

# An introduction to CHIP 4



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## Do you supply chemicals?

By chemicals we mean single substances (such as acetone) or mixtures (preparations) such as a paint brush cleaner. The chemical could vary from a commodity chemical sold in bulk to a household-cleaning product sold in small packages.

If so, this guide is aimed at you. It introduces your legal obligations to provide safety, health and environmental information for your customers.

## What have you heard?

You may have heard of CHIP or more recently, CHIP 4. You may wonder if CHIP applies to you. You may also have heard CHIP is very long, complicated and technical. Someone may have told you that you need a degree in chemistry to understand it.

You may also have heard about a new European Regulation that will replace CHIP.

You may be feeling rather confused, if not anxious...

## So what is the truth?

If this sounds familiar, then this guide should put you on the right track.

CHIP is our short name for the Chemicals (Hazard Information and Packaging for Supply) Regulations. CHIP has been around for a number of years and has been changed quite a few times to keep up to date with developing science and technology.

CHIP implements the European Dangerous Substances Directive (No. 67/548/EEC) and Dangerous Preparations Directive (No. 1999/45/EC).

The most recent version of CHIP is known as CHIP 4. CHIP 4 is the name for the Chemicals (Hazard Information and Packaging for Supply) Regulations 2009. CHIP 4 became law on 6 April 2009.

This Introduction will help you decide what you need to do about CHIP and whether you should get help. It introduces you to the CHIP Regulations and identifies the various supporting documents or other sources of information which will help you to follow the law.

There have also been quite a few changes to European law on chemicals recently which you will need to know about. So, this guide also provides a short introduction to the new European Regulation on the Classification, Labelling and Packaging of Substances and Mixtures – known as the CLP Regulation – and the REACH Regulation. Both these European Regulations are direct-acting on the UK. This means there will not be any national laws to implement them and you must comply with them directly.

## What's CHIP for?

CHIP helps protect people and the environment from the ill effects of chemicals by requiring suppliers to:

- identify the hazards (dangers) of the chemicals they supply;
- give information about the chemicals' hazards to their customers; and
- package the chemicals safely.

CHIP applies to the **supply** of chemicals. There are different laws for controlling them in the workplace and on the transport of dangerous chemicals. By supply we mean sell, offer for sale, provide commercial samples, import, or transfer chemicals from workplace to workplace.

## Are all chemicals covered by CHIP?

No. Some special chemicals, for example medicines and cosmetics, are not covered because other more specific laws apply. These, and the other exceptions are described in the CHIP Regulations.

**BUT the vast majority of chemicals are covered by CHIP.**

## What are the basic requirements of CHIP?

The basic requirement of CHIP is for you to decide whether the chemical you supply is dangerous. CHIP, with its Approved Classification and Labelling Guide (ACLG), sets out the rules for this. They tell you how to:

- decide what kind of hazard the chemical has; and
- explain the hazard by assigning a simple sentence that describes it (known as a 'risk phrase' or 'R-phrase' for short).

This process is known as classification.

**In CHIP, you have to classify before you do anything else. If you classify the chemical wrongly then everything else you do under CHIP may be wrong.**

## Harmonised classifications

If you are selling a substance, some of the work may have been done for you. Many commonly used substances have already been classified and agreed at European level. You must use these classifications.

These agreed, or 'harmonised' classifications used to be published in the Approved Supply List (ASL). But, because the law has changed, the ASL is no longer printed.

A list of all harmonised classifications can now be found in Table 3.1 and Table 3.2 in Part 3 of Annex VI of the CLP Regulation.

Table 3.2 lists the harmonised classifications agreed under the existing system used in CHIP. Table 3.1 lists the same harmonised classifications, but the entries are classified and labelled according to the CLP Regulation.

To help you, the list is published on the web, either in the CLP Regulation itself, or on the website for the European Commission's Institute for Health and Consumer Protection, (formerly the European Chemicals Bureau).

### **Self-classification**

If your substance is not in Table 3.2, or if you are supplying a preparation (a mixture of substances), then you must classify it yourself.

- For substances, the ACLG explains how to classify for: physico-chemical properties (eg how easily the chemical will catch fire); health effects (eg the chemical burns the skin or causes asthma); and, dangers for the environment (eg the chemical kills fish). The explanations in the ACLG are called criteria. There is no need to do expensive tests. You can use information that is already available to you.
- For preparations, you can use a calculation method, or for certain hazards you can use the criteria in the ACLG.

An easy to follow summary can be found on page 8.

As a general rule, if the chemical is not dangerous there may be nothing more you need to do. The exceptions to this (listed in CHIP) include several special cases where some preparations that are not dangerous still need additional warning information, and/or a safety data sheet.

### **Providing hazard information**

After deciding what the classification is, you have to:

- tell your customers about the hazards; and
- tell them, as far as you can, how they can use your chemicals safely.

You have to do this by:

- a label; and
- a safety data sheet (a must if your customer uses the chemical at work, but other equally good measures may be used for consumers).

### **Labelling**

If you supply a dangerous chemical in a package, the package must be labelled.

If the chemical is not supplied in a package (eg if the chemical is supplied from a tanker or down a pipeline), then you don't have to provide a label - it wouldn't be practical!

The aim of the label is to:

- tell anyone handling the package or using the chemicals about its hazards; and
- give brief advice on what precautions are needed.

**For workers, the label is a supplement to information provided by the employer.**

CHIP specifies what has to go on the label (eg the chemical's name), and also tells you how packages should be labelled (eg the size of the label).

### ***Safety data sheets***

Safety data sheets are important in helping you, or anyone you supply, make the workplace safe and to protect the environment. More specifically, a safety data sheet contains information to help you make a risk assessment as required by the Control of Substances Hazardous to Health Regulations (COSHH).

The safety data sheet itself is not an assessment. However, it will describe the hazards, helping you to assess the probability of those hazards (ie the risk) arising in the workplace.

Safety data sheets used to be required by CHIP. This requirement now appears in the REACH Regulation.

Safety data sheets are a MUST if your chemical is dangerous and supplied for use at work, whether in packages or not. Safety data sheets are also needed if your chemical is not classified as dangerous but contains small amounts of a dangerous substance(s).

More information on safety data sheets can be found on the HSE website, and in Article 31 and Annex II of the REACH Regulation.

## **What else does CHIP expect me to do?**

### ***Packaging***

CHIP says that the packaging used for a chemical must be suitable. We think this is explained clearly in the Regulations. Let us know if you do not understand it. Our address can be found at the end of the guide.

### ***Child-resistant closures and tactile danger warnings***

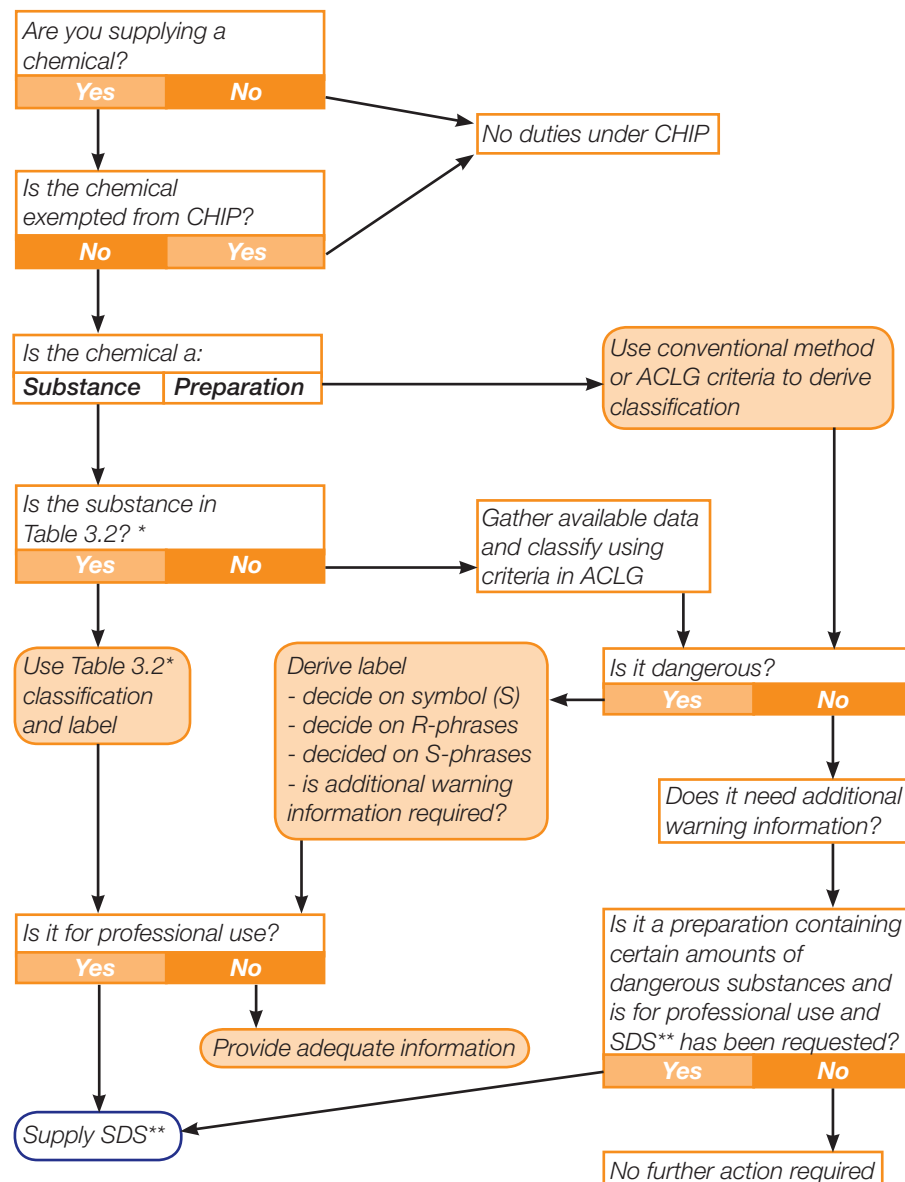
CHIP sets out special requirements for the packaging of certain chemicals that are sold to the public.

Some have to be fitted with a child-resistant closure (meeting a certain standard) to prevent young children swallowing the contents.

Some must have a tactile danger warning (normally a small, raised triangle) to alert the blind and partially sighted that they are handling a dangerous product.

If you're unclear about what needs to be done, you should contact your local Trading Standards Office for advice. You may also wish to contact the Department of Business, Innovation and Skills (Tel: 0845 015 0010) which can help further.

## Summary of what you need to do



\* Table 3.2 in Part 3 of Annex VI of the CLP Regulation

\*\* SDS - required under Article 31 and Annex II of the REACH Regulation

## I've heard the law is changing, is it true?

Yes. Changes have been made to the European laws on classifying, labelling and packaging chemicals, to reflect a new internationally agreed approach.

CHIP has been changed to make sure we're up to date. But, there is time to learn about these changes and decide what they will mean for you.

### What is the 'GHS'?

If you manufacture or supply chemicals, you may have heard people talking about recent changes to CHIP or using terms such as 'GHS', 'CLP' or the 'CLP Regulation'. If you have, don't be alarmed! These are all terms referring to changes to the law on how chemicals are classified and labelled.

Across the world, countries have different rules on classification and labelling. For example, a chemical could be classified as 'toxic' or 'explosive' in one country but not in another. Different symbols are also used to indicate the same hazards.

Countries in the United Nations, including those in the European Union, have been working together with industry representatives and others to agree a classification and labelling system that can be used worldwide. The outcome is the Globally Harmonised System of Classification and Labelling of Chemicals, known as the 'GHS'. The GHS provides a single system to identify hazards and to communicate them in transporting and supplying chemicals across the world.

The GHS is not a law, it's an international agreement. To make the GHS legally apply, each country or bloc of countries must adopt the GHS through legislation. European Union (EU) Member States agreed to adopt the GHS across the EU through a direct-acting Regulation, the European Regulation (EC) No 1272/2008 on **C**lassification, **L**abelling and **P**ackaging of substances and mixtures. This is also known as the 'CLP Regulation' or just 'CLP'.

### **What will the CLP Regulation do?**

The CLP Regulation:

- is a direct-acting regulation in all EU member states, including the UK, and does not require transposing into national legislation;
- adopts the majority of the GHS 'hazard classes' (nature of the hazard) and 'hazard categories' (severity of the hazard);
- keeps a few aspects of the existing EU system, where these do not contradict the GHS, to maintain existing EU standards (eg harmful to the ozone layer);
- replaces the requirements of the Dangerous Substances Directive (67/548/EEC) and the Dangerous Preparations Directive (1999/45/EC) relating to the classification, packaging and labelling of substances and preparations, over a transitional period lasting until 2015;
- introduces newly designed hazard symbols, known as pictograms;
- introduces new labelling phrases, known as 'hazard statements' and 'precautionary statements';
- introduces new provisions for a classification and labelling inventory;
- maintains the list of harmonised classifications.

### **When are these changes going to happen?**

The CLP Regulation became law throughout the EU on 20 January 2009 but it doesn't apply all at once. To give you and your customers time to adapt to the new system, you will be able to continue applying the 'old' CHIP system for a period of time.

The CLP Regulation will require:

- substances to be classified, labelled and packaged according to the CLP Regulation from 1 December 2010 onwards; and
- mixtures, (currently called 'preparations') to be classified, labelled and packaged according to the CLP Regulation from 1 June 2015 onwards.

The transitional arrangements are summarised in the table below. The changes should also be reflected in safety data sheets, where these are provided.

For substances

20 January 2009 – 1 December 2010	<ul style="list-style-type: none"> <li>■ Suppliers must classify substances according to CHIP, and may continue to label and package them according to regulations 6 to 11 of CHIP.</li> <li>■ However, they may, as an alternative, choose to classify, label and package substances according to CLP. In this case, they must, in addition, continue to classify under regulation 4 of CHIP, but the requirements on labelling and packaging in regulations 6 to 11 of CHIP no longer apply.</li> </ul>
1 December 2010 – 1 June 2015	<ul style="list-style-type: none"> <li>■ Suppliers must classify substances according to both CHIP and CLP.</li> <li>■ They must label and package according to CLP.</li> </ul>
1 June 2015 onwards	<ul style="list-style-type: none"> <li>■ Suppliers must classify, label and package according to CLP.</li> </ul>

For preparations (known as mixtures in the CLP Regulation)

20 January 2009 – 1 June 2015	<ul style="list-style-type: none"> <li>■ Suppliers must classify preparations according to CHIP, and may continue to label and package them according to regulations 6 to 11 of CHIP.</li> <li>■ However, they may, as an alternative, choose to classify, label and package mixtures according to CLP. In this case, they must, in addition, continue to classify under regulation 4 of CHIP, but the requirements on labelling and packaging in regulations 6 to 11 of CHIP no longer apply.</li> </ul>
1 June 2015 onwards	<ul style="list-style-type: none"> <li>■ Suppliers must classify, label and package according to CLP.</li> </ul>

There are certain limited circumstances where these transitional arrangements for substances and preparations can be extended. The re-labelling and re-packaging of substances and preparations which are already in the supply chain on the above dates may be delayed until 1 December 2012 and 1 June 2017 respectively.

These additional two years are there to help you make the move from the existing system to the new one, especially if you supply products that have a longer shelf life.








From 1 June 2015, CHIP will end and the CLP Regulation will be the only law on classifying, labelling and packaging chemicals.

***So does this mean I can apply the CLP Regulation now?***

Yes, provided you apply the transitional arrangements and continue to classify according to CHIP as explained in the table on page 11.

## What are the changes?











The current system says that suppliers must use certain symbols and warning phrases on the label to inform users about the hazards of chemicals. For example:

	Example of Hazard	Example of Statement
	Explosive	Risk of explosion by shock, friction, fire or other sources of ignition
	Oxidising	Contact with combustible material may cause fire
	Flammable	Highly flammable
	Toxic	Harmful in contact with skin
	Irritant	May cause sensitisation by skin contact
	Corrosive	Causes burns
	Dangerous for the environment	Very toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment

The CLP Regulation introduces new hazard pictograms (symbols) (see page 14), and new 'signal' words such as 'warning' and 'danger', together with new phrases for the different hazards.

Although many of the CLP pictograms are similar to the existing EU system, they have been re-designed. The new pictograms are diamond shaped, white and black with a red border. You may have seen some of these changes as suppliers gradually switch to the CLP system.



	Example of hazard statement	Example of precautionary statement
	Heating may cause an explosion	Keep away from heat/sparks/open flames/hot surfaces – no smoking
	Heating may cause a fire	Keep only in original container
	May intensify fire; oxidiser	Take any precaution to avoid mixing with combustibles
	Causes serious eye damage	Wear eye protection
	Toxic if swallowed	Do not eat, drink or smoke when using this product
	Toxic to the aquatic life, with long lasting effects	Avoid release to the environment
	<b>New pictogram</b> , reflects serious longer term health hazards such as carcinogenicity and respiratory sensitisation eg May cause allergy or asthma symptoms or breathing difficulties if inhaled	In case of inadequate ventilation, wear respiratory protection
	<b>New pictogram</b> , refers to less serious health hazards such as skin irritancy/sensitisation and replaces the CHIP  symbol eg May cause an allergic skin reaction	Contaminated work clothing should not be allowed out of the workplace
	<b>New pictogram</b> , used when the containers hold gas under pressure eg May explode when heated	None

### Further reading

*Approved Classification and Labelling Guide (Sixth edition). Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (CHIP 4). Approved Guide L131 (Sixth edition) HSE Books 2009 ISBN 978 0 7176 6370 5*

*Read the label: How to find out if chemicals are dangerous Leaflet INDG352(rev1) HSE Books 2010 (single copy free or priced packs of 15 ISBN 978 0 7176 6414 6) [www.hse.gov.uk/pubns/indg352.pdf](http://www.hse.gov.uk/pubns/indg352.pdf)*

*CHIP for everyone HSG228 HSE Books 2002 ISBN 978 0 7176 2370 9*

*COSHH Essentials: Easy steps to control health risks from chemicals <http://www.coshh-essentials.org.uk/>*

## Where can I get more information?

- From HSE's website:
  - on CHIP [www.hse.gov.uk/chip/index.htm](http://www.hse.gov.uk/chip/index.htm);
  - on the CLP Regulation [www.hse.gov.uk/ghs/eureg.htm](http://www.hse.gov.uk/ghs/eureg.htm);
  - on the REACH regulation [www.hse.gov.uk/reach/index.htm](http://www.hse.gov.uk/reach/index.htm).
- Speak to your local HSE inspector or trading standards officer – they don't bite!
- Get advice from your trade association or from a professional society.
- From the European Chemicals Agency (ECHA) website [http://echa.europa.eu/clp\\_en.asp](http://echa.europa.eu/clp_en.asp).
- From the European Commission's Joint Research Centre <http://ecb.jrc.ec.europa.eu/classification-labelling/>.

## Further information

For information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit [www.hse.gov.uk/](http://www.hse.gov.uk/). You can view HSE guidance online and order priced publications from the website. HSE priced publications are also available from bookshops.

**This leaflet contains notes on good practice which are not compulsory but which you may find helpful in considering what you need to do.**

This leaflet is available in priced packs of 10 from HSE Books, ISBN 978 0 7176 6413 9. Single copies are free and a web version can be found at [www.hse.gov.uk/pubns/indg350.pdf](http://www.hse.gov.uk/pubns/indg350.pdf).

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