

Scope Question support

Substance Compliance and Integrated Material Management

The complexity and the number of material and substance related regulations is continuously increasing.

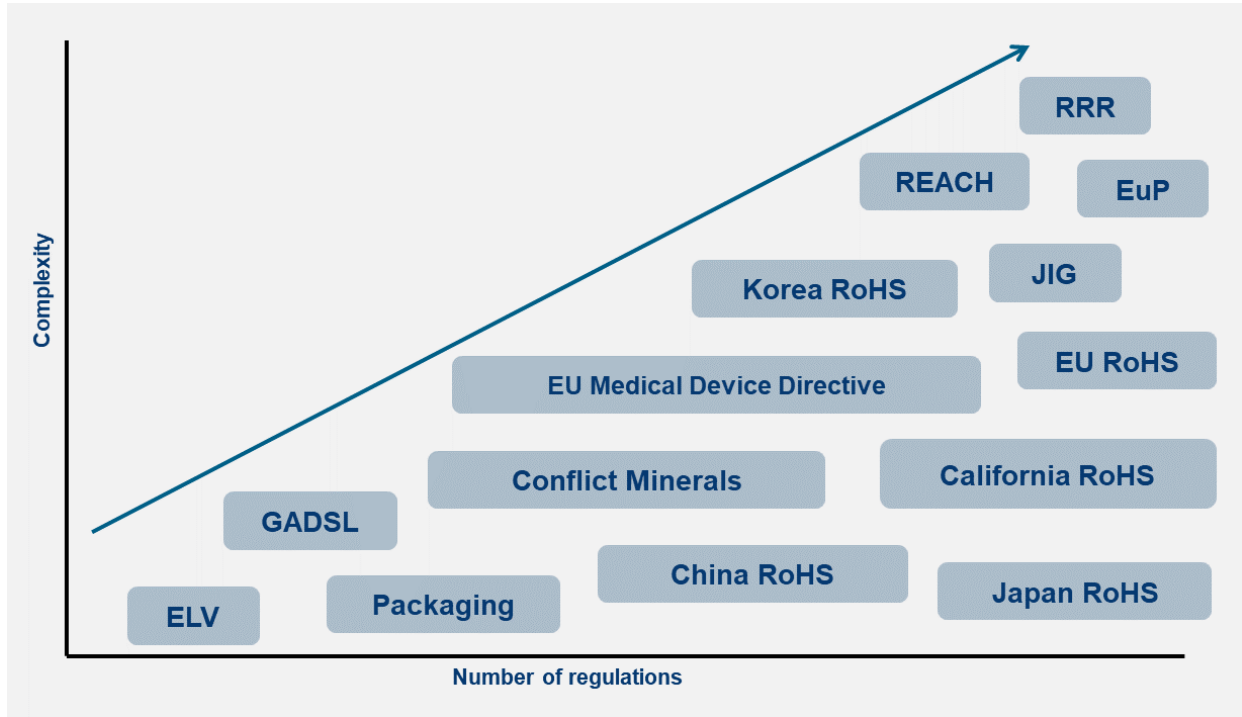


Figure 1 Increasing Complexity and number of Regulations

A good example of the increasing complexity is the 11 different Product Categories within the RoHS 2011/65/EU list. Based on the applicable category for a final product the relevant expiration dates for one of the Annex III and Annex IV Exemptions varies.

The example below illustrates the different expiry dates for the exemption 7(a). Depending on the usage of my final product I have different dates before the exemption is no-longer valid.

Exemption	Applicable to categories:	Expiry Date
Annex III n. 7(a)	8 and 9 other than in vitro and industrial	21.07.2021
Annex III n. 7(a)	8 in vitro	21.07.2023
Annex III n. 7(a)	9 industrial	21.07.2024
Annex III n. 7(a)	11 other EEE	21.07.2024

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32011L0065>

This adds more complexity to the validation of your in-house Bill of Materials (BOMs), and in the validation of your supplier declarations.

To address this complexity, we have introduced Scope Question support, and a comprehensive condition engine within Teamcenter Substance Compliance 4.2

With the new Scope Question support, the user has the opportunity to answer Ruleset (objects in Teamcenter used to grade for compliance against regulations) specific questions to generate a more specific compliance result for products. The Scope Questions which the user answers on a BOM element or a Supplier declaration then drives the thresholds for the individual Substance Groups, or the list of applicable exemptions.

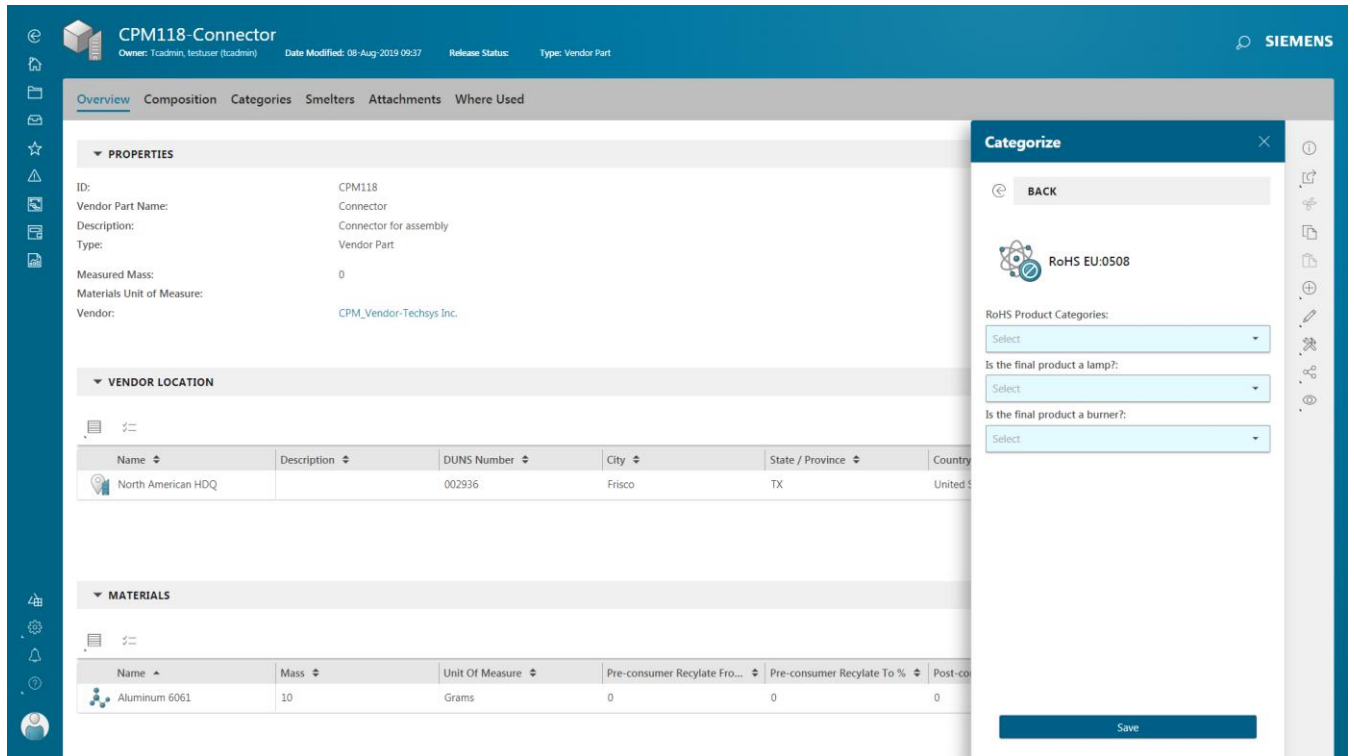


Figure 2 Compliance Officers answers Scope Questions for RoHS EU:0508

The Scope Questions are now included in the latest RoHS Regulations available already on Siemens GTAC. Also, the Compliance Officer can now add their own Scope Questions and their own Conditions to the Rules Editor when creating or editing custom Rulesets.

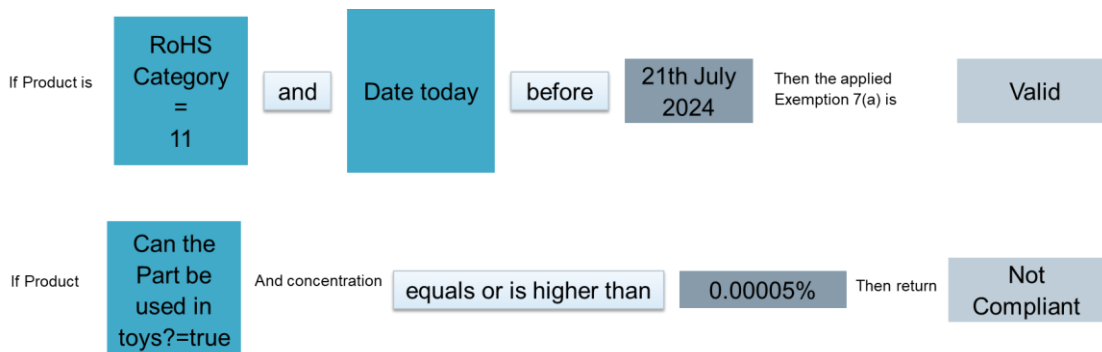


Figure 3 User enters values for pre-defined questions (blue). Based on the user input the compliance results gets more precise.

The extension to the grading framework is designed to be flexible, to help companies address changes to existing legislation, and also address new legislation.

Before the user had to manually overwrite compliance results and interpret the results based on his compliance expertise. "I know my product is used as a medical component and hence in Category 8. Hereby I can still use this exemption even, so it is no longer valid in Category 1-7. For a large BOM with hundreds of RoHS2 exemptions the risk of overseeing certain exemptions is hereby relatively high.

By adding the Scope Questions to the Substance Compliance solution, the needed human interpretation is now significantly reduced, and done by the substance compliance engine. Through the open framework changes from the regulatory bodies can be easily implemented and made available to the compliance officer in Teamcenter.