



# Sodium Chlorite Material of Construction

The following information should be considered when selecting materials for use with sodium chlorite:

### **Tanks**

Tanks should be of closed top construction to prevent product contamination. The tank gas space should be adequately vented to prevent chlorine dioxide gas accumulation above explosive decomposition limits.

Tank materials of construction:

- 1. Fiberglass reinforced vinyl ester plastic, color natural, with UV protection.
- High density polyethylene (HDPE) with UV resistance color
- 3. Titanium

## **Pumps**

Pumps are a typical source of leakage around glands and packing. This type of spillage should be promptly cleaned up and the area washed down with water. The water should then be drained into an industrial sewer in accordance with the regulations that govern wastewater discharges in your area or absorbed with inert materials. Greaseless lubricants should be used in areas where spilled material or dust from dried material will not come in contact with the lubricants or the housings containing those lubricants.

Pumps should not be run against closed valves. This may result in heating the sodium chlorite solution to above its decomposition temperature. Pump materials of construction (Wetted Parts):

- 1. 316 SS
- 2. Polypropylene
- Seal types: Continual running = Dynamic Start/Stop = double Mechanical

# **Piping**

Design the piping system to avoid space which may trap gases. The piping system should be designed to accommodate thorough flushing or complete drain down especially in cold climates where low temperatures may induce crystallization of the liquid in the piping system. Piping materials of construction:

- 1. CPVC
- 2. Vinyl Ester FRP
- 3. Teflon lined pipe
- 4. Schedule 80 PVC

Heat tracing and insulation (calcium silicate or equivalent) may be appropriate where the solution freezing point is exceeded. However, if that approach is used, a temperature controller should be used to keep from generating any "hot" spots in the piping. Heat tracing temperature settings should be specific for the product in the piping or container.

#### **Further Information**

More detailed information on sodium chlorite is available on request through the OxyChem Technical Service Department. Call or write to:

OxyChem Technical Service Department 6200 S. Ridge Rd. Wichita, KS 67215 800-733-1165 option #1 OxyChem\_Tech\_Service@oxy.com

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