

# Is This Any Way to Behave Around Flammables?



Can you spot what's wrong with this picture?



The good news is that the white fuel storage tank in the background is marked with the proper NO SMOKING warning. The bad news is that the worker has literally turned his back on the warning while puffing blissfully away.

**The Moral:** Although smoking is always hazardous, it's especially dangerous around flammable liquids. The OSHA Flammable Liquids Standard requires employers to control "sources of ignition" where flammable liquids are stored, like posting signs warning you not to smoke. But as this picture illustrates, **you have a part to play in protecting your own safety** by heeding warning signs and following safety instructions.

### 3 Reasons to Pay Attention

1. Your work area contains flammable liquids like fuels, solvents and cleaning chemicals that can explode and burst into flames if something causes them to ignite.
2. The things *you do* while working with or near flammable liquids can ignite fires and explosions.
3. Although we've taken steps to protect you—like installing ventilation and storing flammables in specially designed containers—you also need to do your part by controlling “ignition sources.”

### THE 3 KINDS OF FLAMMABLE LIQUIDS



A flammable liquid is one that has a “flash point,” i.e., minimum temperature at which the liquid gives off a vapor that can ignite when it mixes with the air, below 100°F (37.8°C). There are 3 types of Class I flammable liquids:

1. **Class IA:** Flash point below 73°F (22.8°C) and boiling point below 100°F (37.8°C)
2. **Class IB:** Flash point below 73°F (22.8°C) and boiling point at or above 100°F (37.8°C)
3. **Class IC:** Flash point at or above 73°F (22.8°C) and boiling point below 100°F (37.8°C)

### GENERAL SAFETY PRECAUTIONS FOR FLAMMABLE LIQUIDS



**STORAGE:** Flammable liquids must be stored in appropriate containers (depending on class):

- **1 pint to 5 gallons:** Can be stored in glass or approved plastic containers
- **Above 5 gallons:** Must be stored in metal cans or drums

**LABELS:** Containers used to store flammable liquids must be clearly labeled with the name of the material they contain

**CONTROL OF IGNITION SOURCES:** Sources of ignition that can cause flammable liquids to explode or catch fire must be controlled, including:

- Matches & cigarettes
- Electricity
- Heat generated by machinery & tools

## 8 FLAMMABLE LIQUID DO'S & DON'Ts



There are 8 things you must do to prevent explosions and fires when working with or near flammable liquids:

- **DO** look at the label of the container to determine the kind of flammable liquid inside
- **DON'T** store or use flammable liquids near an ignition source
- **DO** make sure all storage drums are grounded to prevent static electricity when transferring flammable liquids from one container to another
- **DON'T** smoke when using or near flammable liquids
- **DO** place fire extinguishers near areas where flammable liquids are stored
- **DON'T** fill containers of flammable liquid past 80% of the container's capacity
- **DO** transport flammable liquids in the back of a truck or trunk of a car rather than inside the vehicle
- **DON'T** use flammable liquids unless you've been trained to do so properly

## REMEMBER

Doing this...



Can lead to this...

