## Accurate listing of hazardous materials

DATACROSS | Regulations such as those in the Hong Kong Convention [2] require accurate lists of hazardous materials on ships. tec4U-Solutions Germany's GmbH says its material-compliance software DataCross is the first to enable the material-related requirements in the Hong Kong Convention, REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals), RoHS (Restriction of Hazardous Substances), etc to be holistically mapped and evaluated. These product liability requirements can thus be met from the development stage to procurement, production, use and processing, allowing companies to guarantee the conformity of their products with applicable laws and customer requirements while minimising their business-related and personal risks.

DataCross is based on the material data communication platform MSD.web, which tec4U has been successfully operating for many years, helping companies integrate material compliance into their processes and supporting them in the operative communication of material-related data.

In addition to implementing Germany's DIN EN 50581

standard – as already realised in MDS.web - DataCross takes effect at the development stage of the company process.

## Features and modularity

A new risk-assessment module enables potential new suppliers and their deliveries to be vetted for material compliance in the early stages of construction. By supporting the registration and quantification of substance-related risks, the module also makes it easier to avoid them.

The developers of DataCross have paid particular attention to ensuring the expandability of this module so that new, customer-specific regulatory requirements can be integrated quickly. A customisable questionnaire module enables the material compliance-related qualification of a supplier and/or general product information to be scrutinised at various levels of detail. It thus provides valuable information for assessing the material compliance risk of the real-life supplier or supplied product, and serves as a first indicator for assessing the actual product risk.

The fact that every customer is offered an individual solution will enable smaller companies, for example, to implement their material data communication and its evaluation with minimal cost and training by way of the Basic Version. Larger companies that also wish to safeguard their development process and require further information in their supplier communications can rely on tec4U's Professional Version.

## **Future viability**

To make sure that DataCross also meets the latest standards in technical software terms, tec4U has entered into a cooperation agreement with Mansystems Deutschland GmbH, an independent solution and IT service provider that has specialised in process automation and service management solutions. Mansystems uses the Mendix platform, among others, as a visual and cloud-based development environment - a platform that DataCross will also be based on in future. The partnership is flanked by the SiCoCheC project, funded by the German Federal Ministry of Education and Research. Besides tec4U and Mansystems, the project partners of SiCoCheC include the German Research Centre for Artificial Intelligence

(DFKI) and CBA GmbH, a laboratory for chemical product consultancy and analysis. The DFKI mainly contributes the results of cutting-edge research to the software, while CBA provides comprehensive knowledge about materials. Regarding software technology, DataCross has set some ambitious targets. In the future it will be possible to choose between storing the product information in a cloud or processing it on servers in the DataCross in-house system, for example. Vouching for the security of the "cloud" system at a European location are Mendix's references, which include many bank and insurance applications. The security standards in question will also be available for DataCross.

## References

References
[1] DIN EN 50581: VDE (German Association for Electrical, Electronic + Information Technologies) standard that serves as a RoHS implementation guideline and is an accepted technical standard for implementing material compliance.
[2] Hong Kong Convention: International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009
[3] RoHS: 2011/65/EU (RoHS): EC directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment.
[4] REACH: Regulation 1907/2006/EC concerning the registration, evaluation, authorisation and restriction of chemicals. SVHC (substances of very high concern) are substances that are classified as dangerous and considered to be carcinogenic, mutagenic, toxic for reproduction, persistent or bioaccumulative.

