



JP-8 is a jet fuel used in U.S. military aircraft, vehicles, and other equipment.

People who work with JP-8 are at risk for health effects from breathing and skin contact with the fuel.

Personal protective measures and good personal hygiene are highly effective at preventing health effects from working with JP-8.

# FACT SHEET

## JP - 8

### WHAT IS JP-8?

Jet Propulsion No. 8 (JP-8) is a jet fuel made by refining crude petroleum. The primary ingredient in JP-8 is kerosene, which is about 99.8% by weight. In addition to kerosene, JP-8 contains very small amounts of many other substances, such as benzene, and various additives to inhibit icing, prevent static charge buildup, avoid oxidation, and decrease corrosion.

JP-8 powers military aircraft and other high performance vehicles and equipment, including tanks, power generators and space heaters. JP-8 is very similar to Jet A/A-1 fuel, which is used in commercial aircraft around the world.

### HOW MIGHT I BE EXPOSED TO JP-8?

People who work with JP-8 are at risk of being exposed to JP-8. In case of spills, those who live where JP-8 is used could be exposed.

Breathing in JP-8 vapors, having skin contact with JP-8 liquid, or swallowing food contaminated with JP-8 are the main ways that people have exposure to JP-8.

### HOW CAN JP-8 AFFECT MY HEALTH?

Little is known about the effects of JP-8 on people's health. Various university and government scientists are currently doing research on JP-8. Health effects are thought to resemble those of kerosene, the main component of JP-8.

Breathing large amounts of JP-8 for a short period may make breathing painful and may cause you to feel like you are suffocating. These large amounts breathed may result in headaches, difficulty in concentrating, tiredness, and trouble with balance or coordination. Breathing lower levels of JP-8 for a longer period could result in sleep disturbances and dizziness.

Skin exposure to kerosene causes irritation of the skin, including itchy, red, peeling, or tender skin.

Accidentally swallowing a small amount of JP-8, such as could occur by not washing JP-8 off your hands before eating

lunch, has not been shown to cause any significant health problems.

Drinking JP-8 is dangerous and can result in coma, seizures, and even death.

It is not known whether JP-8 affects fertility, the fetus, or breast feeding.

The International Agency for Research on Cancer (IARC) has concluded that there is not enough information available to determine if jet fuels cause cancer.

### WHAT CAN I DO TO PROTECT MY HEALTH WHILE WORKING WITH JP-8?

It is important to follow all existing shop regulations, guidance, and technical orders. Especially important is proper wear of personal protective equipment, which includes:

- Airline respirator with bottle back-up
- Disposable nitrile gloves, minimum 4-mil, 6 mil, when working inside fuel tanks or with sharp objects
- Plastic hood that allows proper wear of full-face piece respirator
- Clean cotton coveralls that are laundered before reuse

Other personal hygiene measures that you can take to protect yourself include:

- If you get fuel on your uniform or coveralls, change into clean items as soon as you can
- Be sure to launder any of your clothes that came into contact with fuel before reusing them
- Always wash your hands and face with soap and water before eating

### References and more Information:

1. Agency for Toxic Substances and Disease Registry, *ToxFAQs for Jet Fuels JP-5 & JP-8*, updated 11 June 2001, <http://www.atsdr.cdc.gov/tfacts121.html>
2. Air Force Institute for Environment, safety, and occupational health Risk Analysis, *JP-8 FAQs*, updated 9 September 2002. [http://starview.brooks.af.mil/afiera/Special%20Projects-Studies/rsrh\\_jp8\\_faqs.htm#1](http://starview.brooks.af.mil/afiera/Special%20Projects-Studies/rsrh_jp8_faqs.htm#1)