3E Optimize

Verisk 3E

Access value added regulatory content and product data within SAP

Environmental health and safety (EHS) and product teams are required to track hundreds of regulations in multiple jurisdictions governing the thousands of substances and products on which their business depends. They're struggling with shrinking resources, complex and continually changing regulatory obligations, market-specific requirements, rapid fire customer demands and increasing consumer pressure for sustainability and transparency. Lack of access to comprehensive, centralized chemical regulatory data makes protecting customers, employees, the brand and the bottom line that much harder.

3E Optimize™ from Verisk 3E™ can help. By seamlessly integrating our industry leading substance level regulatory content and scientific data into your SAP® system, 3E Optimize can empower your team with access to value added global product and compliance information throughout the product lifecycle and across the enterprise.

Only 3E Optimize can combine the power of rich global chemical regulatory content; physical, chemical, toxicological and eco-toxicological data; supplier data; expert rules logic; multilingual phrase libraries and SDS templates plus sophisticated data loading and management to deliver a truly effective integrated content solution for SAP.

Feed comprehensive regulatory content directly into SAP

For more than two decades Verisk 3E has worked closely with SAP AG, SAP America and its partners to establish and enhance a best practice solution for integrating regulatory content into the SAP EHS and Recipe Development (RD) modules. More than 60 chemical manufacturers and major chemical users worldwide rely on our regulatory content for their SAP system. No EHS regulatory content provider has more experience integrating data into SAP.

The global scope of Verisk 3E's specialized team of regulatory analysts and researchers plus the breadth and depth of our content—which spans more than 500,000 substances—is unmatched.

What 3E Optimize for SAP Can Do For Your Organization

LEVERAGE ACTIONABLE INTELLIGENCE WHEN, WHERE AND HOW YOU NEED IT

Our 3E Optimize content includes thousands of chemical control laws plus food, pharmaceuticals, personal and home care regulations and other industry specific standards for 500,000+ chemical substances in 100+ countries.

The number of countries covered and depth of regulatory and legislative information provided offer unparalleled support for proactively identifying, monitoring and complying with continually changing EHS requirements, product stewardship obligations and customer demands.

ACCESS UP-TO-DATE REGULATORY CONTENT WITHIN SAP

Our extensive, expertly curated multilingual content includes substance level regulatory data and full text source documents. Content is based on official government sources in their respective countries and value added by our regulatory specialists who leverage a unique combination of scientific, legal and information technology domain expertise. Data is updated quarterly to keep users' systems current as regulations are added and amended.

We continue to evolve to better serve our customers.

Verisk 3E
Formerly 3E Company

3E Generate
Formerly MSDgen®

3E Optimize
Formerly Ariel® Integrated Content

3E Connect
Formerly 3ESC® Supply Chain Solutions

3E Monitor
Formerly Regulatory Monitoring

3E Insight for Chemicals
Formerly Ariel WebInsight

3E Insight for Food
Formerly ArielLogic

3E Protect
Formerly 3E Online® - SDS

CHOOSE THE CONTENT THAT MEETS YOUR NEEDS

Regional Product Safety Coverage

Regional regulatory data provides extensive coverage of regulated chemicals throughout the world at multiple levels of jurisdiction.

Substance level product safety data includes 2,000+ chemical control regulations and spans topics including workplace safety, consumer products, pharmaceuticals, food contact and classification and labeling including GHS.

PCTEC

A comprehensive collection of physical, chemical, toxicological and eco-toxicological data encompassing hundreds of endpoints such as water solubility, carcinogenicity and bioaccumulation for hundreds of thousands of substances.

Generics

All content is supported and enhanced by Generics which help identify regulatory requirements for chemicals that are not specifically named in regulations but are regulated under a generic classification as members of broad regulatory classes.

Targeted Industry Content

Global industry specific content packages include:

- Food and Beverage: Prohibited ingredients, quantity restrictions, application area, regulatory reference, positive/negative statements and more
- Food Contact: Regulations related to plastics, printing inks, glass, paper, ceramics, metals and other food contact materials and more
- Personal Care/Cosmetics: Positive lists and inventories for cosmetics substances, lists of restrictions specific to threshold and application category and more
- Pharmaceuticals: Drug precursors, controlled, narcotic and psychotropic substances and more

Regulatory Transportation Data - Dangerous Goods

The transportation module provides regulatory data for the transportation of hazardous materials worldwide spanning multiple modes of transportation, jurisdictional boundaries and language requirements.

STREAMLINE DATA LOADING AND MANAGEMENT

Global Content Manager

Our Global Content Manager data and document loading tool enables the efficient upload and maintenance of 3E Optimize content in your SAP system, compiling, verifying and loading the data.

Global Content Manager is a unique vehicle for loading and updating content directly from our servers, offering users ultimate flexibility and control over the application of complex legal requirements. The application provides regulatory change management and impact analysis as well as hazard classification support.

Cloud Delivery

Content can also be delivered via the cloud, reducing the cost and complexity of information technology (IT) setup and maintenance as well as accelerating content updates. Content is available via a secure application in the cloud that communicates via a local proxy with your SAP EHS system.

Cloud delivery eliminates time consuming and resource intensive manual data maintenance processes, reduces technical requirements, simplifies deployment and makes software and content updates immediately available.

3E Optimize product safety, PCTEC, dangerous goods and food, pharmaceuticals, personal and home care content is available for integration with SAP via the cloud.

Intelligent compliance. Sustainable progress. **A safer world.**

UTILIZE INTEGRATED EXPERT RULES LOGIC, PHRASE LIBRARIES AND TEMPLATES

With our comprehensive package of system integrated, multilingual and multi-jurisdictional hazard communication Expert Rules, Multilingual Phrases and SDS Templates you can reduce time spent researching, understanding and applying global chemical regulatory requirements and ensure that SDSs and other documents are compliant with country-specific regulations.

By enabling the automation of compliant SDS authoring in SAP EHS, 3E Optimize can empower your team to:

○ Accelerate the introduction of new products to market and existing products to new markets

○ Manage increased regulatory pressures and customer requirements

○ Enhance the quality of documentation by eliminating manual processes

○ Reduce the burden on your compliance team

○ Decrease the risk of delays or fines due to inaccurate documentation

Expert Rules
The Expert Rules module enables SAP users to apply automated logic to the substance database in SAP EHS to create compliant SDSs and labels. Expert Rules can eliminate variations in SDS authoring, as well as human error, and ensure the consistent application of country-specific requirements.

Expert Rules are specifically programmed for SAP EHS and can calculate product composition, check the regulatory status of substances and determine disclosure requirements. The rules also classify products (single substances or mixtures) for countries' regulations, including GHS.

The programs make determinations using data such as physical-chemical properties, toxicological test results and safety data just as an author would. The result is automated population of each section of an SDS and other documents mandated by a regulation. Using Expert Rules saves time and reduces uncertainty in evaluating the regulatory status of products and determining SDS and label content.

Expert Rules are available in a variety of rule sets segmented by geography or regulation including GHS and transportation classifications.

Rules Builder
Verisk 3E's Rules Builder creates rules for the automated population of content into the SAP EHS Property Tree. Rules Builder's intuitive, user friendly interface enables you to configure and generate rules required to automate the document authoring process in SAP EHS. The application eliminates the need for IT expertise while providing SAP EHS users flexibility and control over the way Expert Rules are applied.

Based on predefined criteria, the rules assign content to multiple characteristics in the SAP Property Tree

from where the content is pulled and populated into the various sections of an SDS. Rules Builder is installed and configured with the latest SAP Property Tree and active phrase library. Once configured the application is ready to author new or modify existing rules content.

Multilingual Phrases
Available in more than 40 languages and offered in multiple language packages, Multilingual Phrases streamline and simplify the creation and authoring of SDSs, Extended Safety Data Sheets (eSDSs), labels and other documents by automatically translating standard health and safety phrases into multiple languages.

All phrases have been thoroughly reviewed by native language experts to ensure accuracy and consistency of terminology. They are optimally configured for import into the Unicode-based SAP system.

3E Optimize phrase libraries are mapped to the respective SAP EHS properties and characteristics and delivered in a series of SAP EHS-ready import files. Phrase libraries include:

○ Multilingual Regulatory Phrases – More than 4,000 regulatory phrases including titles of regulations, Risk and Safety and GHS phrases with substance classifications published by government authorities including notes, hazard and precautionary statements, classifications and classification categories; value type phrases such as skin notations, ceiling values, TWA, OEL phrases and warning statements.

○ Multilingual SDS Phrases – More than 6,000 phrases required for SDS authoring, including headers and sub-headers.

○ Exposure Scenario Phrases – Exposure Scenario (ES) Phrases for authoring REACH-compliant eSDSs. ES Phrases can be used to create and translate ESs as well as the Exposure Scenario Annex to the EU SDS.

Templates
SDS Templates provide a preconfigured library of regional and country-specific SDS and label document templates that can be tailored to your company's requirements.

Beginning with generalized templates based on country-specific or regional (EU) regulations, Verisk 3E experts can support the creation of company-specific templates in your SAP EHS system to generate documents consistently reflecting your global brand identity and in compliance with local regulations.

FEED VENDOR SDS DATA INTO SAP EHS

3E Optimize provides a powerful combination of SDS content and a robust loading tool for importing data directly into the Specification Database of SAP EHS. Verisk 3E is the only company able to provide a single solution for obtainment, tracking, access and enterprise integration of both regulatory and vendor SDS content in SAP EHS.

The SDS Content module can feed raw material vendor SDS data into SAP to fulfill employee right to know and workplace safety obligations by providing easy access to a centralized set of updated SDSs for all employees. Users can quickly review and import SDS documents from suppliers in SAP EHS, streamlining manual and time consuming tasks.

3E Optimize enables SAP users to efficiently load and maintain product level SDSs and SDS metadata. In addition to the entire SDS image composition, classification and key physical-chemical data can be imported directly into the Standard Property Tree for use in rules, reports and compliance activities.

Verisk 3E will keep your supplier SDS data up to date, providing efficient change management and regular updates as SDSs change. Simply provide a list of vendor products. Our team will cross reference the list against our library of more than 7 million SDSs and feed the data directly into your system.

With 3E Optimize you can centralize data on the standard SAP platform, eliminating point solutions and redundant data maintenance. You can also more effectively leverage vendor data for substance volume tracking, exposure profiling, regulatory reporting, etc.

MAXIMIZE THE VALUE OF YOUR SAP SYSTEM

Tight integration with SAP optimizes many critical functions:

- Streamlined integration with SAP's Recipe Development application enables users to seamlessly load our data into the SAP property tree to utilize the Compliance Check functionality.
- Comply with industry specific regulatory requirements covering food, personal care, home care and pharmaceuticals. Content encompasses restricted/banned substance lists along with their functional and end product use as well as applicability thresholds, enabling compliance checks, certificate generation, suitability reviews and supplier assessments.
- Your team can quickly and effectively determine the impact of changing regulations on products in the SAP EHS system. Our product impact analysis module can generate a report showing regulatory impact down to the ingredient and SAP characteristic level for analysis and reporting.
- Our transportation content provides the necessary data for UN List Substances to enable classification in the SAP EHS module. The data populates Dangerous Goods Checks, Shipping Papers and Section 14 of the SDS in English, French, German and Dutch.
- SAP users can utilize integrated product level SDSs and SDS metadata for downstream compliance checks and reports.

Choose Verisk 3E

Verisk 3E, formerly 3E Company, delivers intelligent compliance solutions that empower companies to reduce risk, drive continuous improvement and create new growth opportunities. For 30 years Verisk 3E has provided clients with the expertise, content, live 24-7-365 EHS support and award winning solutions required to increase chemical and workplace safety, improve product safety and stewardship, strengthen supply chain stewardship and optimize research and development decision support.

We are deeply committed to serving our more than 5,000 customers worldwide, including seven of the world's top ten chemical manufacturers, seven of the world's top ten retailers and seven of the world's top ten pharmaceutical companies. Global locations include our corporate headquarters in Carlsbad, California along with offices in Beijing, China; Bethesda, Maryland; Canton, Ohio; Copenhagen, Denmark; Montreal, Quebec and Tokyo, Japan.
Visit us at www.Verisk3E.com.

Intelligent compliance. Sustainable progress. **A safer world.**