

# The Easy HANDBOOK

of European SDSs

## SECTION 2:

hazard  
identification

# What information do I need to provide in section 2 of the SDS?



**2.1** Classification of the substance or mixture



**2.2** Label elements



**2.3** Other hazards

# 2.1

## subsection

### FIRST STEP

# classification of the substance or mixture

**This section contains the hazard classification of the substance or mixture** to which the safety data sheet refers. This is essential information when assessing the risk to workers and the environment.

**There is the option to list the complete hazard classification** with the related “**hazard statements**”, or, if desired, to **only list the codes required** by the CLP regulation, which are independent of the language.

Where the codes without the full text are used for classification and/or hazard statements, the full text of each classification and hazard statement shall be indicated in **Section 16**.

Of course, the physical properties indicated **in sections 9 and 10** must be consistent with the physical hazards classification, just like the information **in sections 11 and 12** of the SDS must be respectively reflected in the classification for health and for the environment as reported in section 2.



## What does classification mean?

The classification describes the type and severity of the inherent hazards to human health or to the environment of substances or mixtures.

There is a difference between hazard and risk.

- **Hazard** is the ability of a substance or mixture to cause adverse effects based on its intrinsic properties. The hazards can be physical, for human health and for the environment.
- **Risk** is the likelihood of a certain adverse effect occurring as a result of exposure to a hazardous substance or mixture.

**The classification is always referred to the hazard, not the risk!**

## How can a substance be classified?

To correctly classify a substance, I must comply with the rules of the CLP Regulation (no. 1272/2008) specifying:

- **hazard class** (e.g., serious eye damage/eye irritation);
- **the hazard category** (e.g., Eye Irrit. 2) representing the hazard level within the Hazard Class;
- **the hazard statement** (e.g., H319).

The **hazard statements** are codified with the letter H + 3-digit numbers.

The first number indicates the type of hazard:

- “2” for physical hazards
- “3” for health hazards
- “4” for environmental hazards



# Classification of a mixture



The classification of a mixture must also be indicated as required by the CLP Regulation, **with hazard classes, categories and statements**.

If the classification is not given in its extended form in section 2 (as well as section 3), the full text of each classification and hazard statement shall be indicated in **Section 16**.

When the SDS for an **unclassified mixture** is supplied on request, it is necessary to indicate the reason why the SDS is available.

For example, if an SDS for a non-hazardous product is required because it contains a substance with a Union workplace exposure limit, the SDS could read: “this product does not meet the criteria for classification in any hazard class in accordance with Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. However, it was provided with a safety data sheet upon request, as it contains at least one substance for which there is a Union workplace exposure limit.”

The cases in which an SDS can be legitimately requested, and therefore must be provided for an unclassified mixture are established in paragraph 3 of Article 31 to the REACH Regulation, and can be summarized as follows:

- presence in the formula of substances hazardous for health or the environment in a percentage equal to or greater than 1% weight/weight (except for gaseous mixtures, for which the percentage becomes 0.2% by volume);
- presence in the formula of substances with a specific hazard in a percentage equal to or greater than 0,1% w/w (substances in the Candidate List for reasons other than classification for health or environment, or PBT/vPvB, or carcinogenic category 2, or sensitizers for the skin or respiratory tract category 1, or toxic to reproduction category 1A, 1B or 2, or with effects on or via lactation).
- presence in formula of a substance with a Union workplace exposure limit.

# 2.2

subsection

## SECOND STEP label elements

The label gives **immediate and concise information** on:



- the product's hazards
- precautionary statements

### What is the difference between classification and labelling?

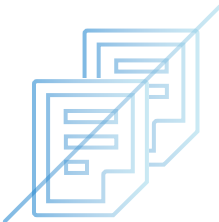
Of course, the labelling reflects the classification of the product. However, they have the following differences.

### What hazard statements are on the label?

Potentially, **all** the hazard statements related to the classification of the product could be listed on the label, however **the CLP requires that there should not be any obvious repetitions of the information**, in order to make the label shorter and easily legible.

There are two sets of hazard statements which overlap in meaning:

1. H314: Causes severe skin burns and eye damage.
2. H318: Causes serious eye damage.
1. H400: Very toxic to aquatic life.
2. H410: Very toxic to aquatic life with long lasting effects.



To avoid repetition of text on the label, when a product is classified with both H314 and H318, the latter shall not be included on the label.

The same applies to H400, which should not be listed on the label if H410 is already present.

## Supplemental hazard statements EUH

The 'Supplemental Hazard Statements' are indicated in Annex II to CLP and encoded with EUH + 3-digit numbers. They do not reflect a hazard classification, but still provide information about a hazard. They should be included in this subsection, if applicable to the product. The rules for the application of these additional hazard statements are set out in Annex II of the CLP.

## Precautionary statements



**The precautionary statements**, which are labelling elements, should be assigned according to the table in Annex IV Part 1 of CLP, and selected to include a maximum (non-binding) of 6 recommendations, considering what is suggested by the ECHA Guide to Packaging and Labelling.

The precautionary statements are coded with the letter P + 3-digit numbers, the first digit of which reflects one of the five types of advice:

- "1" general advice
- "2" prevention advice
- "3" response advice
- "4" storage advice
- "5" disposal advice

## Product identifier



If the product is a mixture hazardous for health, the **substances** in the mixture **which make the mixture hazardous to health** for the hazard classes referred to in Article 18(3)(b) of the CLP shall also be indicated in this subsection. If there are many, their number can be limited to four, choosing those that contribute the most to the hazard.

For mixtures classified as sensitising, there is also an obligation to indicate on the label the presence of sensitising substances that, while not leading to the classification of the mixture, exceed the elicitation limit of allergic reactions in people who are already sensitised. This is the same reason as to why the supplemental hazard statement EUH208 is assigned when the mixture is not classified as sensitising but contains sensitising substances above the elicitation limit.

## Supplemental labelling information



In addition to the 'supplemental hazard statements', i.e. statements with an EUH code, other information resulting from other EU acts **should sometimes also be included on the label**.

An example is when a restriction imposed on the product requires a specific statement on the label (for example, for products classified as carcinogenic, mutagenic, or toxic to reproduction, the statement "Restricted to professional users" should be reported, as required by points 28, 29 and 30 of Annex XVII of REACH).

Other examples are the indications required for products containing biocidal products or substances subject to authorisation.



# 2.3

subsection

## THIRD STEP other hazards

Information shall be provided on whether the substance or mixture meets the criteria for the **identification of:**

- **PBT or vPvB substances in accordance with Annex XIII** to REACH
  - substances with **endocrine-disrupting** properties.
- For a mixture, information shall be provided for the above substances when present in the formula in concentrations equal to or greater than 0,1 % by weight.

The PBT/vPvB evaluation takes place during the REACH registration of substances, and more precisely is part of the chemical safety assessment of the substance, so it is carried out only if the amount of substance placed on the market by the registrant exceeds 10 tons/year. This means that this important information is not always available.



Endocrine-disrupting properties are attributed if the substance is included in the list established in accordance with Article 59(1) of the REACH Regulation (Candidate List) or if the substance is identified as such based on the criteria set out in Regulation 2017/2100 or Regulation 2018/605, which establish the scientific criteria for the determination of endocrine-disrupting properties.

This subsection shall also provide information on **other hazards** which do not result in classification but which may contribute to the overall hazards of the substance or mixture, such as formation of air contaminants during hardening or processing, dustiness, explosive properties which do not fulfil the CLP classification criteria, dust explosion hazards, cross-sensitisation, suffocation, freezing, high potency for odour or taste, or environmental effects like hazards to soil-dwelling organisms, or photochemical ozone creation potential. For example, the statement ‘may form explosible dust-air mixture if dispersed’ is appropriate in the case of a dust explosion hazard.