

Mercury Control Sodium Bromine, 40% Solution

DESCRIPTION

Mercury Control Sodium Bromide is an aqueous solution of 40 wt.% sodium bromide salt.

APPLICATIONS

Mercury Control Sodium Bromide can be used to enhance the oxidation of the elemental mercury that is present in flue gas environments at power generation units and incinerators. Oxidized mercury is more readily removable via conventional pollution processes and equipment. Sodium Bromide can also be added to adsorption materials such as activated carbon to enhance elemental mercury uptake.

FEATURES

Sodium Bromide 40% solution has a low crystallization point as compared to solutions with higher concentrations of bromide. The total crystallization temperature for this product is -21°F. This feature is favorable when storing the solution where low temperatures are expected. Some users of sodium bromide purchase 40% solution as the winter-grade of product.

TYPICAL PROPERTIES

Assay as NaBr (wt%)	38.0 – 42.0
Density @ 70°F	11.5 – 12.0
pH (1:10 Dilution)	7.0 – 9.0
Chloride	< 1.0
Appearance	No Visual Impurities

These properties are typical but do not constitute a specification either in part or as a whole. Specification data is available on request from sales, customer service or customer technical service.

COMPATIBILITY

Materials of Construction

This product is compatible with most non-metallic materials of construction such as fiberglass-reinforced plastic (vinyl ester or polyester FRP), polyvinyl chloride (PVC), chlorinated polyvinyl chloride (CPVC), high density polyethylene, polypropylene, Viton®, Teflon®, natural rubber, chlorobutyl rubber, Hypalon®, HALAR® ECTFE, Tefzel® ETFE, and most high-performance PTFE-based gasket materials such as W.L. Gore GORE-TEX® GR, W.L. Gore UPG Style 800, and Garlock Gylon® Styles 3504 and 3500.

Titanium and high-nickel alloys such as Inconel® 625 & 686, and Hastelloy® C-22 & C-276 also are suitable materials of construction.

Incompatible Materials of Construction

The compatibility of this product with common metals depends on the storage conditions and the environment that the material is in. Aluminum, brass, carbon steel, copper, stainless steel and other common metals generally are not suitable for use. Carbon steel and copper can result in discoloration of the product. Aluminum suffers pitting attack. Dissolved oxygen increases the corrosion rate of stainless steel.

Recommended Materials of Construction for Storage Tanks

Vinyl Ester FRP such as Ashland Derakane® 411 or 470 is suitable for use, as is bisphenol A fumarate polyester FRP such as Reichhold Atlac® 6694.

Recommended Materials of Construction for Piping and Valves

For piping, an adhesive socket FRP system such as Reinforced Plastics Systems P150 series or Smith Fibercast® CL-2030 series is suitable. A flat-faced FRP ball valve such as the Nil-Cor® 310 series is a good choice for FRP piping. PP-lined steel also is suitable. For low-pressure lines (<5 psig) such as overflows and drain lines, solid PVC or CPVC piping can be used, but should be safeguarded from mechanical damage.

SAFETY AND HANDLING INFORMATION

For specific safety and handling information, please refer to the current material safety data sheet.

CHEMICAL REGISTRATION NUMBERS

CAS: 7647-15-6
EINECS: 231-599-9
MITI: 1-113
KECL: KE-31368

RESPONSIBLE CARE

Albemarle is committed to the safety and well-being of our customers, employees and the community at large. Safety Data Sheets (SDS) are available upon request.



NORTH AMERICA 4250 Congress Street, Suite 900 • Charlotte, NC 28209 • Tel: +1 980 299 5700
EUROPE Parc Scientifique Einstein, Rue du Bosquet 9, 1348 • Louvain-la-Neuve, Belgium • Tel: +32 10 48 17 11
LATIN AMERICA Av. Brigadeiro Faria Lima, 1461 – sala 131-B • Sao Paulo, SP Brazil, 01451-001 • Tel: +55 11 99655-2288
CHINA Room 3202, No. 757 Mengzi Road, Gopher Center, Huangpu District • Shanghai, PRC. 200023 • Tel: 86.21.6103.8666

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