

GASOLINE PROPERTIES, HEALTH EFFECTS, AND FIRST AID FOR THE SERVICE STATION



The highly volatile and extremely flammable nature of gasoline means that potentially explosive air/vapor mixtures are likely to form easily at ambient temperatures. Gasoline ignites easily, burns vigorously and gasoline vapors may explode in certain conditions. Keep gasoline away from ignition sources like heat, sparks, static, and flame.

Before attempting to assist fueling a vehicle, it is important to isolate the area from all potential sources of ignition, recognizing that the vapor is heavier than air and may travel some distance to remote sources of ignition. Before removing gasoline-saturated clothing, it should immediately be drenched with water. Remove gasoline-soaked clothing immediately

Exposure to gasoline liquid or vapor can adversely affect health. Avoid prolonged breathing of the gasoline vapors. Keep your face away from the nozzle. Keep gasoline away from your eyes and skin.

Inhalation: In normal use, the main route of exposure to gasoline is likely to be by inhalation. Exposure to the vapor during normal refueling is not a significant health concern. However, significant spills can result in short-term exposure to high concentrations of vapor (greater than 500 ppm) may cause irritation of the eyes, nose and respiratory tract, and possibly signs of central nervous system depression (headache, dizziness, mental confusion, for example). If symptoms arise from exposure to gasoline, take the person to fresh air, using the above precautions.

Skin contact: During refueling, minor accidental skin contact may occur, and is not a significant health concern. Prolonged skin exposure is only likely to occur in accident situations (drenching of clothing during pump malfunction, for example). Gasoline is unlikely to cause systemic toxicity following accidental skin exposure. Skin contact may cause local irritation, and, if contact is frequent or prolonged, skin reactions may be severe. Gasoline also can result in drying, cracking skin or dermatitis. Where significant skin contact has occurred, drench clothing with water before removing (this is necessary to avoid risk of sparks from static electricity) and wash all affected skin areas thoroughly with soap and water.

Eye contact: Accidental splashes entering the eye may cause irritation and discomfort. Such effects are usually temporary, and permanent damage is considered unlikely. If the eyes are affected, irrigate them immediately with copious amounts of water. If irritation occurs and persists, obtain medical advice.

Ingestion: Gasoline is unlikely to cause systemic toxicity following accidental ingestion. The main potential health hazard, however, is the possibility of severe, **potentially fatal**, damage to lung tissue, which can occur following aspiration of even small amounts of gasoline into the lungs. Never siphon gasoline by mouth nor put gasoline in your mouth for any reason. If gasoline is ingested do not induce vomiting but obtain medical advice immediately.

GUIDELINES FOR FUELING VEHICLES

1. Turn off your engine. Disable or turn off any auxiliary sources of ignition such as a camper or trailer heater, cooking units, or pilot lights.
2. Put your vehicle in park and/or set the emergency brake.
3. Do not smoke, light matches, or use lighters while refueling
4. Use only the refueling latch provided on the dispenser. Never jam the refueling latch on the nozzle with any object (i.e. gas cap, etc.)
5. Never leave the nozzle unattended.
6. Do not overfill or top-off your vehicle tank – it can cause spillage.
7. Do not allow children to fuel and /or assist fueling vehicle.
8. Never use a cell phone or other personal electronic device while refueling (for example, laptops, PDAs, and electronic games). These items should be left in your vehicle.

STATIC ELECTRICITY AT THE GAS PUMPS

Static electricity-related incidents at retail gasoline outlets can be avoided. In the unlikely event a fire occurs when refueling, leave the nozzle in the fill pipe and back away from the vehicle. Notify the supervisor immediately so that all dispensing devices and pumps can be shut off with emergency controls. Use the emergency shutdown button to shut off the pump.



SAFETY TIPS TO AVOID STATIC ELECTRICITY BUILDUP

- Before handling the nozzle or fuel door, always touch a metal part of the vehicle such as the door or hood.
- To avoid a build-up of static electricity, do not get back into your vehicle during refueling.
- If you cannot avoid getting back into the vehicle, upon exiting **always touch a metal part of the vehicle** away from the fill point before handling the nozzle.

GUIDELINES FOR USE OF PORTABLE CONTAINERS

- Use only an approved portable container (1 to 5 gallons, metal or UL approved plastic, colored red, with vapor-tight cap). The container must be in good condition with vapor-tight cap. Never store gasoline in glass or unapproved containers.
- When filling container, follow same rules as when fueling car: turn off engine; extinguish smoking materials, leave electronic devices in the vehicle.
- Place portable fuel container on the ground during filling, and keep the metal nozzle spout in contact with the container to prevent build up and discharge of static electricity.
- Never fill a container in the bed of a pickup, in the back of a station wagon, or in the trunk of a car.
- Keep container five feet away from cars to prevent ignition of fumes by hot engines or mufflers. Ask others, particularly children, to stand back during filling.

- Manually control the nozzle valve throughout the filling process. Fill a portable container slowly to decrease the chance of static electricity buildup and minimize spilling or splattering.
- Back off on the trigger to slow fuel flow as the container becomes full. Fill container **no more than 95 percent** full to allow for expansion. When filling is complete, tightly cap container. Wipe off any gasoline that spilled on the outside of the container. Ask the station attendant to properly dispose of the material used to wipe off the gasoline.

GUIDELINES FOR TRANSPORTING GASOLINE IN PORTABLE CONTAINERS

- Make sure the cap is on tightly before you put the container in the vehicle. Spills pose a fire hazard and gasoline odors are hard to remove from carpeting.
- Put container in trunk of car or in bed of pickup. Do not put container in the passenger area of vehicles.
- Restrain the container so it cannot tip over or slide around while driving.
- Never leave a vehicle with a portable gasoline container in direct sunlight.



GUIDELINES FOR DISPOSAL

- Do not discard gasoline on the ground.
- Do not put a container containing gasoline along with household refuse in garbage can or trash container.
- Do not discard gasoline into a sewer, street drain, stream or river. Such actions are illegal.
- For old or dirty gasoline, find a recycling organization that will accept it. Locate such an organization by contacting your community's fire department, recycling center, or hazardous waste disposal center.

