



SPILL KIT GUIDE











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INTRO

Spills in the workplace are hazardous for many reasons. Not only is their the obvious danger from inhalation of chemicals and other corrosives, especially when chemicals come into contact with each other. There is also the often overlooked danger from slips and falls from spilled liquid.

Many fluids used in the workplace are oil based and are therefore very slippery and this can make them quite difficult to clean up quickly and fully, without posing a further problem to employees. When a spill isn't dealt with immediately the possibility of an accident occurring is exceptionally high and the use of additional fluids, such as detergents, can exacerbate the risk.

There are many other risks associated with spills. In addition to the possibility of an injury to an employee, there is the risk of a fire or an explosion. Some chemicals are highly flammable and you should have a containment procedure that includes removing this very real danger from the equation.

Many chemicals can be an environmental hazard should they end up in the watercourse. Their containment and cleanup should ensure that none of the fluids end up in drains, rivers or waterways.

You can accomplish all of these protections when you have an active spillage safety plan.





Failure to have a proactive stance towards spills can be an exceptionally costly exercise - insurance claims, employee litigation, fire damage and rebuilding -

it could cost you your entire business

A 10 Litre Spill Kit for £15 could have saved it!

AWARENESS & TRAINING

Your primary defence against spills and leaks in the workplace is a training and awareness program. The basic aim of these is to, firstly, educate all employees about the chemicals and fluids that are used in your business.

Any liquids used in you business should have an MSDS sheet, Material Safety Data Sheet on file. This will enable employees to access details about the product that will give the details to help fight any spills that might occur.

Should you be in a business that might have a spill that is of an unknown nature, such as haulage and courier, then these spills should be treated as if they were the most dangerous that you might come across.

An important aspect of spill safety training is spill prevention. Ensuring that the right techniques and methods are used for storage and transportation of dangerous liquids many spills and leaks can be avoided. Materials should be stored in the correct containers that

appropriate for the their chemical composition. The areas that these chemicals are stored should have the correct signage so that there is no question about what is in that location and information about how to deal with a spill.

Liquids that have to be stored on site that are regarded as extremely dangerous should be kept out of the way of general traffic, both pedestrian and mechanical, such as fork lifts, and in addition the location of storage should be away from drains, gullies and external doors if possible.



CHOOSING THE RIGHT SPILL KIT

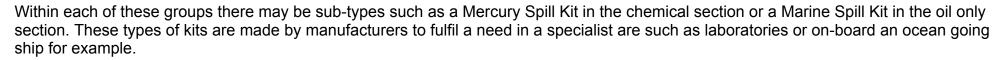
The usual starting point is by first making a list of the liquids used or stored at your location. If you are not sure this is not a major problem, maybe you are in the storage or courier business for example, and different containers of fluid come in and out every day, there is a kit for this type of situation.

Assuming that you know what types of liquids are used at your location. If you had a spill, where would it be? Could it be on land or could it be on water - or could it be both? It could be quite a costly mistake not to have the proper spill kits on hand. There are the three basic types of spill kits in the absorbents industry.

The General Purpose or MRO Spill Kit— These are for land spills only. They will absorb all water based liquids and oils but are not recommended for corrosive liquids.

The Oil Only or Oil and Fuel Spill Kit - These can be used for land or water spills. They should only be used with oil, fuel or any hydrocarbon based fluid as they will repel water. The great thing about these absorbents is that they will float on water and still absorb the oil or fuel. They are not recommended for use with corrosive liquids.

The Chemical or Hazmat Spill Kit – Sometimes called a Universal Spill Kit, these are for land use only. They will absorb almost any water based liquids and oils, acids and bases and can be used with corrosive liquids.



If you are not sure what type of fluid or chemical you might need to absorb but you are using it on 'land', then the safest option would be to opt for the Chemical Spill Kit. This is based on the fact that Chemical Absorbents will soak up pretty much anything so you won't need to worry about what it was that was spilt.



SIZE OF SPILL KIT

So now that you have decided on which type of kit you need you should then look at the size. To find this out you need to ask -

What is the largest amount of liquid that could be spilled at this location?

What is your worst case scenario?

Determining the size of kit is a tricky business and we can only give some general guidance here, because there could be many other factors that should be taken into account, things like are there any drains in the area of the potential spill. If the total volume of liquid that could be spilled is several thousand litres or more, you might need to look at other 'built' methods of retaining the liquids.

But let's say you keep, or handle, a smaller quantity of drums of liquid ranging from 25 to 200 litres, they are stored in a dry area that is used for dispensing and they are a mixture of oil based and light acids. Assuming that you have nothing at all in the way of absorbents you might want to look at drip trays with chemical pads to catch the drips from taps and a 250 Litre mobile Chemical Kit that can be kept near the drums but could be also moved to another location in an emergency.



The Chemical Spill Kit would be a good choice because it would cover all the types of fluids you store and you're working in a rain-proof environment. You might also want to consider having several smaller 20 Litre kits that could be mounted to walls in areas where the fluids are used.

The main thing is that if a spill happens you need to have at your disposal the means to control it. It is not always practical to have enough absorbent materials to hand to absorb the entire contents of a large spill but you should have available the means to stem the spread and flow.

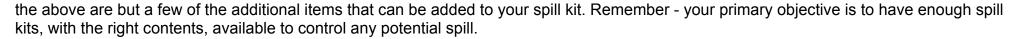
If there is the possibility of a very large spill then you should work with your local fire brigade and the local health and safety executive, it might also be beneficial to have the services of your nearest spill clean-up company.



SPILL KIT CONTENTS

The basic contents of any spill kits are absorbent pads, absorbent socks and absorbent pillows, all of which can be used to control and clean up a spill, but there are also other products that you might need to consider;

- containment dikes
- drain covers
- spill berms
- plugging compounds
- respirators
- · personal protection suits
- special gloves
- safety glasses



You should always consult the MSDS sheet for each chemical to ensure that the correct protective clothing and ancillary equipment is used. If you are unsure as to the type of fluid spilt always ere on the side of extreme caution - remember that chemicals can kill!

In addition to the actual materials used to absorb and clean up a spill it should also contain some disposal bags and instructions. Remember that virtually anything that you have cleaned up can never be placed in a common trash can or dustbin - it cannot be disposed of along with your regular waste, it must be treated as hazardous waste and dealt with in accordance to your federal/national/local laws and regulations. You could get fined for disposing of it incorrectly. If you are at all unsure of how to dispose of it hire a reputable waste collection company to do it for you. Your Environmental Control section of your local council should be able to assist.



SPILL KIT TRAINING

Any business that handles fluids of any description should have training in place for all employees.

There should be a rapid response to a spill whilst following strict safety guidelines. If an employee is familiar with the procedures needed to deal with a spill they are far less likely to panic in an emergency, this prevents further accidents and helps mitigate against further damage.

The training used by a company is dependant on the size and scope of your operation and the potential dangers of the chemicals that you use.

Every employee that works near chemicals should basic training in how to deal with a spill. The most basic requirement might be just who to call in the event of a spill.



Employees must understand the potential dangers of the materials they work with, or the company handles, and how they impact on themselves and the environmental hazards of a spill. It is just as important that the training of employees should be part of their induction to your company as well as periodical updates and refresher courses. Updating and refresher courses are an excellent method of reminding staff of the risks associated with the materials they are handling, it also reduces the risk of an employee becoming overly comfortable and possibly cutting corners when it comes to spill kit maintenance and safety procedures.

There are different forms of training. If you are unable to supply training in-house you should seek to employ the services of a qualified professional. Alternatively there are companies that sell high quality videos for you to use in house.

If you have your own Health and Safety Department they might consider doing a lecture or group discussions in the training classes. Changing your teaching and updating procedures from time to time can help keep people engaged in the subject. It may not seem important but changing your teaching style from time to tome helps to keep staff engaged with the subject matter and it can go a long way to improving workplace health and safety. Quite often trainers and supervisors can become complacent when delivering the same safety courses time and time again. This can lead to points missed which could contribute to accidents and failing to handle them correctly.

There may be times when your training program should meet standards set down by external bodies such as the Department for Health and Safety, or another regulating body which you may be a member of, and you might face penalties if you fail to meet these standards.

Do some research into the chemicals that you use in your business and consult with your local H&S or OHSA as to exactly what needs to be included in your programs.

SPILL PROCEDURES

When the correct procedures are followed the risk of damage from a chemical spill can be greatly reduced. Prompt and correct action by the person who happened to cause, or see, the spill must notify others in the area immediately and then their supervisor or primary response team.

Your spill safety guidelines should include the names of actual people and departments as well as their contact information.

The posting and displaying of basic spill procedures around the workplace will help ingrain the steps that need to be taken in the event of a spillage. Putting signs up only where a spill might occur is not enough, put them in break or rest rooms, toilets, office areas, in fact anywhere that an employee might see them. As with the repeated delivery of the same material when training employees, staff can become blind to the same poster time after time, rotate their placement, renew them and change them.



SAMPLE SPILL PROCEDURES

Alert any employees in the area that there has been a chemical spill

Alert your supervisor or primary spill response leader that there has been a spill

Determine if there is a need for immediate assistance from fire or medical personal and if necessary call 999 or 911

Determine if the chemicals that have been spilled are flammable or toxic, alert everyone in the vicinity and ventilate the area

Retrieve the correct spill kit

Put on the necessary personal protective equipment. Should you have any question about the level of protection that is needed for the spill you are dealing with always choose more protection than less. You should always assume that the level of contamination is high and protect yourself accordingly.

If respiratory protection is required put it on and ensure that it is on correctly, get a trained colleague to double check if needed. Once again, if there is any doubt as to whether respiratory equipment is required ere on the side of caution and use it. You should now aim to stop as much of the spill as possible so it contaminates that smallest possible area.

Use booms or socks to contain the spread and pads to absorb the volume.

Locate the source of the spill and stop it from continuing to flow. Quite often it may just be a matter of uprighting a container or placing a cap over an opening.

Check to see if there are any floor drains or gullies and protect them from any of the chemicals flowing towards them.

Clean up the spill according to the size and type of material that has been spilled.

The spill absorbents that you have used to contain the spill must be disposed of correctly. Once the absorbent material is completely saturated remove it and dispose of it in the proper container.

Place all of the material that has been used to absorb the spill in an appropriate container and ensure that is labelled as hazardous waste and identify the chemicals if possible.

Clean the spill area with the recommended clean-up method according the chemicals MSDS sheet i.e. mild soap and water.

Ensure that any necessary reports regarding the spill are completed so that it, and your response, can be properly documented.

CONCLUSION

Spill safety and dealing with accidental spills is more or less about your workforce receiving the proper training and ensuring that you have the correct tools for them to do their job properly.

Correct procedures and well stocked spill kits at their disposal should eliminate the need for panic and further damage.

Panic and confusion will result in employees missing important steps in the spill mitigation procedure, like stopping the initial spill or putting on the correct protective equipment and clothing. The focus on personal safety can fly out of the window and this can ultimately result in fatalities and further putting co-workers at risk.

Staff dealing with a spill should protect themselves from the dangers of the chemicals and then work on containment.



A SPILL KIT IS ONLY AS GOOD AS THE PEOPLE THAT ARE USING IT

Users must remain calm and follow the procedures learnt in training in order to avoid injury and reduce the risk of further damage to the environment and your facility.

The vast majority of spills in the workplace are minor in nature and contained and cleaned up without fuss in a very short period of time, logged in the incident book and finished with. No danger, no risks taken and without further damage - be calm, be safe and use your training and your worries will be diminished.

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LINKS



Marine Oil Only Spill Kits

An oil-only spill kit will mean you're always prepared if the unthinkable happens. It's got everything you'll require to be able to deal with an oil spill with the minimum of fuss.





Chemical Spill Kits

Don't be tempted to do without a spill kit when handling hazardous chemicals. Without the correct protection, you're risking injury or possibly even death.

General Purpose MRO Spill Kits

The majority of spillage problems which you encounter on a day-to-day basis can be successfully addressed by using general purpose absorbents.



Pollution Prevention Guidelines

A range of pollution prevention guidance notes (PPGs) to advise industry and the public on legal responsibilities and good environmental practice

Health and Safety at Work

HSE is the national independent watchdog for work-related health, safety and illness.

NETREGS

NetRegs provides free environmental guidance for small and medium-sized businesses throughout the UK.

If you would like to contribute to this document or suggest an amendment please click here.

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