



NATIONAL PETROCHEMICAL COMPANY
STANDARDS

MATERIAL STANDARD
FOR
FOAM SYSTEM REQUIRED FOR HYDROCARBON TANKAGES

NPCS-MS-GC-04

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CONTENTS

- 1 SCOPE
- 2 STANDARDS AND CODES
- 3 FOAM AND CONCENTRATION
- 4 FOAM SYSTEMS
- 5 EQUIPMENT FOR FOAM SYSTEM
- 6 CONSTRUCTION AND MATERIAL
- 7 WORKMANSHIP AND FINISH
- 8 TESTING
- 9 PAINTING
- 10 MARKING
- 11 INSPECTION

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1 SCOPE

This standard describes the requirements of the design, material, construction of the foam system including of all equipment for a hydrocarbon storage tanks in an industrial complex.

2 STANDARDS AND CODES

- NFPA National Fire Protection Association.
- NFPA 11 Low Expansion Foam System.
- ANSI American National Standard Institute.
- B 16.5 Standard Specification for Flanges.
- NPCS-ES-GC-10 Engineering Standard for Fire Fighting System.

3 FOAM AND CONCENTRATION

- 3.1 Fire fighting foam is a stable aggregation of small bubbles of lower density than oil or water and shows tenacious qualities for covering horizontal surfaces. Air foam is made by mixing air in-to a water solution containing concentrate by means of suitably- designed equipment.
- 3.2 Aqueous film forming foam (AFFF) are based on fluorinated surfactants plus foam stabilizers.
- 3.3 The percent of foam concentrate contained in a foam solution shall be 3 to 6 1.97% to 94% water, 3% to 6% foam concentrate).
- 3.4 Foam shall applied over the surface through fixed outlets.

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