



## Storage of petrol and diesel within the workplace

Many businesses store quantities of petrol fuel within the workplace. They could be for plant and equipment used onsite such as lift trucks, or for maintenance needs, strimmers, lawnmowers and the like. However, you are storing a highly flammable substance and certain precautions are required but what are they?

Since the introduction of DSEAR (Dangerous Substances and Explosive Atmospheres Regulations), there are no longer any specific controls over the storage of petrol at workplace sites other than at petrol filling stations. However, you will need to follow the requirements of DSEAR as petrol is classified as a 'dangerous substance.'



### Key requirements

If the petrol is being stored in a place which is also a workroom then no more than 50 litres of highly flammable liquids should be stored - this is a general requirement which applies as much to thinners or any other highly flammable liquids as it does to petrol.

If the storage area is not a workroom, then DSEAR also requires, as far as is reasonably practicable, risks from 'dangerous substances' are controlled and to mitigate against the effects of any fire or explosion arising from these dangerous substances. This means conducting a risk assessment and recording its findings then acting on them. Identifying how you can reduce risks to a minimum - look at the storage area to ensure that:

- It does not have any sources of ignition and none should be brought into the area (compressors, electrical switching)
- It should be properly ventilated (large vents in doors and on one outside wall would be good practice)
- It should be secure (padlocked and not able to be accessed except by authorised persons - consider arson risks also)
- Refilling of equipment should preferably take place in the open air and away from sources of ignition (you could refill on hard standing outside and clear of the building - something your insurers will appreciate as well as the environment)
- Care is taken to avoid spills and the consequences of a leak or spill is assessed (could a spillage leak to surface water drains - the consequences could be serious for the environment and your business)
- Containers should be kept closed when not in use.

### Storing diesel

There are no specific legal requirements on how to store diesel or the quantity allowed either in workplaces or domestic premises. It is not, from a health and safety point of view, a particularly hazardous substance within the meaning of the Dangerous Substances and Explosive Atmospheres Regulations 2002 - its vapour flash point is too high. This means that its vapour will not ignite at normal room temperatures.



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That said, there are some general issues you'll need to take into account:

- no 'hotwork' should be performed on the vessel unless it is emptied and purged of any remaining vapour.
- the drum should be positioned away from any source of direct heat.
- the drum should be located in an area where there is no risk of collision with vehicles, fork-lift trucks etc. (diesel splashing onto a hot engine will probably ignite).
- leaks and spills should be contained to the vicinity of the drum and mopped up quickly, to lessen the risk of slipping.
- refilling and dispensing activities need to take account of manual handling issues etc.

While diesel is not a particularly dangerous substance from a health and safety point of view, it is an environmental hazard, with considerable clean-up costs if it should leak into a drain, watercourse or the soil. You may, therefore, wish to contact the Environment Agency for further information .

## **More good advice on storage**

Cans and drums can provide an adequate means of storing petrol. When considering this method of storage remember to take into account the method by which the petrol will be used or disposed of and whether the use of small containers increases the overall risks and handling problems during their filling and emptying (think about manual handling). Where you need to store larger quantities than 300litres you should consider installing tanks and referring to the more detailed advice in HS(G)51. You should not store more than 50 litres of petrol within a workroom and then only when it is kept in a properly labelled metal cabinet or bin with adequate spillage retention.

Containers should, where reasonably practicable, be stored in the open air at ground level (singularly or in stacks). This enables leaks to be quickly seen and any vapours to be easily dispersed. They should not be stored on the roof of a building. Where the best option of storing containers outside is not reasonably practicable they should be kept in suitable storerooms, preferably separate buildings, specifically designed for the purpose.

Finally, remember that other activities, including filling and emptying containers, must not be carried out in the designated storage area. This is to prevent other activities that are a higher risk causing a fire, which then spreads to involve the larger quantities in storage.

## **Notes on application**

Information should be incorporated into your Risk Assessments, Health and Safety Policy or Construction Phase Health and Safety Plan (Construction based projects under CDM Coordinators). If you have questions please post below, more information can also be found from manufacturers safety data sheet (MSDS). Don't confuse this with COSHH Risk Assessment