

Flammable and combustibles

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Flammables & combustibles Flammable and combustible liquids are liquids that can burn. They are identified, or grouped, as either flammable or combustible by their flashpoints. Generally speaking, flammable liquids will ignite (catch on fire) and burn easily at normal working temperatures. Combustible liquids have the ability to burn at temperatures that are usually above working temperatures.

<http://www.ccohs.ca/oshanswers/chemicals/flammable/flam.html>

What is a Flash Point?

The flashpoint of a liquid is the lowest temperature at which the liquid gives off enough vapour to be ignited (start burning) at the surface of the liquid. Sometimes more than one flashpoint is reported for a chemical.

<http://www.ccohs.ca/oshanswers/chemicals/flammable/flam.html>

Maximum Capacity of Containers for Flammable and Combustible Liquids

Flammable Liquids

Container Type

Class IA

Class IB

Class IC

Glass or Approved plastic

1 pint

1 quart

1 gallon

Metal

1 gal

1 gal

Safety Cans

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2 gals

2 gals

Combustibles Liquids

Container Type

Class II

Class III

Glass or approved Plastic

1 gal

1 gal

Metal

1 gal

5 gal

Safety can

2 gal

5 gal

Containers for flammable and combustible liquids shall be of the type, not exceeding the maximum capacities as set forth in the OSHA Standards. Size limitation for containers must be followed in order to prevent ignition of liquid by sparks from static discharge during pouring operations. Refer to Table I for container size specification.

<http://www.uncfsu.edu/emergency/safety/manual/flammables.htm>

Program Components

Plan for Safety!

A good plan for safe use of flammables and combustibles contains the following components:

Control of ignition sources

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Proper storage

Fire control

Safe handling

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SOURCES OF IGNITION

Open flames

Smoking

Static electricity

Cutting and welding

Hot surfaces

Electrical and mechanical sparks

Lightning

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SAFETY PRECAUTIONS FOR IGNITION SOURCES

CONTROL IGNITION SOURCES:

1. Electrical equipment and wiring should be suitable for the hazard.
2. If a heating operation is necessary, use only indirect heating methods.
3. Do not allow any open flames, hot surfaces, radiant heat sources or friction- and spark-producing equipment in flammable liquid areas.
4. Provide grounding and bonding for all equipment handling using these liquids.
5. Establish a maintenance program to assure that all equipment and safety controls are functioning satisfactorily.

<http://www.toy-icti.org/info/flammables.html>

VENTILATION:

Always provide adequate ventilation to reduce the potential for ignition of

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flammable vapors.

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STORAGE FUNDAMENTALS

STORAGE:

Accidental discharge is one of the major hazards concerning the storage of flammables and combustibles.

should be stored in tanks, drums, cabinets, or small containers

Drums and containers should be segregated from the rest to lessen potential fire risk.

Outside storage or storage in a detached building is preferred.

If the combustibles and flammables are stored inside, they should be stored in a detached room.

<http://www.toy-icti.org/info/flammables.html>

FIRE CONTROL

Suitable fire control devices, such as small hose or portable fire extinguishers must be available where flammable or combustible liquids are stored

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SAFETY HANDLING FUNDAMENTALS

Carefully read the manufacturer's label.

Practice good housekeeping.

Clean up spills immediately.

Only use approved metal safety containers.

Keep the containers closed when not in use and store away from exits or

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passageways.

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