



Briefing: Petrol and health – an update

- **Petrol has always been a hazardous material and needs to be handled carefully to ensure risks are controlled to a safe level.**
- **Petrol contains a number of chemical constituents, including toluene, which are produced as part of the normal refinery processes to make fuels.**
- **Hazard classifications have been updated recently, according to EU rules. As petrol normally contains more than 5% toluene, the description of petrol hazards now includes the phrase “possible risk of harm to the unborn child”.**
- **There is no evidence to suggest that short exposure to toluene in petrol vapour during refuelling poses a risk of harm to you or your unborn child and no additional precautions are required as a result of this update.**

What's new?

Information about the hazards of exposure to toluene (which has always been a constituent of petrol) has been added recently.

This was in response to a review of the available information on the hazards of toluene by experts in the EU, coupled with the mandatory administrative application of classification rules.

However there is no evidence to suggest that exposure to the low level of toluene in petrol vapour (less than 1%) may cause harm to the unborn child. In fact, in a 2-generation reproductive study in rats exposed to condensed petrol vapour, no adverse effects were observed.

What are the hazards of petrol?

- ❑ Extremely flammable – burns fiercely once ignited. Vapours are potentially explosive.
- ❑ Vapours are heavier than air and may travel long distances and collect in confined spaces.
- ❑ Will cause lung damage if liquid enters the lungs.
- ❑ Irritating to the skin.
- ❑ Inhaling high concentrations of vapour may cause drowsiness and dizziness.
- ❑ Contains benzene. Exposure to high concentrations of benzene may cause cancer.
- ❑ Contains toluene. Exposure to high concentrations of toluene may pose a risk of harm to the unborn child.
- ❑ Spills can cause harm to the environment.

Do I need to take any additional precautions when refuelling my car?

No, the small amount of exposure to petrol vapour experienced during refuelling is too low to be of any concern.

What if I am of child-bearing age or pregnant?

There is no evidence to suggest that the short exposure to toluene in petrol vapour during refuelling should be of any concern to you or pose a risk to your unborn child. The levels of toluene in petrol vapour (less than 1%) are much lower than in liquid petrol (typically 11%).

General Handling/Safety Precautions:

- ❑ Avoid skin or eye contact with liquid and inhalation of petrol vapour.
- ❑ DO NOT SMOKE. Keep petrol away from sources of heat or ignition.
- ❑ Do not use a mobile phone whilst refuelling.
- ❑ Only store and transport fuels in metal or plastic containers specifically designed for this use.
- ❑ Never siphon or suck up petrol by mouth.
- ❑ Dispense petrol in a well-ventilated area.
- ❑ Do not use petrol for lighting bonfires or barbecues.
- ❑ Do not mix petrol with other flammable hydrocarbons or solvents.
- ❑ Never use petrol as a cleaning solvent.
- ❑ Clean up spillages promptly.

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