SKILLSIGNAL™
Construction Safety & Compliance

TOOLBOX TALK

The Flame Pictogram: It Covers More Than Things That Burn

TOPIC NO.	DURATION	AUDIENCE
HC-04	10 to 15 min	All Crew

OSHA REFERENCE 29 CFR 1910.1200 Appendix B & C · 29 CFR 1926.152 · 29 CFR 1926.352

PROJECT / JOBSITE	DATE	PRESENTED BY

01 THE HOOK

START HERE

Everybody knows what the flame means. That is the problem. You see it on the gas can and think “flammable, fine, I know that.” Then the same flame is on the can of PVC primer, the aerosol foam, the two-part floor coating, and a bag of something you have never heard of, and in each case it means something a little different. Flash point. Vapor heavier than air. Ignites on its own when it touches air. Heats itself up in the bag. The symbol is one picture for seven different ways a product can start a fire. The label tells you which one you are holding.

02 WHAT THE FLAME COVERS

FLAME

SEVEN HAZARD CLASSES, ONE SYMBOL

Under **1910.1200 Appendix C**, the flame goes on: **flammable** gases, aerosols, liquids, and solids; **pyrophorics** (ignite spontaneously in air); **self-heating** substances; substances that **emit flammable gas on contact with water**; **self-reactive** substances and **organic peroxides** (the less violent types); and, since the 2024 update, **desensitized explosives**. The hazard statement under the pictogram names which one.

The most common one on a jobsite is a flammable liquid, and the number that matters is the **flash point**: the lowest temperature at which the liquid gives off enough vapor to ignite. The lower the flash point, the worse the category.

CATEGORY	SIGNAL WORD	FLASH POINT AND WHAT IT MEANS
CAT 1	DANGER	Flash point **below 73.4°F** and boiling point at or below 95°F. “Extremely flammable liquid and vapor.” Gives off ignitable vapor well below room temperature. Example: diethyl ether, some solvent blends.
CAT 2	DANGER	Flash point **below 73.4°F**, boiling point above 95°F. “Highly flammable liquid and vapor.” **Gasoline, acetone, PVC cement and primer, lacquer thinner, most spray paint.** Vapor ignites at any temperature you will ever work in.
CAT 3	WARNING	Flash point **73.4°F up to 140°F**. “Flammable liquid and vapor.” Mineral spirits, some adhesives, xylene. Safe-ish on a cold morning, a vapor hazard on a hot slab in July.
CAT 4	WARNING	Flash point **140°F up to 199.4°F**. “Combustible liquid.” **No pictogram.** Diesel, kerosene, many form-release oils. It will not ignite from a spark at room temperature, but it will near a torch or a heater.

03 THE ONES THAT SURPRISE PEOPLE

HAZARD 1

PYROPHORICS: NO SPARK NEEDED

A pyrophoric material **ignites on contact with air**, at or below 130°F for gases, within five minutes for liquids and solids. No spark, no flame, no heat. Open the container wrong and it lights. Rare on most sites, but silane gas and some catalysts carry this class. “Catches fire spontaneously if exposed to air” is the hazard statement.

HAZARD 2

SELF-HEATING: THE BAG THAT GETS WARM

Some products generate heat on their own in storage, enough to ignite in large quantities with no outside source. The classic is a pile of oily rags, which is not labeled at all. Linseed oil, some finishes, and certain powders carry it. “Self-heating: may catch fire” means **do not pile it up and leave it.**

HAZARD 3

WATER-REACTIVE: EMITS FLAMMABLE GAS

Some metals and compounds give off hydrogen or other flammable gas when they hit water. Wet it to clean it up and you just made the fuel. The label will say “In contact with water releases flammable gases.” The SDS Section 5 will tell you not to use water on the fire.

HAZARD 4

AEROSOLS: PRESSURE PLUS FUEL

A spray can with flammable propellant is a flammable liquid in a pressure vessel. Puncture it, heat it, or spray it near a pilot light and the can becomes a torch. Flammable aerosols carry the flame; the 2024 update added a Category 3 for non-flammable aerosols that carry only the gas cylinder.

04 THE JOBSITE RULES BEHIND THE SYMBOL

When you see the flame, these are the OSHA construction rules that kick in:

☐ **1926.152(a)(1)**: only **approved containers and portable tanks** for flammable liquids. No water jugs, no milk cartons, no open buckets of gas.

☐ **1926.152(b)(1)**: no more than **25 gallons** of flammable liquids stored in a room outside an approved storage cabinet.

☐ **1926.152(b)(2) and (3)**: anything over 25 gallons goes in an approved cabinet, no more than **60 gallons** per cabinet, and no more than three cabinets in a storage area.

☐ **1926.152(f)(1)**: areas where flammable liquids are transferred from one container to another must be **separated from other operations by at least 25 feet** or a one-hour fire wall, with ventilation and spill control.

☐ **1926.352(c)**: no welding, cutting, or heating where flammable paints, compounds, or dusts are present.

☐ **1926.151(a)(3)**: smoking prohibited at or near operations that are a fire hazard, and the area conspicuously posted “No Smoking or Open Flame.”

☐ Vapor from most flammable liquids is **heavier than air**. It pools in pits, trenches, basements, and the bottom of a tank, and it travels along the floor to the spark.

⚠ **“IT’S JUST A LITTLE BIT” IS HOW SOLVENT FIRES START**

A pint of acetone spilled in a closed room makes enough vapor to flash. A rag with PVC primer tossed in a bucket next to a heater is a fuse. If the flame is on the label, every ignition source within 25 feet is your problem: torches, grinders, space heaters, pilot lights, extension cord ends, and the cigarette in somebody’s mouth.

05 WHY IT MATTERS

[JOBSITE]

FOR THE CREW

Flammable liquid storage and handling is one of the most visible things an inspector sees walking a site: the open gas can, the cabinet with the door propped, the solvent next to the torch. Crews that know the categories keep the Category 2 liquids in the cabinet and the rags in a covered can.

[INDIVIDUAL]

FOR YOU

A flash fire from solvent vapor happens faster than you can move. It burns hands, face, and airway. The label told you the flash point. The SDS told you the vapor was heavier than air. Reading them is what keeps you out of the burn unit.

[HOME]

FOR LIFE OFF-SITE

Gasoline in the garage, spray paint in the basement, oily rags from refinishing the deck. Same flame, same rules. Store them in a cabinet or outside, and never near the water heater.

06 TODAY'S DRILL

TODAY'S DRILL **FIND THE FLAME, FIND THE SPARK**

Walk the storage area and your work area. Find every container with a flame pictogram. For each one, read the hazard statement and name the category. Then look 25 feet in every direction for an ignition source: torch, heater, grinder, cord end, smoking area. Any flame-labeled product within 25 feet of a spark gets moved or the spark gets moved. Tell the foreman what you found.

07 CREW DISCUSSION

Take 2 minutes. Pick one.

1. Which flame-labeled product on this site is stored closest to an ignition source right now?
2. Has anybody seen or been in a solvent flash fire? What was the ignition source, and how far away was it?
3. Where do the rags and brushes with solvent go at the end of the day on this site? Is that a covered metal can or a cardboard box?

08 ATTENDANCE & SIGN-OFF

All attendees confirm they participated in this Toolbox Talk and understand the content covered.

NAME (PRINT)	SIGNATURE

SUPERVISOR SIGNATURE

_____ Date: _____

SKILLSIGNAL™

Construction Safety & Compliance

READY TO DIGITIZE YOUR TOOLBOX TALKS?

Digital sign-offs, instant distribution, and your full safety program in one place. No more paper.

Book a demo at **skillsignal.com**