

VLR SAFETY TAILGATE TALK

October 2016

Subject: Flammable and

Date: _____

Combustible Liquids

Location (garage, mm, etc...):

Instructions:

Safety Coordinators & Supervisors should use this Tailgate Talk as a guide for discussion during their safety meetings. The primary purpose of the safety meetings is to give crews the opportunity to discuss any safety related concerns they may have.

Once the meeting has concluded, the Presenter should have each employee sign this form and include their Employee ID# in the spaces below.

TGT Presenter: _____

Name Employee

Name	Employee
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Is it Flammable?

The New OSHA Flammable Liquids Definition

Flammable liquid chemicals require special precautions in handling, use, transfer, and storage. The Occupational Safety and Health Administration (OSHA) is responsible for managing the hazard communication standard (HCS_ and the Flammable and Combustible Liquids standard, 29 CFR 1910.106, for these potentially dangerous liquids in the industry.

Recently, they changed the definition of “flammable to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS). Now these standards are simply titles “Flammable Liquids”. See the Flammable Liquids: **Old Classification Versus New Categories** table for an approximate comparison of the old classes and the new categories. The numbers in the table are taken from the GHS, however it’s important to note that they primarily use the metric system, so the cut-off temperatures do not match up exactly between the two systems. For a more detailed comparison of the old system and the new, see the specific breakdown of old VFR 1910.106 classes and new GHS Flammable Liquid categories as provided by The EHS Daily advisor.

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Flammable Liquids: Old Classification Versus New Categories					
	<73.4° F (23° C)	<100° F (37.8° C)	<140° F (60° C)	<199.4° F (93° C)	>199.4° F (94° C)
Old 1910.106	Flammable		Combustible		
Classes	IA, IB	IC	II	IIIA	IIIB
New GHS	Flammable				
Categories	1, 2	3		4	

OLD

CFR 1910.106

Before it was aligned with GHS, 29 CFR 1910.106 gave these definitions for flammable and combustible liquids:

- ◆ A flammable liquid was defined as “Any liquid having a flash point* below 100°F (37.8°C)”.
- ◆ A combustible liquid was defined as “Any liquid with a flash point at or above 100°F (37.8°C), but below 200°F (93.3°C)”.

Flammable and combustible liquids were further subdivided into classes:

All flammable liquids were Class I liquids.

- **Class IA** liquids had flash points below 73°F (22.8°C) and boiling points below 100°F (37.8°C).
- **Class IB** liquids had flash points below 73°F (22.8°C) and boiling points above 100°F (37.8°C).
- **Class IC** liquids had flash points at or above 73°F (22.8°C) and below 100°F (37.8°C).

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Combustible liquids were Class II or III liquids.

- **Class II** liquids had flash points at or above 100°F (37.8°C) and below 140°F (60°C).
- **Class IIIA** liquids had flash points at or above 140°F (60°C) and below 200°F (93.3°C).
- **Class IIIB** liquids had flash points at or above 200°F (93.3°C). When these chemicals were heated within 30°F (16.7°C) of their flash points, they were treated as Class IIA liquids.

NEW

GHS Flammable Liquids

Under GHS, all liquids with a flash point of not more than 199.4°F (93°C) are not categorized as flammable liquids. Flammable liquids are further subdivided into categories:

- **Category 1** liquids have flash points below 73.4°F (23°C) and boiling points at or below 95°F (35°C).
- **Category 2** liquids have flash points below 73.4°F (23°C) and boiling points above 95°F (35°C).
- **Category 3** liquids have flash points at or above 73.4°F (23°C) and at or below 140°F (60°C). When Category 3 liquids with flash points at or above 100°F (37.8°C) are heated for use to within 30°F (16.7°C) of their flash point, they must be handled in accordance with the requirements for a Category 3 liquid with a flash point below 100°F (37.8°C).

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- **Category 4** liquids have flash point above 140°F (60°C) and at or below 199.4°F (93°C). When Category 4 flammable liquids are heated for use to within 30°F (16.7°C) of their flash points, they must be handled in accordance with the requirements for a Category 3 liquid with a flash point at or above 100°F (37.8°C).

In addition, the new rules specify that when a liquid with a flash point greater than 199.4°F (93°C) is heated for use to within 30°F (16.7°C) of its flash point, it must be handled in accordance with the requirements for a Category 4 flammable liquid.

FLAMMABLE STORAGE GENERAL INFORMATION

Flammable storage cabinets or ROOMS are identified in conspicuous lettering. Labeling should include warnings such as “FLAMMABLE-KEEP FIRE AWAY”.

Only flammable liquids are stored in flammable storage cabinets or ROOMS (no other liquids, tools, materials, etc.).

Flammable liquids are only stored in approved containers and containers are kept tightly closed when not in use.

Shelves are sturdy and adequately support the material being stored on them.

Drums of flammable liquids inside flammable storage cabinets or ROOMS are bonded to the cabinet ground.

Bonding cables are available for transferring flammables from primary containers to secondary containers.

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There is no evidence of open flames or smoking near flammable storage cabinets, ROOMS, or above-ground fuel tanks.

Only 25 gallons or less of flammable liquids are stored outside of a flammable storage cabinet or flammable storage room.

ABOVEGROUND FUEL TANKS

Aboveground fuel tanks are clearly identified with type of fuel, and labeled with DOT labels, based on contents.

Aboveground fuel tanks are located such that they are protected from accidental vehicle contact, or are protected by appropriate barriers/barricades.

Aboveground fuel tanks are either double wall construction, or are located within secondary containment.

Fuel nozzles and hoses on aboveground fuel tanks are not damaged, degraded, or dry rotted.

There is no evidence of significant or continual fuel leakage around the aboveground fuel tank.

Fuel suppliers have been instructed to ensure that the fuel delivery truck is bonded to the aboveground fuel tank prior to transferring fuel to the tank.

Emergency shut-off switch is functional, clearly labeled, and located away, but within view of, the aboveground fuel tank.

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An appropriately sized spill kit and fire extinguisher are placed near the aboveground fuel tank.

FLAMMABLE STORAGE CABINETS

Flammable cabinets purchased or constructed must meet the requirements of NFPA 30: 4.3.3 (b) and OSHA 29 CFR 1910.106.

Less than 60 gallons of flammable liquids are stored in any one flammable storage cabinet.

Flammable storage cabinets are properly grounded to a building or earth ground.

The doors on flammable storage cabinets are in good repair and can fully close.

A suitably sized dry chemical fire extinguisher (12-B units or higher) is located between 10 and 25 feet of the flammable storage cabinet.

FLAMMABLE STORAGE ROOMS

Flammable storage ROOMS are clearly marked.

Flammable storage ROOMS are used only for storing flammable liquids (no other liquids, tools, materials, etc.).

Flammable storage ROOMS have an approved self-closing fire door.

Openings to flammable storage ROOMS have noncombustible liquid-tight raised sills or ramps at least 4 inches in height to prevent spills from leaving the room.

Walls are liquid-tight where the walls join the floor and all wall penetrations are sealed.

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The flammable storage ROOM does not exceed the maximum allowable storage density of 5 gal/sq. ft. for 2-hr rated room, 2 gal/sq. ft. for 1-hr rated room.

Electrical wiring, enclosures, and equipment (including ventilation equipment) inside the flammable storage room is approved for Class I, Division 2 hazardous locations.

The flammable storage ROOM's ventilation system is capable of at least six air changes per hour.

The ventilation switch is tied to the light switch, has a pilot light, and is located outside the flammable storage room near the entrance.

Containers are stored such that a 3-foot wide aisle is maintained.

A suitably sized dry chemical fire extinguisher (12-B units or higher) is located within 10 feet of the entrance to the flammable storage room.

SAFETY