

Flammable and Combustible Storage Checklist

This checklist has been compiled to help employers and employees comply with the requirements of the Occupational Safety and Health Act, (Reference 29 CFR 1910 and 1926 of the Federal OSHA Standards) regarding the storage and use of flammable and combustible liquids. This checklist is only a guide. The use of it does not necessarily assure full compliance with all State and Federal regulations. This checklist is designed in such a manner that a negative answer indicates a need for safety attention.

GENERAL INFORMATION

Company Name:		Date:	
Location:			
Inspector Name:			

I. Tanks (IN General)

Are tanks made of steel (unless they fit the exception as noted)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If the tank is of inlined concrete, is it being used to store a flammable or combustible liquid having a gravity of 40 API or heavier?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the spacing between any two tanks housing flammable or combustible liquids not less than three feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the separation between a LP gas container and a flammable or combustible liquid storage tanks at least twenty feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Does every above-ground storage tank have a pressure relieving system?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If tanks storing Class I liquids are located adjacent to buildings, are the vents arranged to be released at a safe point outside the building?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the area around the tank(s) provided with drainage or diked as provided?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are tank supports on a firm foundation? Are these supports made of concrete, masonry or protected steel?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If the tank(s) is inside the building, does it meet requirements of OSHA?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If manual gaging is independent of the fill pipe, does it have a liquid-tight cap or cover?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

II. Outside Above Ground Storage

Is the area free of weeds, debris and other combustible material not necessary to storage?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If the quantity exceeds 1,100 gallons, is there a minimum distance of ten feet between the building and the nearest container?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the storage area either graded to divert possible spills away from buildings or surrounded by a curb at least six inches high?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If curbs are used are there provisions for draining accumulations of ground or rainwater of spills of flammable or combustible liquids?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Do the drains terminate at a safe location?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are suitable fire control devices available?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the distance between any two of the storage tanks at least three feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If storage tanks are placed in an irregular fashion, are the inside tanks available for firefighting purposes?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

III. Underground Storage Tanks

Pit Tanks			
Is the pit (hole) big enough to allow easy access to all parts of the tank?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Does it have an access door that can be fastened shut?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
When anyone enters the pit, is he wearing a safety belt with an attached lifeline?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Underground Tanks			
In storing Class I liquids, is the tank at least one foot from the nearest wall?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the tank at least three feet from the property line?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the tank surrounded by at least six inches of non-corrosive inert materials?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is it properly covered (two feet of dirt, or foot of dirt on top of which is a concrete slab not less than four inches thick, unless subjected to traffic)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are the vent pipes at least 1 ¼ inches nominal inside diameter?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Do fill and discharge pipes enter only through the top?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

IV. Diked Area

Is the diked area large enough to hold the contents of the largest tank within the area (assuming the tank is full)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are the walls of the area made of earth, steel, concrete or solid masonry and are they liquid tight?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Have you made sure that there is no loose combustible material, or full drum or barrel within the diked area?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the average height of the wall restricted to six feet above the interior grade?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

V. Portable Tank

Does it have emergency vent(s) to relieve internal pressure automatically if the tank gets too hot?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the vent set open at not less than 5 psig?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If fusible vents are used, are they actuated by elements that operate at a temperature not exceeding 300 degrees F	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If stacked over one tier, are they designed to nest securely without dunnage?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

VI. Drum

Is the drum grounded for Class I liquids?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Before dispensing of liquid, is the container bonded to the drum for Class I liquids?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A

Is the drum on metal supports if inside? (Recommended)	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

VII. Safety Can

Does it have a spring-closed lid and spout cover?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is it designed to prevent spills and to relieve internal pressure of expanding vapors?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Does it have a maximum safe capacity of five gallons (except for Class IA and this has a safe capacity of two gallons)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If stacked over one tier, are they designed to nest securely without dunnage?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Does it have a flame arrester?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

VIII. Storage Cabinet

Capacity			
Is it ascertained that not more than 60 gallons of Class I and Class II liquids or not more than 120 gallons of Class III liquids are stored in any storage cabinet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Metal Cabinets			
Is it labeled “ Flammable –Keep Fire Away ”?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is it made of at least number 18 gauge sheet iron?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is it double-walled with 1 ½ inches air space?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the door provided with a 3-point lock?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the door raised at least 2 inches above the bottom of the cabinet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Wooden Cabinets			
Is it made of an approved grade of plywood that is at least 1 inch in thickness?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are all joints rabbetted and fastened in two directions with flathead wood screws?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If more than one door is used, is there a rabbetted overlap of not less than 1 inch?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

IX. Inside Storage Room

Are all openings provided with approved self-closing fire doors?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the room provided with either a gravity or mechanical exhaust ventilation system?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the ventilation system designed for a complete change of air within the room at least six times per hour?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If mechanical exhaust system is being used, is the control switch outside the door and is it connected to the light fixture system?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A

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Does the room have one clear aisle that is at least three feet wide?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If containers are over thirty (30) gallons in capacity, did you remember not to stack one upon the other?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are things stacked in the storage room so as not to limit use of exits or areas normally used for safe egress?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the room liquid tight where walls join the floors?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Does the room have either: (1) raised sills at least four inches high; (2) a floor at least four inches below the surrounding floor; or (3) an open-grated trench inside the room that drains to a safe location?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Does the total allowable quantity stored within the room comply with the room comply with Table H-13?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are all storage room areas posted " No Smoking "?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If wood is used for shelving, dunnage or racks, is it at least one inch in thickness?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is there a fire extinguisher (12B minimum) located within ten feet of the door?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If the storage building is located fifty feet or less from a building or line of adjoining property that may be built upon, does the exposing wall have a fire resistance rating of at least two hours?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If containers are stacked in piles, are they separated by pallets or dunnage where necessary to assure stability?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

X. Storage Inside Building

Are containers stored so as not to limit the use of stairways, exits or other means of egress?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are the containers being used the approved type?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
In office areas, is there only enough of these liquids for maintenance and operation?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is storage being done in accordance with Table H-14 or Table H-15?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

XI. Inside Tanks

If inside tanks are being used, do they meet requirements as listed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Do the vents discharge vapors outside the building?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are the employing and filling connections that are made and broken located outside and free from any source of ignition?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Does it have an automatic-closing heat-activated valve on each withdrawal connection to prevent continued flow in the event of fire in the vicinity?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is it provided with a means to prevent overflow into the building?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

XII. Storage in Public Warehouse

Is storage done in accordance with Table H-14 or Table H-15?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

XIII. Storage in Warehouse or Storage Building

Is storage in accordance with Table H-14 or Table H-15?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If the building is located 50 feet or less from another building, does the exposed wall have a fire-resistance rating of at least 2 hours?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

XIV. Incidental Storage

Are the liquids stored in tanks or closed containers?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the amount of Class IA liquid stored not in excess of 25 gallons?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the amount of Class IB, IC, II, or III liquids stored not in excess of 660 gallons (in a single portable tanks)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

XV. Storage In Flood Areas

Vertical Tanks			
Is the amount of liquid to be stored considered safe for the tank during a flood (unless it has a guiding structure)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If the tank is located on an exposed point or on the bank of a shore line, is the structure able to withstand a unit force up to 50 pounds per square foot?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are the structural guides designed to give free rise to the tank and are they made of non-combustible materials?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If there is no public water supply, is water available to fill any/all tanks that are practically empty?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If the tank is horizontal and more than 70% of the tank would be submerged during a flood, is it attached to a foundation of concrete or of steel and concrete?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

XVI. Fire Protection or Control

Are an adequate number of portable fire extinguishers and control equipment provided for the special hazards that exist?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is the water supply adequate both in volume and in pressure to supply all equipment needed?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are all fire protection facilities maintained and periodically checked and tested?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

XVII. Tank Cars

Are the tanks cars separated from warehouses, plant buildings or adjoining property lines by a distance of 25 feet for Class I and by 15 feet for Class II and III liquids?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are the valves self-closing type and are they held open manually except when automatic means are provided for shutting off the flow?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are bonding facilities provided?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

XVIII. Dispensing Station

Are the dispensing units either mounted on a concrete island or protected against collision damage?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Does the area have an approved mechanical or gravity ventilation system?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is there an easily accessible switch (es) or a circuit breaker (s) at a location remote from the dispensing devices?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is there a "No Smoking" sign(s)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is there an appropriate fire extinguisher?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

XIX. Industrial Plants

Are the processing buildings made of fire-resistant, noncombustible or heavy timber construction?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If the processing building is enclosed, is it ventilated at a rate of at least 1 cubic foot per minute per square foot of solid floor area?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is emergency drainage provided to direct these liquids to a safe location?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
If Class I liquids are being used, is the area provided with explosion venting?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is proper fire control available?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Does the plant have an approved automatic sprinkler system?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

XX. Construction

Are the combustible materials piled no higher than twenty feet?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are the driveways between and around combustible storage piles at least fifteen feet wide?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A

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Is there at least ten feet between outside stored combustibles and any building or structure?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Are the portable tanks at least twenty feet from any building?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is there at least one portable fire extinguisher with a rating of not less than 20-B units at any outside storage area?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Is this extinguisher not less than 25 feet and not more than 75 feet from the area?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
Comments / Action Items:			

Inspection Performed By:

Name:	
Title:	
Signature	

XXI. Tables

Table H-12 Maximum Allowable Size of Containers and Portable Tanks

Container type	Flammable liquids Class IA	Flammable liquids Class IB	Flammable liquids Class IC	Combustible Liquids Class II	Combustible Liquids Class III
Glass or approved					
Plastic	1 pint	1 quart	1 gallon	1 gallon	1 gallon
Metal (other than DOT drums)	1 gallon	5 gallons	5 gallons	5 gallons	5 gallons
Safety cans	2 gallons	5 gallons	5 gallons	5 gallons	5 gallons
Metal drums (DOT specifications)	60 gallons	60 gallons	60 gallons	60 gallons	60 gallons
Approved portable tanks	660 gallons	660 gallons	660 gallons	660 gallons	660 gallons

“Rating and capacity.” Storage inside storage rooms shall comply with Table H-13.

Table H-13 Storage In Inside Rooms

Fire protection (1) provided	Fire resistance	Maximum size	Total Allowable quantities (gals/sq. ft/ floor area)
Yes	2 hours	500 sq. ft.	10
No	2 hours	500 sq. ft.	5
Yes	1 hour	150 sq. ft.	4
No	1 hour	150 sq. ft.	2

Footnote (1) Fire protection system shall be sprinkler, water spray, carbon dioxide, or other system.

Table H-14 Indoor Container Storage

Class liquid	Storage level	Protected storage Maximum per pile	Unprotected storage Maximum per pile
A	Ground and upper floors	2,705 gallons (50)	660 gallons (12)
	Basement	Not permitted	Not permitted
B	Ground and upper floors	5,500 gallons (100)	1,375 gallons (25)
	Basement	Not permitted	Not permitted
C	Ground and upper floors	16,500 gallons (300)	4,125 gallons (75)
	Basement	Not permitted	Not permitted
II	Ground and upper floors	16,500 gallons (300)	4,125 gallons (75)
	Basement	5,500 gallons (100)	Not permitted
III	Ground and upper floors	55,000 gallons (1,000)	13,750 gallons (250)
	Basement	8,250 gallons (450)	Not permitted

Note 1: When 2 or more classes of materials are stored in a single pile, the maximum gallonage permitted in that pile shall be the smallest of the 2 or more separate maximum gallonages.

Note 2: Aisles shall be provided so that no container is more than 12 ft. from an aisle. Main aisles shall be at least 3 ft. wide and side aisles at least 4 ft. wide.

Note 3: Each pile shall be separated from each other by at least 4 ft. (Number in parenthesis indicate corresponding number of 55-gallon drums)