TECHNICAL BULLETIN

MATERIALS OF CONSTRUCTION FOR USE WITH FOAM CONCENTRATES

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058
Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com
Visit the Viking website for the latest edition of this technical data page www.vikinggroupinc.com

1. DESCRIPTION

Fomtec SFFF foams are SFFF's to which a special polymer and solvent system has been added. All of these foam concentrates have a pH range from 7.9 to 8.6, are not excessively corrosive and will not harm any recommended materials used to contain them.

2. LISTINGS AND APPROVALS

Refer to technical data pages for products used.

3. TECHNICAL DATA

Specifications:

A. When introducing foam concentrate into storage tanks or foam piping make sure that components are cleaned thoroughly and dry. Foam concentrates are subject to evaporation which accelerates when the product is exposed to air. Storage tanks should be sealed and fitted with a pressure vacuum vent to prevent free exchange of air. Storage tanks should be kept filled. In certain applications, contents may be covered with ¼ inch (3 mm) of Foam Seal Oil to ensure prevention of air coming into contact with the concentrate.
B. It is recommended that foam concentrate piping should be maintained in a flooded state.
C. Annual foam concentrate inspection is recommended by the manfucturer in accordance with appropriate NFPA Standards.
D. Please consult individual foam product data sheets for further information regarding warranty and shelf life.

Materials Standards:

Viking recommends and lists the following materials of construction:

Storage Tanks

Preferred Materials

- Stainless Steel – 304L or 316 grades
- High Density Cross Linked Polyethylene
- Fiberglass with isophthalic based polyester and an internal layer (50-100 mils minimum) of vinyl ester resin in contact with foam concentrate

Piping/Components

Preferred Materials

- Stainless Steel – 304L or 316 grades
- PVC (**Note: should be underground only**)
- Fiberglass with isophthalic based polyester and an internal layer (50-100 mils minimum) of vinyl ester resin in contact with foam concentrate
- Brass or Bronze
- Carbon Steel (**for solution only**)
- High Density Cross Linked Polyethylene

Gaskets/Seals/Bladders

- Ethylene Propylene Diene Monomer (EPDM) or Ethylene Propylene Rubber (EPR) (e.g. AP Rubber)
- Butyl rubber (modified isobutylene) (e.g. Bucar, Polysarbutyl, MD551, Buna N, Nitrophyl)
- Fluoroelastomer (e.g. Viton)
- Nitrile Rubber (butadiene acrylonitrile copolymer)
- PTFE

The Viking Corporation, 210 N Industrial Park Drive, Hastings MI 49058
Telephone: 269-945-9501 Technical Services: 877-384-5464 Fax: 269-818-1680 Email: techsvcs@vikingcorp.com
Visit the Viking website for the latest edition of this technical data page www.vikinggroupinc.com

⚠ CAUTION

In systems containing dissimilar metals, Viking recommends that these components be insulated with dielectric components to reduce the possibility of galvanic corrosion.

Note: Galvanized steel storage tanks or piping should never be used to contain any foam concentrates.

4. COMPATIBILITY OF FOAM CONCENTRATES

- Different types of foam concentrates shall not be mixed for storage.
- Different brands of the same type of concentrate shall not be mixed unless data are provided by the manufacturer and accepted by the AHJ to prove that they are compatible.
- Low-expansion foams generated separately from protein, fluoroprotein, FFFP, AFFF, and alcohol-resistant concentrates shall be permitted to be applied to a fire in sequence or simultaneously.