

SAFETY

Best Practices in Global MSDS Authoring and Distribution

Stay Compliant Through Timely Updates and Efficient Management

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Organizations of all sizes face increasing challenges from globalization and changing international regulatory initiatives. These challenges affect an organization's ability to produce and maintain material safety data sheets (MSDSs). MSDSs are required during sale, use, storage, and shipment of hazardous chemicals.

Global MSDS Requirements

Countries have different requirements and guidelines for the information that is required on an MSDS and how the information is to be used. The regulation in the United States is OSHA's Hazard Communication Standard, 29 CFR 1910.1200; the Hazardous Products Act (HPA) and Controlled Product Regulations (CPA) govern MSDSs in Canada. The regulation in Europe is the REACH Regulation (1907/2006) from 2007. Japan, Taiwan, Korea, China and other Asian countries also have unique requirements.

However, one thing remains consistent across the globe—the chief role of the MSDS is to provide information for the safe handling of chemicals and to protect workers, the general public, and the environment. This information typically includes the composition of the chemical, its physical and chemical properties, its hazards, instructions for proper handling, first aid measures for treatment of individuals exposed to it, and other information.

Hazard Determination and Substance Classification

Regulations also determine the classification of substances and mixtures. An MSDS is required for all chemical products determined to be hazardous. The regulations are OSHA's Hazard Communication Standard in the U.S.; Controlled Product Regulations such as the Workplace Hazardous Materials Information System (WHMIS) in Canada; and EU Regulation

1272/2008, which is replacing Directives 67/548/EEC and 1999/45/EC during a transition period. The Globally Harmonized System of Classification and Labeling of Chemicals (GHS) has already been implemented in a number of Asian countries and is being implemented globally to replace regulations governing the hazard determination of chemicals and the preparation of MSDSs.

Updating MSDSs

MSDSs must be updated depending upon the geography into which chemicals are sold or used. OSHA requires MSDSs to be updated within three months following the awareness of significant new information about a chemical. Canada requires revisions of MSDSs every three years or when new information is known. In Europe, MSDSs must be updated immediately when a new regulation comes into play and when there are significant changes in the hazard of the chemicals; when other, non-risk-related information becomes known, the MSDSs must be updated within one year.

Best Practices in MSDS Authoring

So how do MSDS authors ensure that their documents are accurate and comprehensive? First, authors should acquire regulatory information and classification data in all the regions where their company does business. Next, authors should develop an efficient method for tracking regulatory and classification changes. Regular analysis of the volume of MSDS production will help in planning for upcoming regulatory changes. Authors should also review and update MSDSs whenever a new product is introduced or an existing product is presented to a new market. If analysis reveals that current resources cannot support the required volume, consider outsourcing MSDS authoring.

Distributing MSDSs Responsibly

Companies have three key responsibilities when considering their MSDS distribution strategy:

- Frequency—how often does the MSDS need to be updated?

Table 1. Pros and Cons of MSDS Delivery Methods

Method	Advantages	Disadvantages
In the box	No additional postage costs	Typically the MSDS goes with every shipment, which is costly
"Snail" Mail (via USPS, FedEx, UPS, etc.)	Easy to manage	High postage and processing costs, no guarantee the MSDS gets to the correct contact
E-mail	Cost-effective method for distribution	Based on country requirements, may require customer permission
Fax	Easy to manage	High costs for global distribution
Website	Low cost	Requires permission from customer to avoid pushing the MSDS

- Delivery methods (see Table 1)—how can the customer receive the MSDS?
- Customer access—can the customer request an MSDS?

In the U.S., the manufacturer or importer of the product is responsible for the MSDS. An MSDS is required for the customer's first purchase and the manufacturer must be able to provide the MSDS to the customer upon request. The manufacturer or importer also must ensure that the customer receives a revised MSDS within three months of any significant change. Updated MSDSs are required to be sent with the customer's next shipment.

Importers and distributors need to ensure they are maintaining MSDSs and tracking manufacturer MSDS revisions. They also need to track regulatory changes to determine whether the MSDS requires modifications.

To address these issues, develop a centralized global MSDS distribution program. A good program has the following characteristics:

- Maintenance of accurate customer records
- Timely updates of MSDSs
- Periodic distribution of MSDSs to limit shipping costs (sending an MSDS with every shipment is expensive)
- Electronic distribution of MSDSs to limit printing and postage costs (customer approval is necessary)
- User-friendly web access to limit phone inquiries

Critical Components

Effective, compliant and up-to-date MSDSs are a global requirement. In today's environment, merely producing and printing an MSDS is not enough. Quality, accuracy, currency and accessibility are critical components for fulfilling regulatory requirements. ✓

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