealing products for leak proof performance.
- Earlier rubber rings with EPDM and Natural Polymer were used in these pipes, but polymers like Thermo Plastic Elastomer (TPE) has given these rings a new dimension.
- As per the latest technology, these Tight Fit O rings are made up of dual material that are made from Polypropylene and Thermoplastic Elastomer (TPE) which gives it a spring type effect to leak proof the pipe.
- We manufacture these rings by using Injection moulding machines which are fully automatic and error proof.
- We also manufacture the SWR Pipe rings as per customer's requirement. We are currently manufacturing these rings in all the required and running sizes right from 75, 90, 110 to 160 MM.



SHIIT

MANUFACTURERS OF ALL TYPES OF RUBBER & TPE PRODUCTS





For our comprehensive catalog on our Rubber & TPE products for the Pipe Industry. Click on following link:- www.ashutoshrubber.com/catalog.php

## ·····-: A Publication by :-·····

© www.ashutoshrubber.com

+91 937 722 9090
mktg@ashutoshrubber.com

**Disclaimer:** All the contents of this newsletter are only for general information related to Rubber & TPE Products. Take experts advice before selecting the product and applications.