

Safety Talk

Handling, Storing, and Transporting Gasoline

Before you begin

- List the tasks in your facility that require the use of gasoline.
- Calculate the amount of gasoline you need to transport.
- Identify which vehicles in your facility you use for transport.
- Read the safety data sheet (SDS) for gasoline, paying attention to hazards, personal protective equipment, first aid procedures, and accidental spill and release.



Introduction

We use gasoline so frequently, we sometimes forget it is a hazardous, regulated substance. If you need to use gasoline in your workplace for tasks like fueling your vehicles or equipment, but only use it in small quantities, specific regulations will apply.

Definitions

Materials of trade (MOT) — hazardous materials, excluding hazardous waste, carried on motor vehicles:

- For the purpose of protecting the health and safety of vehicle occupants,
- Supporting operation or maintenance of the vehicle, or
- Materials in direct support of a business other than transportation by motor vehicle.

Discussion

The Department of Transportation (DOT) regulates transportation of hazardous materials like gasoline. It describes how to classify and package hazardous materials, proper labeling, requirements for shipping papers, emergency response information, and training. It also includes a MOT exception as outlined in 49 CFR 173.6 for substances used in small quantities.

This rule allows gasoline to be in containers with a maximum capacity of either 8 gallons or 66 pounds. The combined weight of all containers carrying hazardous materials should not exceed 440 pounds.

MOTs are exempt from most DOT regulations; shipping papers are not required, drivers don't need a special license, and training requirements are reduced. However, your responsibilities as an employer still include identifying hazards and implementing controls to reduce the risk of exposure and release in the environment.

Transport gasoline in the manufacturer's original packaging or a container that meets DOT specifications. Containers must be leak tight and protected against movement or damage. Secure containers in your vehicle using cages, carts, bins, boxes, compartments, or other outer packaging. Label containers using the substance's common name, in this case, gasoline. Storage containers for gasoline must be metal or plastic and meet DOT or Occupational Safety and Health Administration requirements.

Take precautions to ensure vapors do not ignite. When refueling, shut off and do not re-enter the vehicle. While filling containers, place the container on the ground, never inside a vehicle, truck bed, or trailer. These actions prevent the build-up of static electricity, a potential ignition source.

Reduce exposure by providing ventilation or wearing personal protective equipment. Generally, you should wear chemical-resistant gloves, goggles, and face shields. Refer to the SDS for more information.

Have a plan to deal with any minor or major spills, including training on procedures. Ensure the driver is familiar with the SDS and understands spill prevention and reporting requirements.

Conclusion

Overall, your employees should understand MOT and hazard communication regulations. They should know what quantities constitute MOT, be able to choose a properly labeled container, and know how to keep it secure. They should also understand the hazards of the chemicals they handle, follow precautions to reduce exposure, and understand spill prevention and reporting requirements.

Group activity

Here are some ideas to help generate discussion with your employees.

1. Have employees list the hazards of working with gasoline, referencing the SDS. Discuss the potential for reactivity with other hazardous materials.
2. Calculate what amount of gasoline equates to 440 lbs. If possible, use a visual aid to show how this looks in containers used at your facility.
3. Identify the types of vehicles workers use in your facility and how to keep containers secure.
4. Discuss items to look for when inspecting containers; examples include cracks, worn labels, or signs of leakage.
5. Describe how to choose a properly labeled container.

Resources

- National Wildfire Coordinating Group – Standards for Transporting Fuel
<https://www.nwccg.gov/sites/default/files/publications/pms442.pdf>
- New York DOT Carrier Resources – Materials of Trade
<https://www.dot.ny.gov/divisions/operating/osss/truck/carrier/materials-of-trade>
- United States Department of Agriculture, Forest Service – Materials of Trade Training
<https://www.fs.fed.us/t-d/fueltran/training/tradetrng.pdf>