What is the purpose of an SDS and who needs it?

An SDS provides enough information that employers can take the necessary measures to protect workers. There are now over 150 million different chemicals in existence. There is no way anyone can understand the properties and hazards of each one. So, who needs it? If you have hazardous products, you need Safety Data Sheets. You need an SDS for any chemical mixture that is present in the workplace, classified as "hazardous" under applicable regulations and not specifically exempt from the requirements. Let's say you have found a chemical that meets those criteria, and you need to find or create an SDS for it. How do you begin? There's an easy answer here. You can get the document you need from the same place you got the chemical itself.

The chemical suppliers are legally obligated to provide a complete and accurate SDS for each hazardous chemical they produce or import. In fact, many suppliers make their SDSs available online. On the other hand, if it is your organization producing the chemical materials, then it is your organization's responsibility to produce an SDS that describes it.

Chemical products are very much integrated with and really critical to our lives as we know them today. For the most part, chemicals developed by the chemical industry are tools used to make things possible, easier, cheaper, last long, perform better, etc. Examples are glues, coatings, plastic and aluminium-coated packaging, cement, insulation, disinfectants, cleaners, pesticides, herbicides, drugs, etc. They present hazards and, like viruses, the hazards can often be undetected by the human body. So, the only way to know about them is to be educated about those hazards.

Why are SDSs so important?

Without the SDS, GHS doesn't have a reliable way to make sure information about a chemical is available to the recipients of that chemical. To make that document useful, it has to have a logical and consistent format. That is why the SDS is such a key component of the GHS system: It bridges the gap between suppliers and recipients, as well as the gap between classification and labelling.

SDS are really very important because it is the only way for people to understand the potential hazards to workers and the planet. Nobody can look at a chemical and identify the hazards. There are too many chemicals. Our senses are not reliable indicators of the hazards. Some things you can smell but they are not dangerous. On the other hand, you can't smell some things and see whether they are dangerous. Sometimes, the hazard only appears under certain conditions. Furthermore, the hazard may not appear until many years later, for example, occupational diseases. So, one won't know until decades later that they've been exposed. Therefore, you have to identify the hazards, with the new GHS version 7 or WHMIS 2015, the terminology is really clear. So, someone can state this product may cause cancer, you understand what that means. You do not need a doctor or somebody to interpret it for you, So, it is not just that they identify hazards, but they do it in a way that the average person can understand. The SDSs will also tell you when products aren't hazardous.

I have heard many times people say SDSs are a waste of time, I have them for producers, manufacturers etc. If the substance is not hazardous, it still makes sense to keep the SDS in case a question comes up in the future. In an average organization, 1/3 of the SDSs are not hazardous. The challenge is to get people to see the hazards identified in the other products and focus on them.



What are the challenges created by SDSs?

A supplier must update an SDS within a short period of time (based on country legal requirements) of becoming aware of relevant information that may affect the way a chemical should be handled. Managing the changing SDSs, regulations, employee turnover, employee health is a challenge.

The volume of information found in a collection of SDSs is very much important. A typical workplace has in excess of 100 SDSs. To give an idea of the volume, consider that an SDS averages 12 pages in length. So, 100 SDSs is 1,200 pages of documentation. That is a lot of reading, Furthermore, employers may suffer from a "bystander effect" as a result of the lack of clarity about the role of the SDS. Many employers believe that suppliers have included all the information needed for the employees to use the product safely and that employees will read the SDS. Yet, it is impossible for suppliers to give specific guidance about how a chemical product is to be used because every workplace has different engineering controls such as ventilation and available PPE for employees.

Furthermore, reading SDSs is time-consuming and even with GHS or WHMIS education, an average employee does not feel competent to take on the task. They just expect the employer to tell them how the hazards can affect them and how to use the product safely (i.e., chemical-specific training). In addition, too many products are not covered by the GHS or WHMIS regulations. This can include products such as pesticides, explosives, drugs, etc. The result of this is, the information provided by these suppliers is not in the same format or may lack the clarity of an SDS. The two big challenges that I have seen in adopting the SDS format are SDS collection and training. The keystone in the arch of GHS implementation is training. All your classification and documentation efforts don't mean much if your people don't understand what they're reading or why it matters. Employees and employers need to be trained to understand both chemical hazards and the GHS approach in classifying and documenting these hazards. Ultimately, the system does not rely on people memorizing all the details, but it does rely on people knowing where to look to find the answers to their questions.

