

Powerful, compliant SDS and label authoring, management and distribution

MSDgen® from 3E Company combines sophisticated functionality with an easy-to-use interface to deliver increased efficiency, improved compliance and reduced risk, as well as consistent document generation, distribution and administration for customers. Manufacturers from a wide variety of industries, from the United States to Europe and Japan, choose MSDgen because it provides the tools necessary to effectively manage the complexities of gathering accurate data, applying international chemical regulatory directives and guidelines, and issuing reliable hazard communication documentation for an in-house and international audience.

Tracking international chemical regulatory guidelines and providing accurate and compliant hazard communication has never been more important – or more complex. Companies of all sizes increasingly face challenges that result from marketplace globalization and an increase in international initiatives to protect the health and safety of employees and end-users of hazardous materials, as well as the environment. To meet these complex requirements and manage the compliance challenges presented by REACH and GHS, Environmental Health and Safety (EH&S), R&D, and product stewardship professionals turn to MSDgen – the leading, globally established and scalable hazard communication and chemical regulatory compliance software system.

A POWERFUL AND UNIQUE COMBINATION

MSDgen users enjoy the unique benefits of having the software, data, services and support from a single source. 3E Company is the only EH&S vendor to offer a powerful combination of integrated and optimized world-class Ariel® data, sophisticated authoring data management tools and comprehensive outsourced services to support product and workplace safety and stewardship.

3E Company invests heavily in attracting and retaining employees with deep EH&S domain expertise from a wide variety of industries and backgrounds. We have professionals who possess the necessary skills to ensure the integrity, accuracy and quality of our data, products and services. EH&S, R&D and product stewards find comfort in knowing the products and services they rely on are built by peers who understand the business and burden of global EH&S compliance. Providing customers with direct access to this knowledgebase has unprecedented value.

What MSDgen Can Do For Your Organization

SDS Authoring

Creating compliant and consistent Safety Data Sheets (SDSs) and labels.

REGIONAL & COUNTRY-SPECIFIC SDS/LABEL TEMPLATES

Any variety of SDS and label templates may be generated by MSDgen to meet international regulatory compliance and business requirements. MSDgen provides full support of hazard communication, classification and labeling directives to generate SDS and label documents in over 60 country-specific regulatory compliant formats, including templates designed in accordance with specific Globally Harmonized System of Classification and Labeling of Chemicals (GHS) adaptations for Brazil, China, Japan, Korea, EU, Mexico, Singapore, Taiwan, U.S. and more. MSDgen also supports the generation of Product Information Sheets (for support of Articles under REACH), as well as business/user definable document templates such as TDSs (Technical Data Sheets), PDSs (Product Data Sheets), Hazard Summaries and Product Stewardship Summaries.

INTEGRATED REGULATORY DATA

MSDgen is much more than software. It is fueled by world-class 3E Ariel data, which is considered the highest quality, most comprehensive collection of regulatory information by many of the world's top chemical manufacturers. More than 300 multinational organizations have come to trust Ariel data because of the documented best practice methodology used in sourcing the content. Rather than serving as a reseller of third party data, 3E Company's own team, through direct relationships with regulatory bodies across the globe, gathers, refines and maintains the content.

MSDgen accesses live substance links for physical and chemical properties, toxicology data such as LD50s and international regulatory and advisory data. Regulatory data is integrated into MSDgen and structured into fully normalized data structures to be used in MSDgen's automatic classifications and mixture-level estimations, as well as presented on the appropriate hazard communication documents.

EXPERT PHRASE & GLOSSARY LIBRARY

A comprehensive library comprised of more than 16,000 distinct statements is available in more than 45 different languages. This library provides a broad repository from which to draw during the authoring of SDSs and labels and the execution and creation of Rules. Authors may edit and add custom statements as needed within each section-specific segment of the library. Updates to the Glossary Library are also

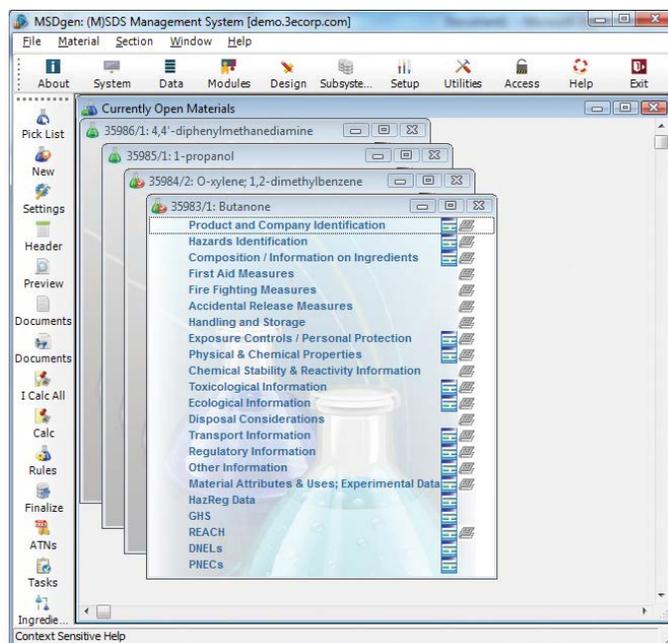
available on a subscription basis. In addition to the library of standard SDS authoring statements, 3E offers the MSDgen ES Library and periodic updates for the authoring and generation of Exposure Scenarios within MSDgen.

BASE CHEMICAL CLASSIFICATION LIBRARY

3E offers an expansive set of chemical substances that are fully classified to the GHS by our expert team of SDS authors and toxicologists. 3E's team of regulatory researchers and authors spend an average of 16 to 24 hours on research, classification, toxicological approval, classification approval, data entry, data review and quality control for each substance in the Base Chemical Library. These classifications can be used for the ultimate classification of mixtures in SDS authoring systems including MSDgen, saving time and ensuring accuracy. The library includes not only the GHS Classification for over 20 global regulatory authorities, but also the precise set of physical-chemical properties, toxicological data and ecotoxicological data that support these classifications.

The Base Chemical Library is regularly updated to include classifications for new authorities as well as any required changes for existing authority classifications. For easy searching and reference, each substance is identified by CAS Number. The library can easily be imported into MSDgen and SAP® EHS, as well as other commercial SDS Authoring systems.

MSDgen's Base Chemical Library offers "ready-made," supported classifications for substances to enable mixtures to be classified automatically. For users, this feature can eliminate the need for hours of research into each substance.



SUPPLEMENTAL AUTHORING SUPPORT WHEN YOU NEED IT

For those inevitable times when companies need supplemental assistance during the ebb and flow of workload, 3E Authoring Services can provide outsourced or co-sourced assistance with authoring SDSs via 3E's own fully dedicated, in-house staff of highly qualified, multi-lingual authors.

SUPPORT BEYOND AUTHORING

Because 3E Company's suite of products and services span the entire chemical lifecycle, manufacturers can rely on 3E for product safety and stewardship, as well as workplace compliance assistance:

- Vendor SDS Management
- Transportation Classification and Shipping Papers
- 24-7-365 Customer Support and Emergency Response to Spills, Inhalations or Ingestions
- Hazardous Waste Services

AUTOMATIC CALCULATIONS AND CLASSIFICATION SYSTEMS

GHS

MSDgen uses many algorithms to accommodate the requirements outlined in the GHS. This consists of the classification of substances and mixtures according to their health, environmental and physical hazards, and HazCom requirements for labeling and SDSs.

At the substance level, assessments are made to determine the hazards based on experimental data. In addition, published GHS regulatory lists are incorporated for substance assessments. For mixtures, where test data is available for the complete mixture, the classification is always based on that data. In the absence of data, the mixture calculations utilize the methods outlined in the UN GHS Guidelines, with adaptations according to the competent authorities' adoption of GHS.

GHS Rules automatically assign the corresponding hazard statement(s), signal word, symbol(s) and precautionary statements outlined in the GHS as adopted by each country's regulation. In addition, appropriate statements are assigned throughout the entire document based on the classification.

Automatic assessments are also based on the EU Dangerous Substance Directive/Dangerous Preparation Directive (EU DSD/DPD) for the countries which have not yet adopted GHS and accept this classification system.

TRANSPORTgen Transport Classification System

TRANSPORTgen is a classification engine within MSDgen to determine and assign Transport Information to product and raw material mixtures. Hazard Class, Packing Group and Proper Shipping Name determinations are based on the classifications of the components of the mixture, as well as from the properties of the mixture, such as physical state, LD50, Flash Point, pH level and so on. These determinations occur automatically based on the information that is given for the mixture and involve many dependencies, calculations and exceptions that meet international transport regulations. Agencies supported include: ADG, ADN, ADR, ANTT, CNDG, DOT, IATA, ICAO, IMDG, RID, SCT and TDG.



Automatic Mixture Assessments & Regulatory Analysis

Other mixture-level assessments and classifications are made for dozens of data points based on substance-level data obtained through the chemical regulatory updates and available empirical raw material data. Automatic calculations and classifications exist for physical properties, LD50s, LC50s, OSHA hazards, WHMIS hazards, HMIS® 4th Edition ratings, NFPA ratings, SARA ratings, Germany WGK, International Inventories, RoHS, Hazchem code and many more.

Audit Assessment Logs

For any classification, calculation or other mixture level determination, MSDgen documents and provides detailed visibility for the logic used as part of the assessment and determination process. The Material Assessment log provides an at-a-glance review of automatic mixture determinations and the results and logic for all of the automatic mixture calculations and classifications for any given material. The GHS Assessment Log and GHS Classification Sheets provide a detailed explanation for the GHS classifications provided for each of the unique country/authority specific GHS classification. Additionally, the Rules Assessment Log details the conditions which trigger the automatic assignment of standard phrases and statements as part of the Rules authoring process. All Assessment Logs may be archived to provide a historical reference for each SDS version released for distribution in MSDgen.

RULES-BASED GENERATION

Off the shelf, MSDgen comes with thousands of standard authoring Rules (MSDrules) for the automated generation of material data displayed on SDSs and other HazCom documents. The system also comes equipped with a powerful and intuitive Rules painter to enable Rules editing and the creation of new, custom Rules.

Users with the appropriate system security rights have complete access and visibility to the logic used in all MSDgen MSDrules, and may extend or modify Rules to meet specific business requirements. Regular updates to MSDgen Rules are provided as part of the regional Rules and Document Template update subscriptions.

MSDgen MSDrules

Authoring Rulesets are available for numerous regulatory bodies including EU (GHS/CLP), OSHA (HazCom 2012, HMIS® 4th Edition ratings, NIOSH, RCRA), Australia, Brazil (GHS), Canada (WHMIS 2015), China (GHS), Indonesia (GHS), Japan (GHS), Korea (GHS), Malaysia (GHS), Mexico (GHS), New Zealand (GHS), Philippines (GHS), Russia (GHS) Singapore (GHS), Taiwan (GHS), Thailand (GHS) and many more. 3E strives to remain current with all of the latest adaptations of GHS by all global regulatory authorities and ensures this support is included with the latest releases of MSDgen.

Rules Creation

New Rules may be easily created using MSDgen's powerful yet user-friendly Rules Painter. No other system offers the level of flexibility, power, and intuitiveness of MSDgen's Rules engine. Standard Rules and user definable Rules are built in the same consistent manner – with Structured Query Language or SQL statements. Since SQL is a global standard for database query design, Rules may be as simple or as complex as necessary. Rules may be designed to look at any set of tables or views in the database, meaning there are virtually no predefined limitations. MSDgen's Rules Painter provides a graphical Query By Example interface which allows users to pick the fields and data from the same type of data layout as the data entry screens that are used to enter the data. Since MSDrules were designed using this same Rules Painter, all Rules provided with MSDgen may be customized to meet specific business requirements.

Rules Update Subscription

Regularly released updates to the authoring Rules library ensures full support of current regulatory requirements. Rules updates do not affect user-defined or customized Rules.

REACH COMPLIANCE

MSDgen supports the collection of data that is necessary for the preparation of a REACH compliant eSDS. Registration and authorization details may be entered for substances requiring registration. Exemption status is automatically recognized based on the data retrieved from the regulatory data content source. Unique registration details may be associated with each legal entity. Multiple registration numbers are then included on the eSDS.



MSDgen's glossary library structure enables a statement to be defined once and reused unlimited times. This structure is combined with a unique concept of authoring the Exposure Scenarios (ES) for a "Product use" within a sector and associating the ES to multiple, similar products. This process minimizes the laborious undertaking needed to define the large amount of text required for the RMMs, WMMs, Technological Process, etc. in the ES.

Unique Exposure Scenarios may be defined for each commercial name or Alternate Trade Name (ATN). Pre-authored Exposure Scenarios may be attached to an authored SDS to form an Extended Safety Data Sheet (eSDS).

REACHsync

MSDgen provides a built-in interface that imports key data elements from IUCLID5 in order to facilitate the classification of materials and authoring of compliant SDS documents and labels. REACHsync includes the import of physical and chemical properties, toxicological and ecological data, CLP Classification as well as DSD/DPD classification.

ESCom support

MSDgen provides support for the ESCom standard phrase catalog as well as the ESCom XML exchange standards. These standards are also fully aligned with the EuPhraC ES library using a common Phrase ID. 3E Company also offers an expert translated library package to ensure full compliance.

FORMULATION MANAGEMENT

MSDgen provides a variety of methods for managing product formulations:

Nested Ingredient Algorithm

MSDgen's Nested Ingredient structure uses a recursive algorithm to traverse through a product's hierarchy and find the eventual base level ingredients. Based on the results of this "drill-down" process, ingredients are appropriately used in MSDgen's automatic calculations and classification systems and properly displayed on the SDS documents based on the concentration limits required for the specific country/region (e.g. Australia, Canada, China, EU, U.S., etc.).

There are no limitations on the levels of raw materials considered in the Nested Ingredient algorithm and the base level components are easily displayed either graphically or via MSDgen's Component Summary window.

Automatic Formula Acquisition

MSDgen may be used as the point of entry for formulations or formulations may be automatically acquired via a direct interface to other ERP or R&D systems. SDSs are updated and queued for review based on the acquisition of new and updated formulas.

Trade Secret and Disclosure Management

Trade Secret management is one of the aspects handled by the MSDgen disclosure functionality. The disclosure logic in MSDgen is built-in to automatically determine all ingredients that are to be disclosed based on the regulatory requirements for the region that the document serves. The default logic can be easily overridden at numerous levels. Any ingredient can be expressed as a trade secret with a proprietary CAS Number. Conveyed percentages can be changed for any ingredient. Conveyed names can be changed. Ingredients can be hidden or displayed. While the disclosure logic for all documents is based off of the same set of common composition data for a material, it allows you to portray each regulatory document in as distinct a manner as necessary with its granular selection criteria for deciding which ingredients are to be displayed and with which properties.

Before-Reaction and After-Reaction Compositions

Composition structures are available for the management of both Before Reaction Compositions (BRC) and After Reaction Compositions (ARC). Users can assign the ARC manually by entering the ingredients individually in the same manner as they are entered in the Ingredients tab. The ARC can also be conveniently copied by using one of a number of copy procedures. Each ingredient in the ARC can be flagged as a participant in the reaction. MSDgen retains all ingredients designated as participants and automatically assigns a weighted percentage to these reactant participants as non-reactant percentages in the base composition are changed over time.



Formulation History

The history of all formulations is automatically tracked for every mixture (raw material or product) to review changes over time and determine the former state of a formulation at any point in time.

ALTERNATE TRADE NAME MANAGEMENT

With MSDgen's Alternate Trade Name (ATN) features, SDSs and other HazCom documents may be generated with any number of commercial names based on a single common material source. This many-to-one relationship enables the user to maintain a single data source, while generating any number of unique SDSs from that same source of data with varying commercial names.

In addition to this ability to manage products marketed under a variety of product names and manufacturer names, MSDgen includes the ATN Composition option – the ability to tie unique data to an Alternate Trade Name SDS, such as product codes, composition disclosures and manufacturer address and logo. MSDgen's ATN management is ideal for businesses providing private labeling services.

Data Management and Administration

Delivering user convenience while tackling technical and business complexities.

While SDS authoring functionality comprises a majority of the features by which many companies evaluate systems, consideration should also be made for the sometimes “behind-the-scenes” data management and SDS administration capabilities.

Version Control & Archiving

The maintenance of “draft” versus “release” versions of authored SDSs is managed through MSDgen's Version Control and Archiving feature set. Upon approval for finalization, each SDS document/language combination is automatically archived as a read-only PDF for current distribution and availability on the web through the MSDSviewer web distribution add-on. Archives are maintained for each new version so that a listing of every document/language combination is available for historical reference and 30-year archival compliance (in the U.S.). The Version Significance feature gives SDS authors and administrators the ability to designate a level of significance for each new SDS version update, which indicates the degree to which each update is to be distributed. Users may designate significant changes that require a full version number increment, or insignificant changes that merely require an increment to the point release (e.g. 2.0, 2.1, 2.2).

In addition to SDS documents authored in MSDgen, Assessment Logs, vendor supplied SDSs, Technical Data Sheets, labels and other regulatory reference documents may also be archived for future reference.

User-definable Queries

User-definable database queries, called Search Objects, provide a powerful means for locating, retrieving and exporting any combination of material data stored within the MSDgen database. Search Objects provide the ability to perform ad hoc queries on virtually any set of data in the database. Search Objects are based on standard database level SQL commands, not arbitrary custom query code.

MSDgen includes dozens of Search Objects “out-of-the-box” with the ability to create new Search Objects based on any desired data combination. Once a Search Object has been defined, it may be used as often as needed. Additionally, search Result Sets may be saved and utilized later as the basis for other queries to perform drillable searches. Result Sets may be quickly and easily exported in a variety of file formats for ad hoc analysis and reporting outside of MSDgen.

Reports

MSDgen comes fully equipped with hundreds of pre-defined reports for easily organizing, displaying and distributing valuable information for internal review and analysis. Stock reports provide the ability to generate information on all aspects of the MSDgen database, from listings of materials by hazard classifications, global inventories and regulatory listings, to information on suppliers, customers and system user activity. New MSDgen reports may be created at any time and catalogued along with those provided “out-of-the-box”.

Batch Processing

MSDgen's rich set of batch processing routines allow users to perform nearly any task in a scheduled batch manner. Furthermore these batch tasks are optimized to take advantage of the processing power of IT environments. Parallel processing functionality is present for rules generation, mass finalization and release of documents, and Ariel data import impact analysis processing.

SYSTEM SECURITY WITH WORKFLOW & NOTIFICATION

System Security

With MSDgen's robust security access management tools, corporate-wide security access is controlled at the User, Group, Activity, Menu and Window level. Users may belong in one or more groups and each group may be involved in one or more activities. Each activity may have access to one or more menus and each menu, in turn, is associated to one or more windows. Within each level of security, read-only or read-write access rights may be granted.

MSDgen has been audited by numerous security experts from several Fortune 50 companies prior to their implementation of the system to ensure that MSDgen provided the best possible security measures for protecting their valuable trade secrets. This required secure single sign-on methods, field level access control and the ability to securitize any abstract object in the system, including Documents, Reports, Glossary Statements, Rules, Languages, Sections, Procedures and Workflow Tasks.

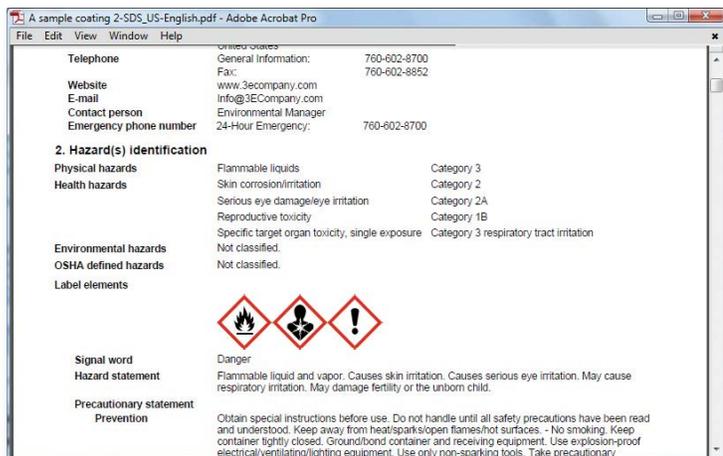
Workflow and Notification

For the streamlining of internal processes among multiple participants for the creation/review of new formulations, material data authoring, regulatory assessment review and SDS approval, MSDgen offers a powerful set of Workflow and Notification features. This includes the ability for a system administrator to graphically design Workflows by assigning user-defined tasks, with each task having one or more user group assigned.

Email notification is used to ensure that the proper messaging is distributed to the appropriate members of the Workflow as certain activities occur in the sequence. Users are able to instantly view all tasks that are relevant to them, and may instantly approve any of the tasks in the list. Tasks may also be rejected or recalled. Additionally, any task has the ability to start another Workflow by calling a task within that Workflow. MSDgen Workflow and Notification provides an excellent set of tools in cases where collaboration among different users is required for the successful completion of the SDS creation and approval process.

External System and ERP Interfacing

By offering standard data exchange utilities, MSDgen was designed to interface with essentially any type of ERP or legacy process management system. The interface systems are programming language-agnostic and accessible through many information exchange technologies. Integrating MSDgen within your corporate IT infrastructure enables a high degree of business process automation including: distribution of SDSs based on customer order transactions; real-time printing of SDSs, shipping documents and HazCom labels; formula acquisition to synchronize the data with the formulation system and facilitate the material analysis and SDS creation; and inventory reporting including SARA Title III.



MSDgen provides full support of hazard communication, classification and labeling directives to generate SDS and label documents in more than 60 country-specific regulatory compliant formats.

Using MSDgen's standard interfacing toolset, interfaces have been successfully established between MSDgen and the following ERP systems:

- SAP/SAP EHS
- Microsoft Dynamics AX
- Oracle ERP
- Deacom
- Infor Adage/Infor Infinium
- LAWSON/Intenia Movex
- Oracle/PeopleSoft
- CDC/Ross iRenaissance
- Sage 300 ERP
- Other internal legacy systems

Multi-Language User Interface

MSDgen supports a multi-language Graphical User Interface from the same system. Each MSDgen user is assigned a language through Security Access that enables automatic access to MSDgen in their native language upon logging into the system. MSDgen is currently being accessed by users in Chinese (Simplified and Traditional), French, German, Italian and Japanese. Additional languages are easily added at any time simply by loading the application translations.

Vendor SDS Management

In addition to being a complete SDS authoring and chemical regulatory system, MSDgen also provides a complete subsystem for the management of in-bound vendor SDSs. Vendor SDSs may be received electronically in PDF format or they may be scanned directly into the system. MSDgen allows the user to associate any number of vendors to a single material so that SDSs are readily available for all suppliers of a particular raw material. Additionally, MSDgen supports the management of vendor SDSs in multiple languages, so that MSDgen may serve as a central repository for the management of SDSs for facilities internally. This means for any vendor supplied raw material, you may have SDSs for multiple suppliers and for each supplier the SDS may be available in any number of languages.

Vendor SDSs managed by MSDgen are automatically available for viewing and printing from the MSDviewer intranet website, where SDSs may be searched by any variety of user-defined details.

In cases where it is preferred to outsource the obtainment and management of vendor SDSs, MSDgen can be integrated with 3E Online® from 3E Company.

Fully Open, Normalized Database

MSDgen employs a fully open and normalized database backend for its Client/Server as well as web components of the application. The backend database architecture used by MSDgen is one of the most open in the industry. There are no hidden catalogs, no proprietary storage mechanisms, no homegrown structures and no ad hoc access logic.

Everything is based on tried-and-true industry tools and techniques such as relational data modeling, standard database objects and SQL query logic. This open approach allows MSDgen to use any standard relational DBMS such as Microsoft SQL Server and Oracle as its backend, with the very same source executable program.

MSDgen is also built on a normalized data model, resulting in data consistency, real life data modeling that allows the database schemes to closely reflect and replicate real-life situations, the consumption of less storage space since data is stored in an optimum manner, and significantly higher level of support of commercial level database optimization techniques.

Label Printing and SDS Distribution

MSDgen provides flexible options for the dissemination of critical communications to downstream customers and users.

MSDgen's extensive set of distribution options ensures your SDSs, labels and other regulatory documents are published, distributed and retrieved in any manner required. Using MSDgen's automated distribution options along with an interface to an order-entry system, SDSs may be printed or emailed as customer orders are processed. And, with the MSDSViewer web distribution add-on, SDSs in varying formats and languages may be searched and retrieved by a web browser via the internet or intranet. Full Label Production may be established so that MSDgen automatically generates the HazCom labels at the appropriate facility based on orders, shipping or production triggers obtained through an MSDgen interface to your company's ERP.

Automatic SDS Distribution

With an MSDgen interface to the corporate customer order system, SDSs are automatically distributed to customers as order transactions occur. Logic for SDS distribution is controlled in MSDgen and configured to meet your company's distribution preferences.

Examples of automated SDS distribution criteria include:

- Sending an SDS when the customer initially purchases a product
- Sending an SDS update when the information within an SDS has changed since the last distribution to the customer (distribution is based on the significance level of change)
- Re-sending an SDS when a year has passed since the customer last received an SDS for a particular product

When one of these conditions occurs, SDSs are distributed based on the preferred method for each customer—hardcopy or email. The SDSs are accompanied with user-defined cover letters that automatically include the recipient's name, a list of the attached SDSs and, optionally, an indication of what has changed on the SDS since the last distributed version. And, using the SDS Customer Delivery History module, users may immediately review all of the SDS distribution activity that has occurred for each customer.

If you would like to outsource the mailing and shipment of hardcopy SDSs to customers, please ask a sales representative about 3E Push Distribution Services.

Automatic Label Production

By operating an MSDgen interface in conjunction with the corporate customer order system, various types of labels, including transport and precautionary labels, are automatically produced to combine material classification information and material handling instructions with transaction specific data, including order number, net weight, shipping address and other information. These transaction oriented data fields can easily be incorporated into a label template. Various transaction types are supported and each type can stipulate the label template and the transaction data fields.

Unlimited Label Formats

MSDgen supports the generation of essentially any size and format label, including dozens of formats for country and regional regulatory compliance including country specific adaptations of GHS, in addition to unique formats designed specifically to meet unique business and industry requirements. MSDgen labels support any combination of sizes, symbols, bar codes and text.



OTHER FEATURES

COFFEE

MSDgen supports a powerful interfacing add-on tool called COFFEE. It can be used to import or export data within MSDgen as well as export PDF files. COFFEE is built to synchronize, with proprietary logging systems to optimize network traffic. It supports SFTP/FTP, HTTPS and local networks to provide secure connectivity. Additionally, COFFEE offers configurable PDF renaming functionality to support third party linking.

Transparent Data Extract

The transparent data extract works automatically as labels are finalized. Automatic processing ensures that the labeling information and translations align with the current version of the material. The information collected can be extracted to a standard output file through the use of the COFFEE tool.

CD/File Generation

MSDgen's CD/File Generation utility extracts any desired set of documents and delivers them in PDF format with a user-defined index file. Documents may be delivered as individual files or in a contiguous, streamed file. CD/File Generation may be automated with an MSDgen macro so that predefined sets of documents are automatically exported to their pre-determined destination at regularly scheduled intervals.

Label Designer

MSDgen users may utilize a designer with integrated functionality to create and maintain custom labels in virtually any format. Integrated functions make it easy to get regulatory content onto labels without having to understand how the data is stored or how MSDgen assigns classifications. MSDgen supports a built in workflow process to manage all of the labels available within the system. You can easily create custom versions of standard labels or unique labels to meet specific business requirements.

Automated Label Production

Labels are also automatically printed as part of a batch process that includes integration with an external ERP system. Order, production and shipping transactions trigger the printing of labels in an automated mode so that MSDgen automatically determines the facility/location where the label will be printed, as well as the size and language(s) of the label.

Any variety of SDS and label templates may be generated by MSDgen to meet international regulatory compliance and business requirements.

<p>Coating</p> <p>Hazard statement Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May damage fertility or the unborn child.</p> <p>Precautionary statement Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>Response If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If exposed or concerned: Get medical advice/attention. Call a poison center/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash before reuse. In case of fire: Use appropriate media to extinguish.</p> <p>Storage Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.</p> <p>Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.</p>	 <p>Danger</p>	<p>Supplemental information This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.</p>
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LABELgenerator

LABELgenerator is a robust web add-on that provides the additional option for printing labels authored using MSDgen through a standard web browser. LABELgenerator is seamlessly integrated with MSDgen yet, as a completely web-based application, requires no separate browser extensions.

LABELgenerator Smart Queue

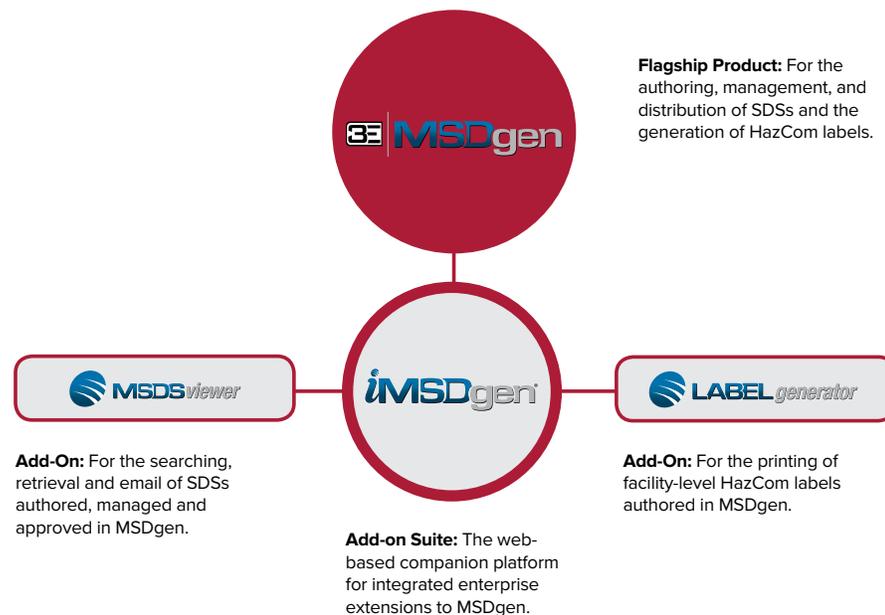
Leveraged with interface implementations, Smart Queue provides a means to group documents and dynamic label data into print jobs that can be easily generated and sent to a printer. Smart Queue allows users to search for jobs using values that appear in the dynamic data. The Smart Queue jobs can be easily accessed through LABELgenerator and MSDgen. When accessed through LABELgenerator content can be easily tailored to different audiences or requirements.

MSDSviewer

MSDSviewer is a web-based add-on designed for the search and retrieval of SDSs (and other documents such as Technical/Product Data Sheets) available on the intranet and internet. All SDS updates are available immediately through this website as they are updated and approved for release in MSDgen. The MSDgen database is used as the searching mechanism for MSDSviewer, which means any type of search is possible, including searches by product name, synonym, raw material code, CAS number and so on. Both authored and vendor supplied sheets may be accessed from the same web portal, allowing users to centralize document access to a single corporate website.

In addition to MSDSviewer's flexible search and retrieval features, the web add-on also includes the ability to select, queue and email documents directly from the web pages. This is ideal for intranet users who wish to fulfill ad hoc customer requests or for use by salespeople who need to quickly and easily provide SDSs and Technical/Product Data Sheets to potential customers.

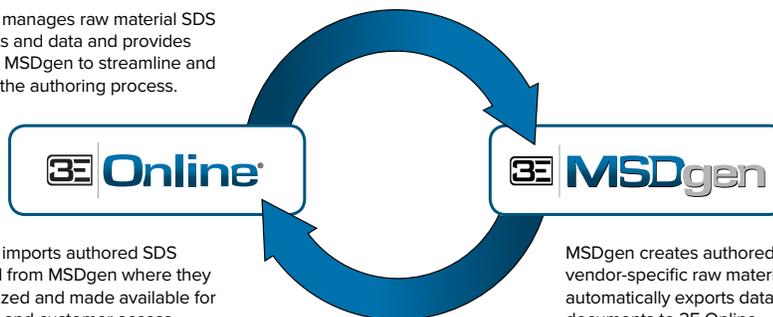
MSDgen SUITE AT A GLANCE



VENDOR SDS INTEGRATION BETWEEN 3E ONLINE AND MSDgen

In addition to implementing the full MSDgen product suite to manage SDS and label authoring, management and distribution within your organization, with optional integration with your ERP, PLM, or Formulation System, 3E may address a broader set of your business and regulatory requirements when MSDgen is implemented with integration to the 3E Online subscription service.

3E Online manages raw material SDS documents and data and provides exports to MSDgen to streamline and automate the authoring process.



3E Online imports authored SDS generated from MSDgen where they are organized and made available for employee and customer access.

MSDgen creates authored SDSs from vendor-specific raw material information and automatically exports data and authored documents to 3E Online.

CHOOSE 3E COMPANY

3E Company, a Verisk Analytics business, is a global provider of data and information services which enable companies to improve compliance with EH&S regulations and supply chain obligations through the entire lifecycle of chemicals and products. Whether you are a manufacturer, distributor or corporate user of chemical products, 3E can tailor a program specific to the compliance information and management needs of your organization. For more than 25 years we have led the industry in obtaining and managing content, offering unique insights and solutions that enable customers to reduce cost and risk while improving processes across the enterprise and throughout the supply chain. Global locations include our corporate headquarters in Carlsbad, California along with offices in Bethesda, Maryland; Canton, Ohio; Copenhagen, Denmark; Kingsport, Tennessee; Montreal, Quebec and Tokyo, Japan.

Want to learn more?

Contact 3E at info@3ecompany.com or +1 760.602.8700 / +1 800.360.3220.