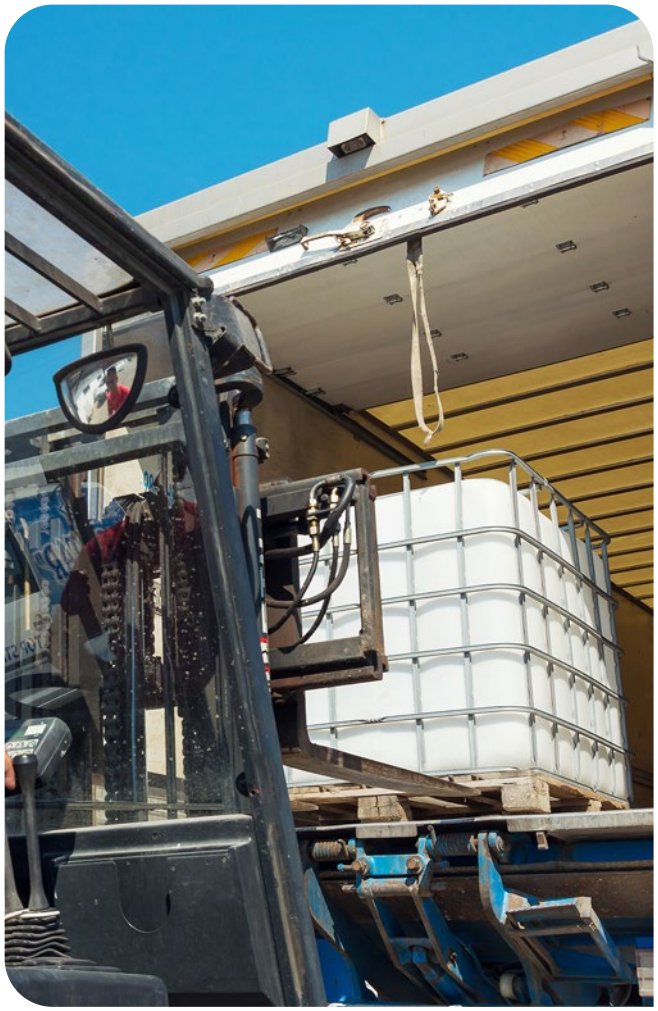
WHITE PAPER

Know Your Chemicals
Inside and Out

Chemicals are part of modern work environments, whether you're a manufacturer, a lab, a facility manager, or a school custodian. They can enter your workplace through standard procurement, vendor deliveries, or even personal items unknowingly brought in by staff. Managing these substances goes far beyond simply having a list. To ensure safety, environmental responsibility, and regulatory compliance, organizations must understand what's in their facilities, how chemicals are used, where they are stored, and the risks they pose.

Before Chemicals Enter Your Facility

The best way to ensure safe chemical use is to control what gets through the door. Automated material approval processes allow organizations to create review workflows for all incoming substances. Approval rules can be based on toxicological properties, storage needs, regulatory thresholds, or other internal criteria. This step prevents hazardous or redundant substances from entering the workplace and keeps chemical inventories aligned with company policies.



Key Considerations for Pre-Approval:

- Establish clear criteria based on SDS data (e.g., hazard classifications, carcinogenicity).
- Route materials through multi-stakeholder reviews.
- Digitally track decisions and approvals.

Know What You're Using – Ingredient-Level Insights

Managing chemicals isn't just about having a safety data sheet (SDS) on hand. It means knowing what's in each product, whether it contains banned or restricted substances, and how it may interact with your environment or employees. Ingredient-level search capabilities help organizations quickly identify risk across products and locations.

Why This Matters:

- Supports Tier II and other environmental reporting requirements.
- Helps identify hazardous air pollutants (HAPs) or substances subject to TRI reporting.
- Enables proactive substitution of safer alternatives.

Labeling Secondary Containers

When chemicals are transferred to new or secondary containers, proper labeling is often required by OSHA and GHS standards. This helps ensure employees can quickly identify the contents, understand the risks, and respond appropriately in case of exposure or spills.

Best Practices:

- Ensure all workplace containers are labeled with identity and hazard information.
- Use durable, compliant labels that meet OSHA 1910.1200 requirements.
- Maintain consistency with SDS information and training.

Hazard Signage and Communication

Clear and consistent hazard signage is a critical part of chemical safety. Proper signage ensures that all employees, contractors, and visitors can immediately recognize the presence of hazardous materials and take appropriate precautions. Signage should align with OSHA's Hazard Communication Standard and include pictograms, signal words, and precautionary statements based on the chemical's classification.

Best Practices:

- Post signage at entrances to storage areas, labs, or production zones.
- Use standardized formats like NFPA diamonds or GHS pictograms.
- Ensure visibility and legibility for all potential language or literacy levels.
- Regularly audit signage to ensure accuracy and compliance.

Inventory Management and Regulatory Visits

Regulators like OSHA, EPA, and DOT expect accurate, real-time chemical inventories. Whether your site uses chemicals occasionally or every day, a complete and up-to-date inventory is essential. On-site inventory services and digital management systems can help maintain accuracy, prevent gaps, and streamline compliance audits.

Benefits of a Strong Inventory System:

- Reduces risk of fines for mislabeling or unreported quantities.
- Improves hazard communication across departments.
- Aligns with internal auditing and sustainability goals.

Emergency Response Preparedness

Even with strong policies, accidents happen. Quick access to chemical data and proper spill response can prevent injuries and limit environmental damage. Organizations should implement 24-hour emergency response systems, including hotlines, spill kits, and communication protocols.

What To Prepare:

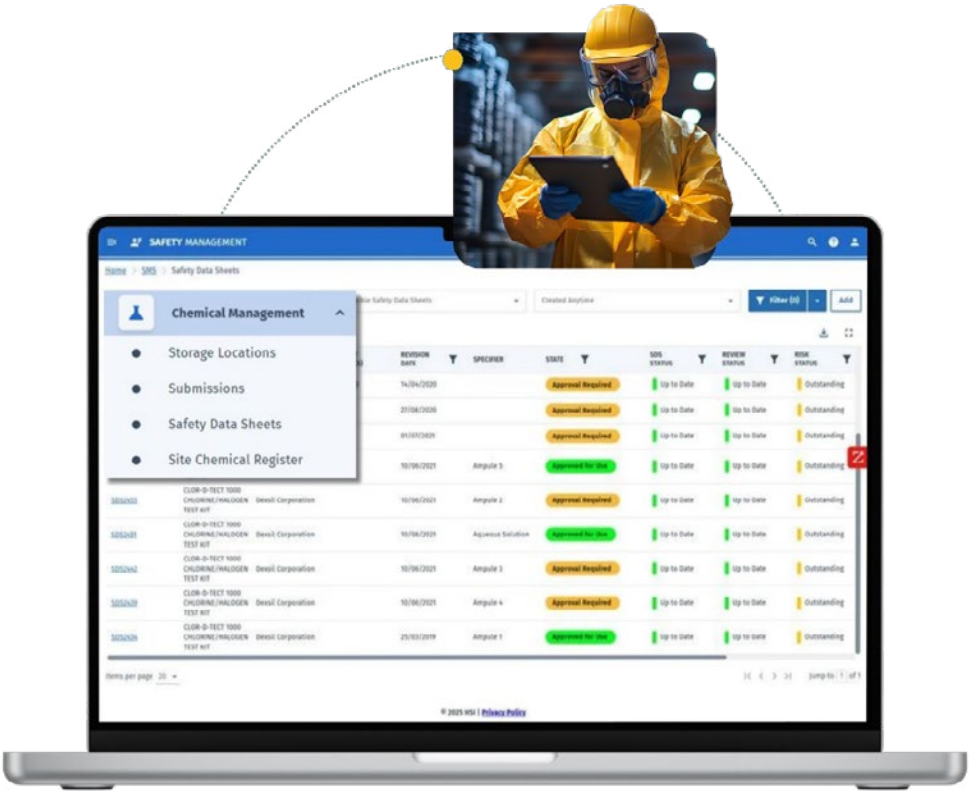
- Have SDS information readily available for first responders.
- Train staff on emergency procedures and incident reporting.
- Ensure around-the-clock access to expert support for large or hazardous spills.

Reducing Burden Through Smart Systems

Managing chemical compliance doesn't have to be overwhelming. Leveraging a cloud-based platform with AI-powered tools to automate documentation, flag reporting deadlines, identify risks, and suggest safer alternatives. This frees up time for teams to focus on operational priorities while staying proactive with regulatory demands.

Key Features of Modern Systems:

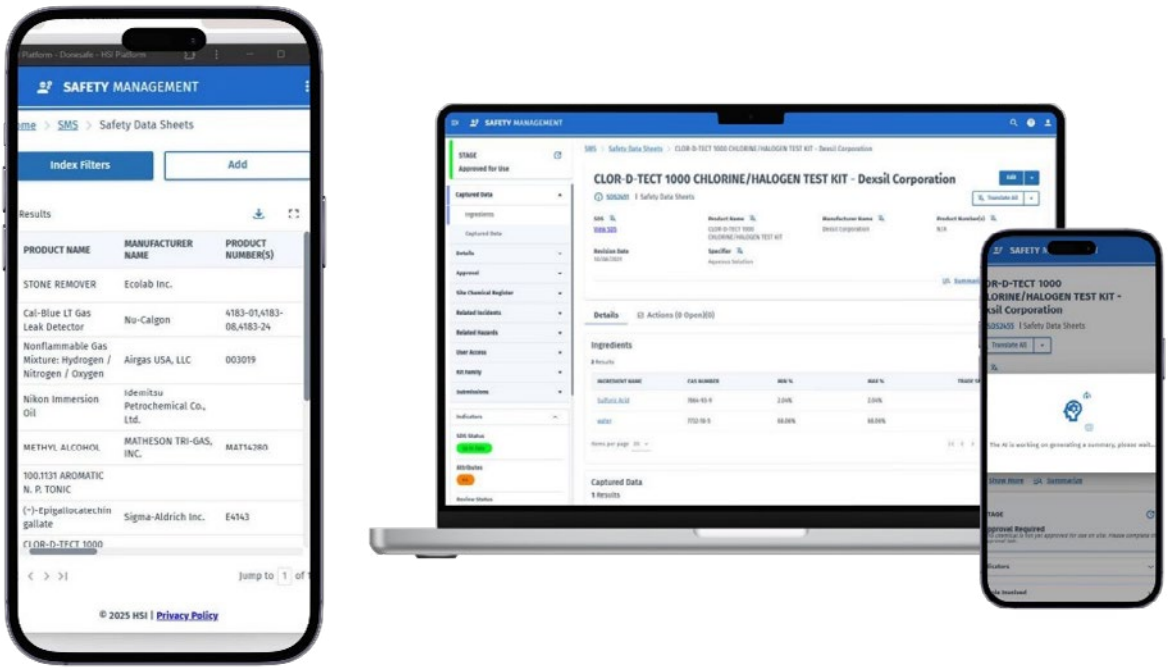
- Real-time inventory updates.
- Automated alerts and real-time reporting insights.
- AI-suggested learning paths, smarter procurement, and streamlined incident management.



Getting Started

Whether you're trying to move away from spreadsheets or scale an enterprise-wide compliance strategy, understanding your chemical footprint is the first step. Start by conducting a full chemical inventory, identify high-risk substances, and build internal policies for approval, labeling, storage, and emergency response.

Need support? HSI provides chemical management solutions, training tools, and expert services designed to simplify compliance and improve visibility across your organization. Connect with us to learn more about how we can help you build a safer, smarter approach to chemical management.



About HSI

HSI is your single-source partner for EHS, Compliance, and Professional Development solutions. HSI provides integrated e-learning content, training solutions, and cloud-based software designed to enable your business to improve safety, operations, and employee development. Across all industries, HSI helps safety managers, and technical employees, human resources, first responders, and operational leaders train and develop their workforce, keep workers safe, and meet regulatory and operational compliance requirements. HSI's focus is on training, software, and services for safety and compliance, workforce development, industrial skills, and emergency care. HSI is a unique partner that offers a suite of cloud-based software solutions including learning management, safety management, chemical SDS management, and more, integrated with content and training so businesses can not only monitor and manage multiple workflows in one system, but train employees via one partner.

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