



## Steam Treatment 1688 NEUTRALIZING AMINE

### **DESCRIPTION AND USE**

Steam Treatment 1688 is a tri-blend amine of diethylethanolamine (diethylaminoethanol), morpholine, and cyclohexylamine neutralizing amines. This formulation is used in a wide range of boiler condensate systems. This particular formulation closely matches the condensation of water and carbon dioxide in steam to provide good protection throughout most systems.

### **CHEMICAL FEEDING AND CONTROL**

Steam Treatment 1688 is normally fed continuously to the system being treated. However, shot feeding may be satisfactory in some circumstances. The product may be fed neat but is most often mixed in a chemical feed tank with the other materials required to complete the program. Normal materials of construction are satisfactory for the feed system. However, copper, copper alloys and aluminum must be avoided.

Steam Treatment 1688 is normally controlled by a pH test on the return condensate. For extensive distribution systems, samples should be taken from various points in the system at least until it can be assured the desired distribution of the amines is being achieved.

### **TYPICAL PROPERTIES**

Appearance.....	Colorless liquid
Odor.....	Typical amine
Flash Point.....	>115°F
Specific gravity.....	0.94-0.96
Density.....	7.92 lbs./gal.
pH(undiluted).....	<12.5

### **SAFETY AND HANDLING**

Steam Treatment 1688 may be toxic by ingestion and due to high alkalinity can be highly irritating to mucous membranes. Do not take internally. If ingested, drink at least two (2) glasses of water and get medical attention. Do NOT induce vomiting. Contact with eyes causes severe irritation or burns. If eyes are contacted, immediately flush with clear water for 15 minutes and get medical attention. For skin contact, wash with soap and water. Get medical attention if irritation persists. For additional information, see the Material Safety Data Sheet provided with this product.

### **PACKAGING**

Steam Treatment 1688 is packaged 55, 30 and 15 gallon, non-returnable plastic drums. Other packaging available depending on quantities.

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