

# The Bleach Ball Valve

**Chemtrol**<sup>®</sup>  
a brand of **NIBCO**

- another thermoplastic flow solution from Chemtrol<sup>®</sup>

## The Problem:

Bleach (Sodium Hypochlorite) in water treatment applications can become trapped in the valve body cavity and may create valve failure conditions as it decomposes.

## The Chemtrol Solution:

Chemtrol's specially designed Bleach Ball Valve effectively vents Sodium Hypochlorite gases, keeping inner valve surfaces constantly wetted and ensuring problem-free use of PVC and CPVC ball valves in water treatment applications.

## Water Treatment

Many water treatment plants nationwide use bleach (Sodium Hypochlorite) as a disinfectant. Sodium Hypochlorite is an aggressive chemical with a high pH level. PVC and CPVC ball valves with fluorocarbon O-rings can easily handle the chemical resistance requirements of Sodium Hypochlorite. However, the high oxidizing nature of this chemical can lead to the formation of caustic residue that makes the valve harder to turn and creates excessive wear on the seats. In addition, the decomposition of sodium hypochlorite will produce gases that place excess pressure on the inner components of the valve and may lead to valve failure.



Polyvinyl Chloride (PVC)

## Bleach Ball Valve

The Chemtrol Bleach Ball Valve was the first plastic ball valve offering a viable solution for Sodium Hypochlorite transfer and injection applications. Our unique factory-assembled Bleach Ball Valve has effectively eliminated the problems associated with these uses for several years. By ensuring that all inner surfaces of the valve are kept constantly wetted and vented to the upstream side when the valve is in the closed position, we have eliminated the conditions required for gas accumulation and caustic crystallization in the body cavity.



Chlorinated Polyvinyl Chloride (Corzan<sup>®</sup> CPVC)

## Sample Specification

All PVC or CPVC Ball Valves must be of the True Union type with an energized seat that will concurrently provide automatic adjustment for wear and leak-free service at the lower pressure port, and with a ball containing an adequate vent to the higher pressure port. The manufacturer of all PVC and CPVC Bleach Ball Valves must complete all components prior to the factory assembly, test and packaging of those valves. Modification of assembled valves by any manufacturer or vendor is unacceptable. Also, the valves must be individually packaged with each carton label depicting Bleach Ball Valve, size, material and manufacturer. The ball valve bodies must be permanently marked externally with NSF (symbol of NSF International), indicating approval for use with potable water, "bleach" and two opposing directional arrows, one inscribed with "flow", and the other with "vent."

For more information on Bleach Ball Valves contact Technical Services by phone: 888.446.4226 or by fax: 888.336.4226

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