



Digital Transformation in Product Stewardship

Enabling Excellence in Global Regulatory Compliance

Experts in Product Stewardship Digitization

As a leading global EHS&S consultancy, ERM provides Process and Discrete Manufacturing companies with a compelling set of expertise for Product Stewardship digitization.

We combine our Digital Services capabilities with an in-depth understanding of the regulatory landscape, enabled through leading technology solutions, to establish and maintain rigorous enterprise-level Product Stewardship business services.

Our services help our clients achieve:



Improved operational efficiency



Regulatory compliance excellence



Integrated decision support & control

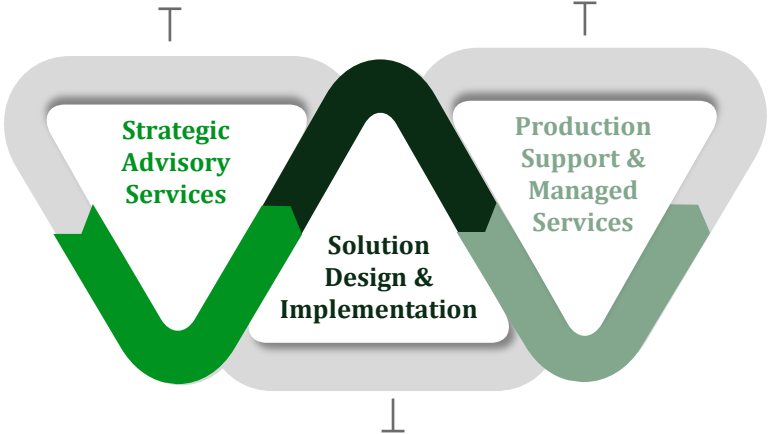


Risk & cost reduction

Our Offerings

Together, ERM's Product Stewardship and Digital Services Teams uniquely cover the product lifecycle from ideation to end of life. This includes all the operational – SDS, label, dangerous goods, and product compliance / SVT – aspects in between.

- Global Product Stewardship Regulatory & Business Process Consulting
- Solution Strategy & Requirements Development
- Adoption & Stakeholder Engagement
- Deployment Planning & Change Management
- SDS Expert Systems Authoring
- Integrated & Automated Product Compliance Assurance
- Regulatory Monitoring - Data & System Compliance



- Process Improvement & Automation
- Data Management
- Global Implementation, Support & Training

About the ERM Team

We package our domain expertise, digital technical skills, business process enablement and change management expertise to deliver effective and impactful projects.

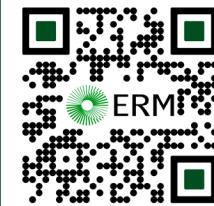
Our specialized Digital Services Product Stewardship team features:

- Product stewardship regulatory and systems integration specialists
- A dedicated SAP practice:
 - Certified since 2013, we are a Silver Partner and SAP's leading global EHS implementation affiliate
 - Recipient of SAP's Pinnacle and Sustainability Partner of the Year awards
- Global implementation partner with 3E
- 100+ years of combined experience in process manufacturing, with chemical sector emphasis
- Global SDS authoring process and content experts



Our Global Reach

Scan QR Code for
ERM Global Digital
Services SAP Product
Compliance Practice
Comprehensive
Overview



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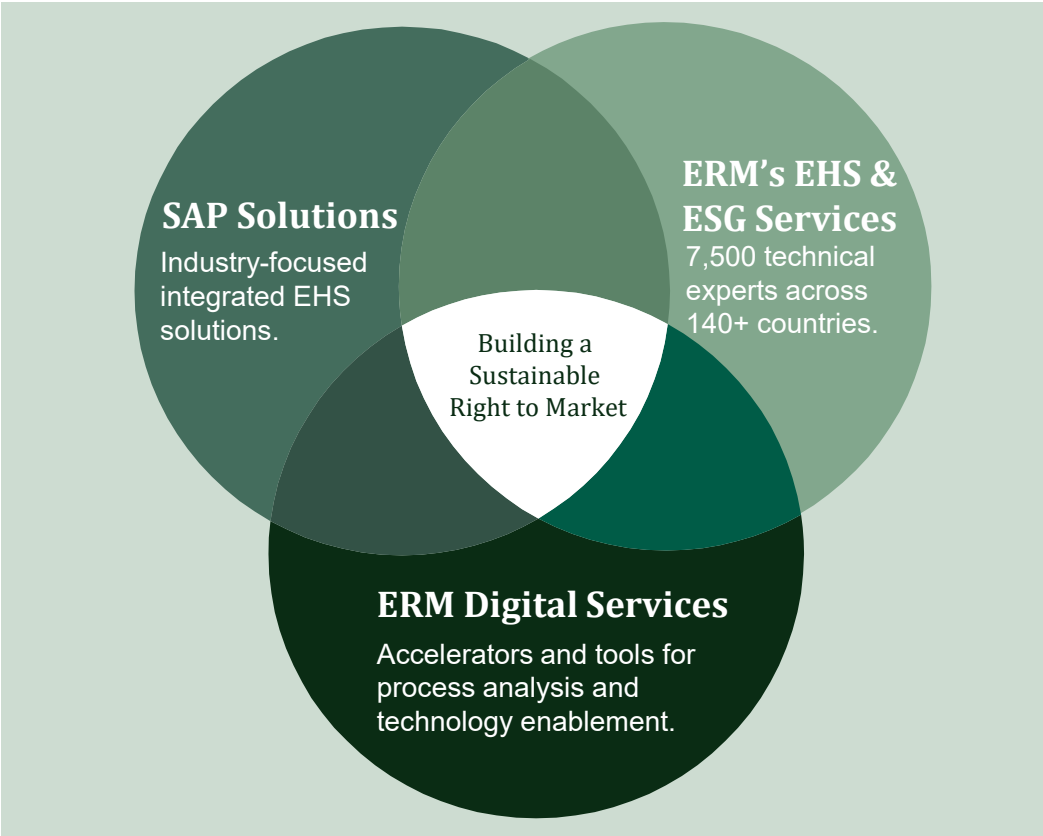
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S/4HANA EHS & Sustainability Global System Integration Experts

Enabling Excellence in Global Regulatory Compliance

The SAP & ERM Partnership

Our 15+ year relationship provides companies with leading global advisory, compliance, and implementation services across the spectrum of the SAP EHS&S Suite of solutions.



ERM SAP EHS&S Suite Global Specialists: Full Life Cycle Support – Presales to Deployment

We focus on solution strategy, design and deployment. Our technology-enabled transformations meet your EHS, sustainability, risk & compliance requirements.

	Global EHS Implementor Certified since 2013, ERM is a global Silver Partner and SAP's leading global EHS Product Compliance systems integrator.		A Dedicated SAP Practice ERM has SAP EHS&S Suite specialists globally with extensive Product Compliance, EHSM and Sustainability implementation expertise.
	Full Deal Life Cycle Services We offer presale strategy and system demos, through to technical implementation, change management, training and ongoing sustainment support.		Fully Integrated Partner SAP Product Compliance co-innovation Partner. Maintain Solution Mgmt. & Product Development relationships. Extensive internal S/4HANA EHS&S Suite demo, train and test environments.
	Deep Industry Expertise 100+ years of combined experience broadly across manufacturing, with chemical process sector emphasis.		Award-winning Recipient of SAP's "Pinnacle" and "Sustainability Partner of the Year" awards.

Our Global Team

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Our Global Reach



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Our services help our clients achieve:



Improved
operational
efficiency



Regulatory
compliance
excellence



Risk & cost
reduction



Integrated decision
support & control

Integration of External SDS Authoring Systems with SAP S/4HANA Product Compliance

THE SAP S/4HANA PRODUCT COMPLIANCE SOLUTION FACILITATES EARLY ADOPTION THROUGH SEAMLESS INTEGRATION WITH EXTERNAL SAFETY DATA SHEET (SDS) AUTHORIZING TOOLS SUCH AS 3E GENERATE AND SPHERA IA.

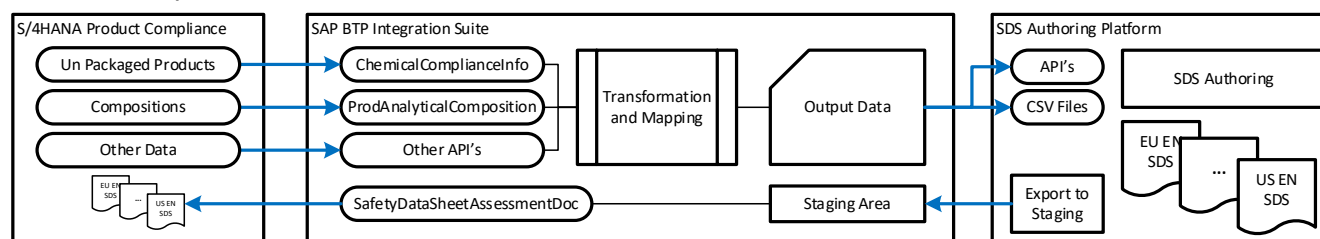
ENABLING SDS FUNCTIONALITY IN S/4HANA PRODUCT COMPLIANCE

If SAP Classic Product Compliance (PC) is a viable option, it should be the first choice. Organizations can leverage the 3E Hybrid Adapter to integrate SAP Classic PC with S/4HANA, ensuring continuity of Safety Data Sheet (SDS) authoring capabilities while benefiting from other advancements in S/4HANA.

However, when SAP Classic PC is not a viable option, alternative solutions must be considered. The adoption of SAP S/4HANA Product Compliance is currently constrained by the absence of native SDS authoring capabilities in its existing release. To overcome this limitation, organizations can integrate with external SDS authoring solutions such as 3E Generate and Sphera IA. These platforms provide robust SDS authoring capabilities and integrate with S/4HANA Product Compliance for the management and distribution of SDSs within SAP, ensuring regulatory compliance. ERM can leverage SAP APIs and the SAP Business Technology Platform (BTP) to enable seamless integration with these external tools, allowing organizations to harness best-in-class functionalities. This approach accelerates adoption while eliminating the need to wait for a fully embedded solution.

UNDERSTANDING THE ARCHITECTURE

SAP Business Technology Platform (BTP) Integration Suite is a comprehensive, cloud-based middleware solution that enables seamless connectivity between SAP and non-SAP systems, whether they are on-premises or in the cloud. It provides a robust framework for integrating applications, orchestrating business processes, and exchanging data securely through APIs, events, and pre-built connectors.



In the context of external SDS (Safety Data Sheet) authoring tools, SAP BTP Integration Suite plays a crucial role in bridging the gap between SAP S/4HANA Product Compliance (PC) and third-party SDS generation platforms. Product Compliance data—such as substance compositions,

classifications, and regulatory information—can be extracted from SAP S/4HANA PC and transmitted to an external SDS authoring tool via Integration Suite. The SDS tool then processes this data to generate legally compliant SDS documents, which are subsequently imported back into SAP S/4HANA PC for storage, distribution, and compliance tracking.

REALTIME PROCESS INTEGRATION

The integration between SAP S/4HANA Product Compliance (PC) and an external SDS authoring platform via SAP Business Technology Platform (BTP) enables seamless, real-time data exchange to streamline Safety Data Sheet (SDS) management. The process follows these key steps:

Product Steward Creates or Updates the CCI in SAP S/4HANA PC

The Product Steward initiates the SDS process by creating or updating the Compliance Composition Information (CCI) in SAP S/4HANA PC. This includes defining the substance composition, regulatory classifications, and other relevant compliance data.

SAP BTP Detects the Release/Save Event and Triggers Data Transfer

SAP BTP Integration Suite continuously monitors SAP S/4HANA PC for release/save events related to the CCI. Upon detecting an update, BTP automatically triggers a secure data transfer process to the external SDS authoring tool. The required compliance data is extracted, transformed (if necessary), and sent to the external environment via APIs, message queues, or file-based transfer.

External SDS Authoring Tool Processes the Data

Once the SDS platform receives the transferred product compliance data, the Product Steward completes the authoring process. The authoring tool uses the received data to generate the SDS, ensuring compliance with regional and global regulatory requirements.

SDS and Metadata Are Exported to a Staging Area

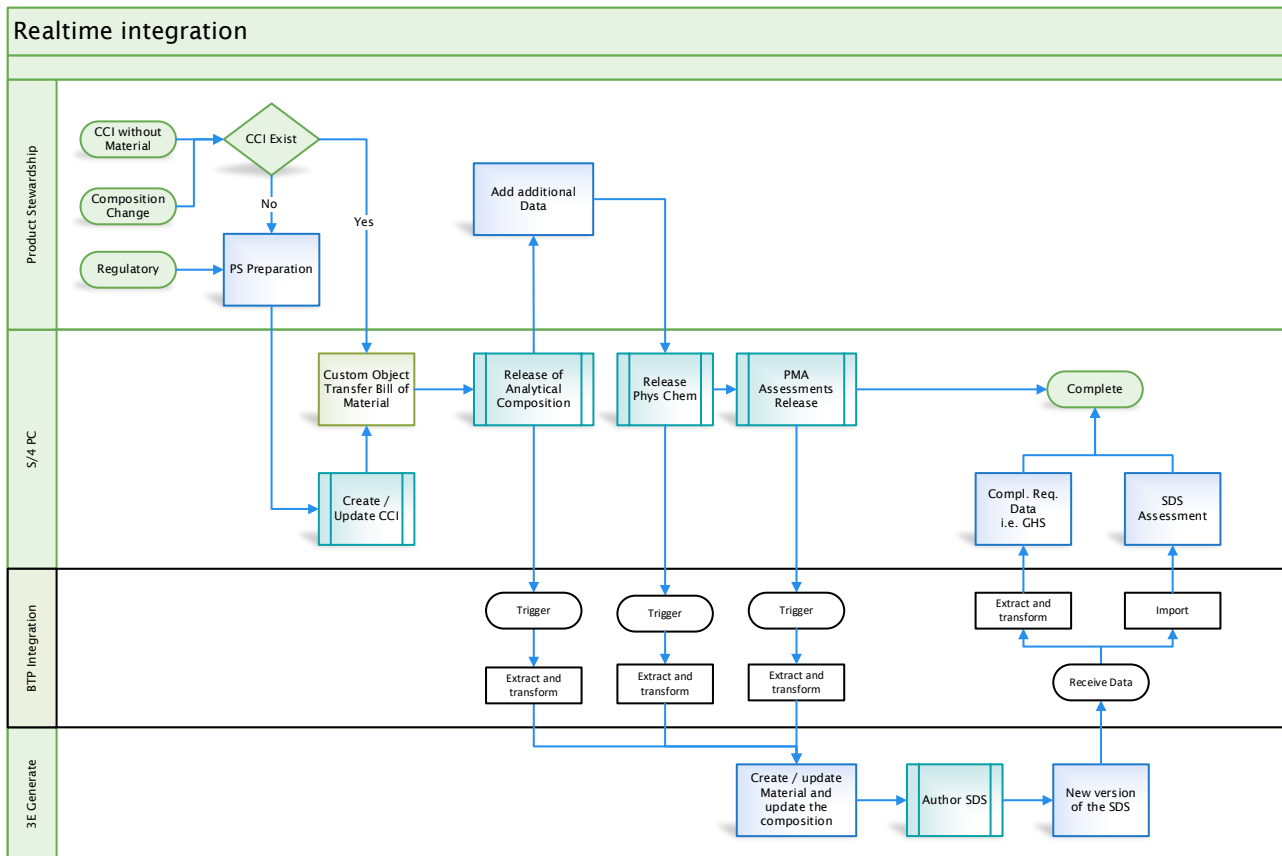
Upon SDS completion, the authoring tool exports the SDS document (e.g., PDF, XML) along with metadata such as version, validity period, and language. The exported data is placed in a predefined staging area (e.g., an SFTP server, cloud storage, or message queue) for SAP BTP to pick up.

SAP BTP Monitors the Staging Area and Initiates Import into SAP S/4HANA PC

SAP BTP continuously monitors the staging area for newly delivered SDS files and metadata. Upon detecting new data, BTP triggers an automated import process into SAP S/4HANA PC. The SDS document and metadata are mapped into SAP's internal format and imported.

Product Steward Completes the Release in SAP S/4HANA PC

Once the SDS is successfully imported, the Product Steward performs a final validation in SAP S/4HANA PC. The SDS is then officially released, making it available for regulatory reporting, customer distribution, and compliance audits.



Key Benefits of This Integration Approach

- ✓ **Real-time Data Synchronization** – Ensures that SDS authoring tools always have the latest product compliance data.
- ✓ **Automated Workflows** – Reduces manual effort and potential errors in SDS generation and import.
- ✓ **Regulatory Compliance** – Ensures that the latest SDS versions are maintained in SAP S/4HANA PC for distribution.
- ✓ **Scalability** – Can support multiple external SDS platforms with standardized integration via SAP BTP.

By combining SAP's cutting-edge technology with ERM's industry-leading expertise, organizations can achieve a fully automated and regulatory-compliant SDS integration, reducing manual effort, improving accuracy, and ensuring timely distribution of critical compliance documents.

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