

## **MSDS: Your best friend in case of an emergency**

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### **Contractor Success**

Be safe, not sorry. Know what's in cleaning chemicals before you use them.

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The growing interest in and application of green cleaning chemicals has had a number of benefits for building service contractors (BSCs).

One of the most significant benefits is that BSCs are becoming much more aware of material safety data sheets (MSDSs) and the information they provide about the ingredients in cleaning chemicals, the precautions and concerns the user should be aware of when handling the product, and what to do in case of an emergency.

This greater awareness of MSDSs can be compared to the increased knowledge consumers now have about foods as a result of the nutrition labels the Food and Drug Administration (FDA) requires on virtually all retail food packages.

However, we still find that many BSCs as well as many others in the professional cleaning and maintenance industry do not know exactly what information is listed on MSDSs, nor do they know the most effective ways to use them — which can be especially important if an emergency arises.

Equally important is the fact that the information found in an MSDS can and should be used and be available for more than just emergencies.

BSCs, their cleaning technicians, and a building's occupants have a right to know what chemicals and chemical ingredients are being used in their facilities, along with their potential hazards.

### **Improves your odds**

Indeed, the Occupational Safety and Health Administration (OSHA) requires that MSDSs be readily available to all employees and building users where potentially harmful substances are used or handled in the workplace.

Thus informed, BSCs can better evaluate and then select chemicals and products that are the safest to use.

This is an important way for a BSC to keep insurance and liability costs down and lessen the chance of a lawsuit as it helps protect and ensure the health and safety of not only workers, but also of all building occupants in the facility.

In a documented case, a pregnant woman working in a bank complained of chest pains and difficulty breathing about an hour after starting work.

A new cleaning crew had recently been hired and it was initially believed their cleaning chemicals were causing her health problems.

However, a review of the MSDSs indicated that such reactions to the chemicals they were using were very rare. Thus her employer had to look elsewhere for the cause of her distress.

### **What's in an MSDS?**

First, you should know that there is no specific format to an MSDS.

When OSHA began requiring chemical manufacturers to provide MSDSs, the requirements simply said the information must be in English and contain a minimum of required information about the potentially hazardous chemicals or ingredients in the product.

This can make things tricky for a BSC because one MSDS may be different from another.

BSCs should also be aware that there are no independent audits of the information on MSDSs, so accuracy should be double-checked if there are concerns.

Essentially, the MSDS is divided into nine or 16 sections, each dealing with specific product information.

The 16-part version will be the norm in the future. Here is what to look for in the future from an MSDS:

- **Section 1: Product and company identification.** Identifies the chemical manufacturer, includes emergency contacts and may also list code and registration numbers
- **Section 2: Composition/information on ingredients.** Unfortunately, full ingredient disclosure is not required. Only if hazardous ingredients used in a quantity greater than 1 percent or carcinogens, mutagens and teratogens used in quantities greater than 0.1 percent need to be listed.
- **Section 3: Hazards identification.** Potential health effects — both acute (immediate exposure) and chronic (long-term exposure) — are provided.
- **Section 4: First-aid measures.** Lists first-aid measures that should be taken should the chemical get into the eyes, get onto the skin, be breathed into the lungs, or be ingested.
- **Section 5: Firefighting measures.** Includes firefighting procedures, explosive limits and flash points.
- **Section 6: Accidental release measures.** Evacuation procedures, spill containment, and chemical cleanup/ disposal are addressed.
- **Section 7: Handling and storage.** Storage temperatures, as well as ways to minimize potential storage hazards and reduce risk by proper handling, are noted.
- **Section 8: Exposure controls/ personal protection.** This lists measures to reduce the likelihood of ingestion, eye invasion, and skin contact; engineering requirements (such as ventilation); and personal protection recommendations (eye protection, gloves, etc.).
- **Section 9: Physical and chemical properties.** Lists pH, color, odors, and vapor density.
- **Section 10: Stability and reactivity.** Lists how stable a chemical is and details its compatibility with other chemicals or other products it may come into contact with.
- **Section 11: Toxicological information.** Consequences of short-term and long-term exposures are noted here.
- **Section 12: Ecological information.** Deals with the environmental fate of the chemical. Items such as biodegradability and aquatic toxicity are reported.
- **Section 13: Disposal considerations.** List directions and limitations for disposal of the chemical or product.
- **Section 14: Transportation information.** Shipping information relative to hazardous materials is described.
- **Section 15: Regulatory information.** Regulatory requirements for OSHA, Toxic

Substances Control Act, Resource Conservation and Recovery Act are provided.

- **Section 16: Other information.** Additional information, such as National Fire Protection Association ratings, would be listed here.

Last, but not least, it is important to find out who prepared the MSDS and when it was prepared.

The date is important, as the MSDS must be updated every three years or whenever there is a change in the information it contains.

Using a product with an outdated MSDS can be a recipe for disaster.

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