

# Innovative 3S Rubber rings for PVC Pipes

### **CRYSTAL Rubber Solution**

CRYSTAL RUBBER manufacture and distribute high quality rubber products to meet the diverse demands of the engineering and construction industry in Middle east and Africa.





# Unique and comprehensive expertise in rubber industry

Rubber parts from CRYSTAL RUBBER - to meet every challenge

At **CRYSTAL RUBBER**, we believe that every piece of rubber has a story. From everyday solutions to saving lives in the medical field – it all comes down to the strength of a single piece.

**CRYSTAL RUBBER** is one of the leaders of rubber manufacturing located in United Arab Emirates and has operations in Middle East and African countries like Saudi Arabia, Kuwait, Bahrain, Oman, Qatar, Iran, Ethiopia, Nigeria and Tanzania.

**CRYSTAL** had worked to solve the world's toughest rubber challenges, innovate new solutions and gain industry expertise that sets us apart from competitors. With extensive in-house capabilities, our products are designed, engineered and manufactured in United Arab Emirates.

Over years, we've built a team of expert engineers who push the boundaries of rubber design and continue to advance rubber material science. Today, we are a leading designer and manufacturer of rubber seals, CV boots, ladder feet and test plugs serving the needs of countless industries around the world.



## 3S Rubber rings for PVC pipe



# About 3S Rubber rings for PVC pipe

Unique design of sealing ring supplied made from high quality rubber to meet the practical requirements of sites, which adds to installation efficiency. This seal can be safely and easily fitted in wet, cold and muddy conditions.

# These sealing rings offer the following advantages:



- Very low assembling force is required for joint.
- ➤ It has large operational life (minimum life is about 50 years).
- ➤ These rings give greater reliability and can withstand pressures beyond that of specified testing pressure of the pipes.



- Specially suitable for underground applications.
- ➤ It is resistant to salt water, organic vegetable oils, dilute acids and alkalis normally found in waste water. It is also resistant to ultra violet radiations, bacteria, fungus and termites. In short, CRYSTAL rings are designed to give long term satisfaction to the customers.





#### **Technical information**

Hardness: 60±5 IRHD

		Dimensio	ns, mm				
Pipe Ø	DN ØD		)	b		h	
63	50	83.60	±0.7	10.30	±0.4	18.10	±0.4
75	65	98.00	±0.7	11.50	±0.4	20.30	±0.4
90	80	115.60	±0.7	12.80	±0.4	22.20	±0.4
110	100	138.40	±0.8	14.20	±0.4	24.20	±0.4
140	125	171.60	±0.8	15.80	±0.4	26.10	±0.4
160	150	194.40	±1.0	17.20	±0.4	27.80	±0.4
200		238.20	±1.0	19.10	±0.4	29.50	±0.4
225	200	266.20	±1.2	20.60	±0.4	31.40	±0.4
250	-	295.70	±1.2	22.85	±0.4	35.20	±0.4
280	250	329.20	±1.5	24.60	±0.4	37.30	±0.4
315	300	367.80	±1.5	26.40	±0.5	38.90	±0.4
400		464.00	±1.8	32.00	±0.5	46.60	±0.5
500	-	571.60	±2.7	34.30	±0.6	54.00	±1.3
630		716.50	±4.2	40.50	±0.6	64.00	±1.3

#### **Jointing instructions**

- 1. Clean the inside surface of the socket. Remove all traces of mud, dirt, grease, gravel and clean the elastomeric sealing ring.
- 2. Shape the ring into a heart shape by pinching a portion of ring from inside. Insert it into the socket and release to seat it into the groove.
- 3. Factory supplied pipes are provided with a 15° chamfer. Mark the insertion depth on spigot of pipe. Clean and apply lubricant to the pipe insertion depth before pushing it into the socket.
- 4. If pipe needs to be cut, it should be cut perpendicular to the axis of the pipe after which it should be chamfered properly.







- 5. Align the socket and spigot correctly in the horizontal and vertical planes. Before insertion, ensure that no sand or dirt adheres to the lubricated surface of the pipe. Care should be taken that the spigot end is inserted in the socket at the correct angle.
- 6. Push the spigot into the socket until it reaches the depth of entry mark. Do not over insert. This must be done manually. Use a steel crow bar, if necessary. Protect the pipe with a wooden block. Insertion of spigot end inside the socket should be at the correct angle.
- 7. In case of large diameter pipes, if the crow bar does not give sufficient leverage, use of a jointing jack may be helpful.









# **Rubber Properties**

### **Rubber Properties Chart**

The rubber properties chart provides a guide for making initial decisions about the suitability of an elastomer for a given application or service environment, the main rubbers are included in the properties chart below. CRYSTAL RUBBER's capability also extends to a wide variety of more specialist blends and formulations.

LASTOMER	SBR	EPDM	Natural Rubber (NR)	Nitrile Rubber (NBR)	
Operating Temperature	-40 to 95ºC	-50 to 140ºC	-45 to 95ºC	-35 to 125ºC	
Mechanical Strength	Good	Fair / Good	Excellent	Good	
Abrasion Resistance	Excellent	Fair	Good / excellent	Excellent	
Flex Resistance	Good	Fair	Excellent	Fair	
Low Temp. Flexibility	Good	Good / Excellent	Good	Fair / Good	
Ozone/Weather Resistance	Poor / Fair	Excellent	Poor / Fair	Fair	
Water Resistance	Good	Excellent	Good	Good	
Impermeability to Gases	Fair	Good	Fair	Good	
Oil Resistance	Poor	Poor	Poor	Excellent	
Fuel Resistance	Poor	Poor	Poor	Good	
Resistance to Dilute Acid	Fair	Excellent	Good	Excellent	
Resistance to Dilute Alkali	Fair	Good	Fair	Good	
Special Properties				Fuel and oil resistance	



# **CRYSTAL RUBBER for construction industry**

## We will definitely find the right solution for you

**CRYSTAL RUBBER** manufacture and distribute high quality rubber products to meet the diverse demands of the engineering and construction industry in Middle east and Africa.

For the Building & Construction industry, rubber part products are assembled into structures or even used in the production process. With property of rubber that is flexible to support sealing, expansion or contraction of steel, concrete, pipes as well, helping to absorb force or even vibration. Making rubber parts nowadays considered to be very important to the industry But what kind of raw material is used in the production Or can be manufactured into any type of rubber product depending on the condition of use.



#### **3S Rubber Rings**

Rubber ring specially designed to fit in PVC pipes to use it as seal to prevent leak, Available in different dimensions, our range is acknowledged for its durability, abrasion resistance and high elasticity.



### Lip Seal Rubber Rings

This product is used Is in areas of lubrication by professionals. Most professionals say their plants use lip seals to control contaminant.



#### **Test Plugs**

Typically suitable for more arduous duties such as long immersion in water even with higher temperatures or in contact with aggressive oils and chemicals.











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You are welcome to contact us for further information.

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