Chapter 7 – Pollution Prevention and Hazardous Substances

Fact-sheet - How to use the Safety Data Sheet (SDS)?

What is the objective?

What is a SDS?
A safety data sheet (SDS) or material safety data sheet (MSDS), is a document which lists the properties of a particular chemical product and provides information on how to safely use it, store it, dispose it, etc.

Why the factory needs the SDS?
This document is a ready reference and guideline for the management, the workers and emergency personnel on how to handle or work with that substance in a safe manner. The SDS is also necessary to control the compliance of the chemical product with a restricted substances list: the CAS numbers of the substances are indicated in the SDS.

How to achieve this objective?

Step 1: Make sure it is written in your chemical purchase policy that the chemical supplier must provide the SDS with relevant information for each chemical supplied. The format of the SDS is as per the following 16 sections:

| 1- Identification (substance & supplier) | 9- Physical and chemical properties |
| 2- Hazard identification                  | 10- Stability and reactivity       |
| 3- Composition/information on ingredients | 11- Toxicological information      |
| 4- First-aid measures                     | 12- Ecological information         |
| 5- Fire-fighting measures                 | 13- Disposal consideration         |
| 6- Accidental release measures            | 14- Transport information          |
| 7- Handling and storage                   | 15- Regulatory information         |
| 8- Exposure controls/personal protection  | 16- Other information              |

Step 2: Control if the SDS is available or not when a new chemical order is received and update the chemical inventory.

Step 3: Translate or make sure you get the version of the SDS in local language (a SDS usually needs to be prepared by the chemical supplier in the language of its destination country but many factories might get only SDSs in English).

Step 4: Display the SDS in local language in the areas where chemicals are used and stored.

Pictures 1 and 2: examples of SDS in local language available nearby the chemical containers. Picture 1: in a chemical warehouse. Picture 2: in the storage area for chemicals used for the Effluent Treatment Plant (ETP). Wherever chemicals are used, SDS must be available and easily accessible.

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1. In countries that have adopted GHS, Safety Data Sheet (SDS) will be the only accepted name for the hazard communication document for chemicals. The Globally Harmonized System of Classification and Labelling of Chemicals (GHS) is a system developed by the United Nations for standardizing and harmonizing the classification and labelling of chemicals globally. See GHS information website.

2. CAS number: “Chemical Abstract Service”. It is like an ID number specific to every chemical substance. In the SDS, you can see the CAS number of every component of the chemical product.
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**Step 5: Train** the employees to explain them how to read and how to use the SDS.

- **Appoint a manager** to control: SDS are received, translated in local language, displayed in the factory and up-to-date;
- **Develop a template for the local language SDS** if the local language SDS were not provided by the chemical suppliers. Moreover, it is easier for the employees to refer to the same format.

**Common non-compliances**

**SDS not accessible**
In the chemical store, the SDS is posted on the wall behind the batch of chemical containers so it is not accessible to the workers (and therefore not readable):

**SDS not readable**
The factory is not keeping the SDS in good conditions in the chemical store; the SDS are not regularly checked to make sure they are always readable (this SDS is not readable):

**Generic SDS**
The factory is not printing the individual SDS for each chemical but displaying a general SDS with basic information about the most common chemicals: