

Table 13.1: General Requirements for Flammable and Combustible Liquid Storage

ITEM	REQUIREMENTS
11. DISPENSING, HANDLING, TRANSFER AND USE OF FLAMMABLE AND COMBUSTIBLE LIQUIDS	<p>ix. If the mixing/blending vessel is capable of creating static electricity, they shall be bonded and earthed to a static grounding system.</p> <p>X. All mixing / blending vessels shall be provided with self closing non combustible lid that are liquid tight and capable of containing fire within the vessel.</p> <p>Xi. Ventilation system shall be provided.</p> <p>4. MAXIMUM QUANTITY ALLOWED FOR INCIDENTAL OPERATIONS INSIDE</p> <p>i. The quantity of liquids allowed for incidental operation shall be limited to amount required to supply one continuous 24-hour period of incidental operation, subject to following conditions.</p> <p>a. The storage of such permitted liquid shall be stored in accordance with Table 13.2.</p> <p>b. Class I liquid, maximum allowed quantity is 25 Gal. (95 L)</p> <p>c. Class II liquid, maximum allowed quantity is 660 Gal (2500 L).</p>
12. STAGING OF LIQUIDS	<p>i. The staging of liquid in dispensing or transfer area shall be limited to the following.</p> <p>a. The containers that are in use.</p> <p>b. Containers that are filled within a working shift.</p> <p>c. The container consisting of liquids that are consumed within 24 hours of operation.</p> <p>d. The containers that are permitted else where in this code.</p> <p>ii. Staging area shall be minimum 3 m away from the dispensing OR transfer area.</p> <p>iii. Following additional precaution shall be taken for Class I liquids.</p> <p>a. They shall be kept in closed tank when not in use.</p> <p>b. They shall not be transferred into containers unless the nozzle and container are electrically interconnected.</p> <p>c. Automatic container filling operation shall be designed to prevent static electricity.</p>
13. FIRE RISK ASSESSMENT REQUIREMENT FOR CIVIL DEFENCE APPROVAL	<p>i. Storage, use, handling and dispensing of cryogenics liquids, unstable liquids shall need fire risk assessment based on the MSDS, process hazards, operation hazards and international standards including but not limited to NFPA 30, IFC and IBC.</p> <p>ii. Operations and processes where flammable and combustible liquids are subjected to higher temperature atmospheres than their flash points such as, but not limited to Heat transfer systems, Boiler systems, vaporizer systems, vapor recovery and processing systems, burner systems, High pressure systems, distillation systems etc., shall be submitted to Civil Defence with detailed fire and explosion risk assessment with supporting documents, analysis and schematics for approval, based on international standards and process safety manuals.</p>