

Table 13.1: General Requirements for Flammable and Combustible Liquid Storage

ITEM	REQUIREMENTS
11. DISPENSING, HANDLING, TRANSFER AND USE OF FLAMMABLE AND COMBUS-TIBLE LIQUIDS	<u>1. GENERAL</u>
	<ul style="list-style-type: none"> i. All flammable liquids and combustible liquids shall be kept in their approved closed containers or tanks when not actually in use. ii. Class I liquids shall not be used or handled outside closed systems, where there are open flames or other ignition sources within classified area. iii. Processing vessels and buildings containing such processing vessels shall be located so that a fire involving the vessels does not constitute an exposure hazard to other occupancies. iv. Processing equipment, in which unstable liquids are handled shall be separated from unrelated plant facilities that use or handle flammable and combustible liquids shall be separated by 7.6 m clear spacing OR 2 hour fire resistance rated, explosion protection wall.
	<u>2. CONSTRUCTION</u>
	<ul style="list-style-type: none"> i. All buildings or structures used for flammable liquids and combustible liquids handling, usage and dispensing shall be separated from adjacent property and public street or public way in accordance with Table 13.1.c.
	<u>3. OPERATION</u>
	<ul style="list-style-type: none"> i. The vessels, containers, tanks and piping systems shall be designed for pressurized transfer and shall be capable of withstanding the anticipated operating pressure. ii. Safety and operating controls, including pressure-relief devices, shall be provided to prevent overpressure of any part of the system. iii. Only inert gas shall be used to transfer Class I liquids. iv. Only inert gas shall be used to transfer Class II and Class III liquids that are heated above their flash points. v. Positive displacement pumps shall be provided with pressure relief that discharges back to the tank, pump suction or other suitable location or shall be provided with interlocks to prevent overpressure. vi. Piping, valves, fittings, hose, nozzles, flexible connectors, devices and equipment shall be Listed and approved by International Civil Defence approved laboratories. vii. If hose is used in the transfer operation, it shall be equipped with self closing valve without a hold-open latch in addition to the outlet valve. viii. Class I, Class II or Class III liquids used in a process and staged in the process area, shall not be filled in the process area.

Table 13.1.c.: Minimum Separation Distances of Buildings using Flammable and Combustible Liquids

LIQUID CLASS	TO ADJACENT PROPERTY LINE	TO STREET OR PUBLICWAY	CONSTRUCTION TYPE
1. CLASS I, UNSTABLE LIQUID OF ANY CLASS	7.6 m	3 m	TYPE II (111)
	3 m	1.5 m	TYPE II (222)
2. CLASS II	3 m	1.5 m	TYPE II (111)
3. CLASS III	3 m	1.5 m	TYPE II (111)