



## MSDS Authoring and Distribution

MSDS Authoring and Distribution, or Outbound MSDS Management, is designed to meet the regulatory requirements of domestic and foreign jurisdictions. The requirements of the ANSI format and the EEC needs were used in the development of the system. It supports the UN's Global Harmonization System (GHS), and EU's REACH and Classification, Labeling and Packaging of Chemicals (CLP) requirements.

Companies that produce MSDSs have unique customer and regulatory requirements. For that reason, a special solution is needed for data processing for material safety data sheets. Quantum Compliance Systems has considered the needs of a number of companies that must produce and distribute MSDSs and provides a solution for such needs.

The product includes the following benefits and more:

- Supports construction of data sheets with varying formats including GHS;
- Generates MSDS in any language;
- Populates MSDS based on algorithms at ingredients, characteristics, or list membership levels;
- Calculates product and aquatic toxicity based on chemical level toxicity data;
- Interfaces with external formulation database to automatically generate MSDS data based on bill of materials (recipe);
- Determines product classification for each of the 28 GHS and CLP categories;
- Holds one set of MSDS data but generates MSDS with different marketing names and logos;
- Updates multiple sheets at once;
- Contains the CLP Annex II table 3.1 and 3.2 data;
- Includes non-standard phrases (user defined), sentences, and or paragraphs;
- Hides comments or citations on sheets for external distribution to preserve internal confidentiality;
- Links to List-of-Lists to make comparisons and exception reports;
- Determines inclusion or exclusion of ingredients on a printed MSDS;
- Supports interfaces to labeling systems;
- Links to order entry system with a logical triggering system for the distribution of the data sheets;
- Creates audit trail records when sending data sheets to a customer or requester;
- Stores revision indicators for quick tracking of changes and alterations;
- Provides EDI delivery capability when choosing the EDI format as an output template; and
- Routes MSDS for sign-off, concurrence, or similar features.

These functions are grouped in different FacTST™ features. Each company can select from the features needed to satisfy their current MSDS authoring needs while allowing for future growth and development.



## DOCUMENT DELIVERY

This feature automates the labor required to distribute material safety data sheets to clients, whether they are internal or external to the company. Customer records are maintained in FacTS and have a history of the MSDS sent. New orders are reviewed to determine the need to print out an MSDS, using predefined programming triggers such as a revision to an MSDS or a first time order. Users can write standard letters to accompany the MSDS within FacTS. Once the system flags that a MSDS is required, FacTS prints out a user-defined, language and region specific form letter and appropriate MSDS for the customer.

## MSDS ALGORITHM

This feature allows the user to create and populate an MSDS from ingredient or characteristic based rules. Using the Algorithm feature, companies can associate various standard phrases to their MSDS at the chemical ingredient level. Users control the algorithms that assign priority to these standard phrases when one or more is applicable to an MSDS. In addition, multiple identifying lists such as EINICS and RTECS numbers can be referenced against each chemical ingredient to trigger information on the data sheet.

<a href="#">Risk and Safety Phrases</a> <a href="#">Fixed Phrases</a> <a href="#">Target Organ Phrases</a> <a href="#">Ingredient Alias</a> <a href="#">Tradename Alias</a> <a href="#">Item Alias</a> <a href="#">Field Label Translation Utility</a> <a href="#">MSDS Catalog Utility</a> <a href="#">Single MSDS Catalog Utility</a> <a href="#">Line of Business Definition</a> <a href="#">Template Output Replacements</a>	From Code ID: <input type="text" value="TX14"/> To Code ID: <input type="text"/> Description: <input type="text"/> contains <input type="text"/> Sort Option: <input type="text" value="Code"/> From Language ID: <input type="text" value="LOOKUP"/> To Language ID: <input type="text" value="LOOKUP"/> Records per Screen: <input type="text" value="10"/>	
<a href="#">administrative</a> <a href="#">Login</a> <a href="#">Logout</a>	Retrieve Records with these buttons: <input type="button" value="First"/> <input type="button" value="Previous"/> <input type="button" value="Next"/> <input type="button" value="Last"/> <input type="button" value="Refresh"/>	
Phrase	Description	Verbatim
TX14	Methylene chloride is harmful by inhalat	Methylene chloride is harmful by inhalation. Continued or high exposures by inhalation will cause anaesthetic effects. This may result in a loss of consciousness and could prove fatal. Repeated exposure to high levels of methylene chloride may produce adverse effects on the liver and kidneys. Some tests on laboratory animals have shown methylene chloride to be carcinogenic. It is classified as a Category 3 carcinogen. Well established species differences have shown the carcinogenic response in laboratory animals to be of little relevance to man and that methylene chloride does not represent a carcinogenic risk under foreseeable conditions of handling and use.
TX14	Formaldehyde	Contains traces of Formaldehyde which is considered a probable human carcinogen.
TX14	Formaldehyde	包含微量的致癌物质 甲醛 El cloruro de metileno es nocivo por inhalación. continuas o largas

## TEMPLATE DESIGN

The Template Design tool allows you to choose the data elements to maintain in your MSDS. Unlike the MSDS stored in the FacTS Base System, Template Design opens the format and content of the MSDS to meet your requirements, including foreign languages. From the ground up, the user controls each field that appears in the MSDS. Once the building blocks of each data sheet are defined, standard formats called templates are stored and control the output and appearance of the MSDS. Taking into account the need to send MSDS to locations with varying labeling or format requirements, more than one template can be created and stored. The template output can use many standard formats such as HTML or Word RTF format.