



A Comprehensive Guide to

# Improve Your Chemical Management



**SLEEP BETTER**

**TONIGHT WITH**



THE SMART CHEMICAL

MANAGEMENT SOFTWARE

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# PUT YOUR MIND AT REST...

With Q-Chem you can be certain that you are proactively managing your chemicals. Q-Chem equips you to:

## MANAGE YOUR CHEMICALS OPTIMALLY.

Throughout the chemical lifecycle.

## MEET REGULATIONS.

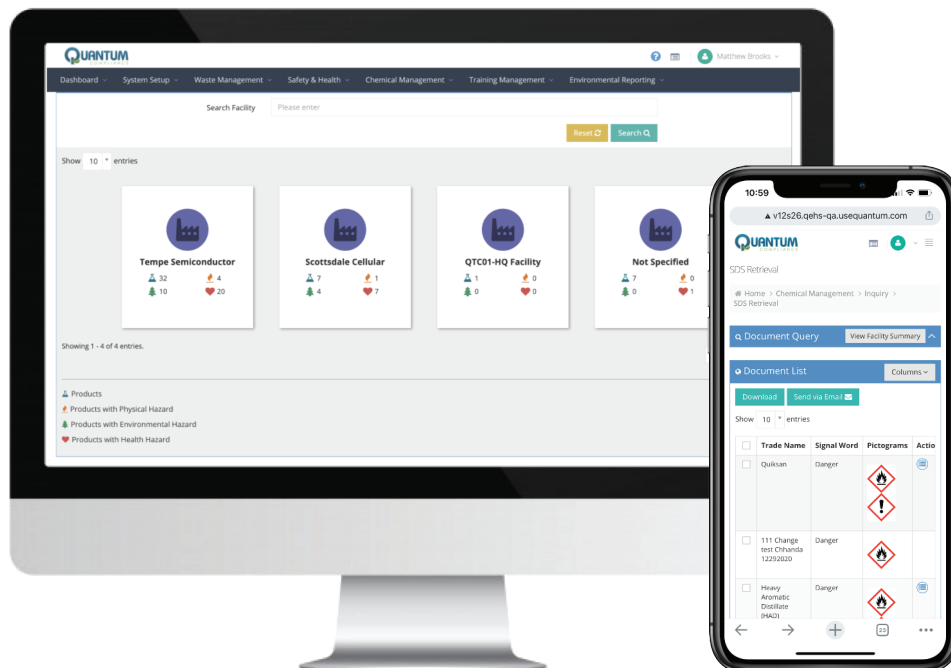
Be compliant.

## MINIMIZE RISK.

Keep your people safe and your company free from fines.

## MULTIPLY YOUR EFFECTIVENESS

With Q-Chem Premium.



# MANAGE THE ENTIRE CHEMICAL LIFECYCLE

Losing sleep wondering what's happening to your company's chemicals? If so, you need a solution to ensure safety, compliance, and your company's future. Q-Chem to the rescue!

## Optimize Your Chemical Management

- Obtain a bird's eye view with Q-Chem's dashboard format that uses easy-to-read tiles and icons to show you what chemicals are located at what facilities.
- Dive into the details with our powerful search tools like Q-Chem's SDS Management software where you can search for documents by chemical name, CAS number, and so much more.
- Enjoy an unlimited number of users and devices as well as SDS that can be uploaded, saved, and printed.
- Maximize your productivity with specific software applications for use in every step of the chemical life cycle.

As a result, you can more effectively **meet HazCom regulations and minimize risk.**

# The Chemical Lifecycle



The chemical industry recognizes the above phases in the chemical lifecycle. It begins with proper procurement, then actually receiving a delivery, placing the product in inventory, distributing these chemicals internally, using the available inventory, collecting waste from the use and then properly disposing of this waste.

This is the regimen that all chemicals follow as they are brought into an organization's system. Managing these steps and scaling production around them requires daily attention to detail and the ability to go beyond paper records in the process.



Quantum's Q-Chem covers the whole chemical lifecycle. It begins with our robust SDS Management tool that allows instant access to all of your SDS and the ability to sort, for example, by ingredient, CAS number or location. This feature is useful at every step in the lifecycle.

Our Authorization module equips larger firms right up front to place a discipline around their acquisition process to confirm that the chemicals being considered can be used around other chemicals already present in an environment. It also allows customizable authorization check points in the process.

Our Inventory module allows you to keep track of what chemicals you have in your various locations identified by minimum and maximum allowable quantities.

Our GHS Labeling feature allows you to batch larger containers of chemicals into smaller usable amounts and produce GHS workplace labels that bring information right from your SDS.

The List of Lists feature gives you access to 87 regulatory lists from around the world to make certain you are identifying what usage requirements your chemicals must meet and what can safely be stored within proximity to other chemicals.

All of these modules are part of our EHS Foundation that allows for a “key in once” feature so that all modules can access all data. Plus our software can connect seamlessly to your ERP system through APIs.

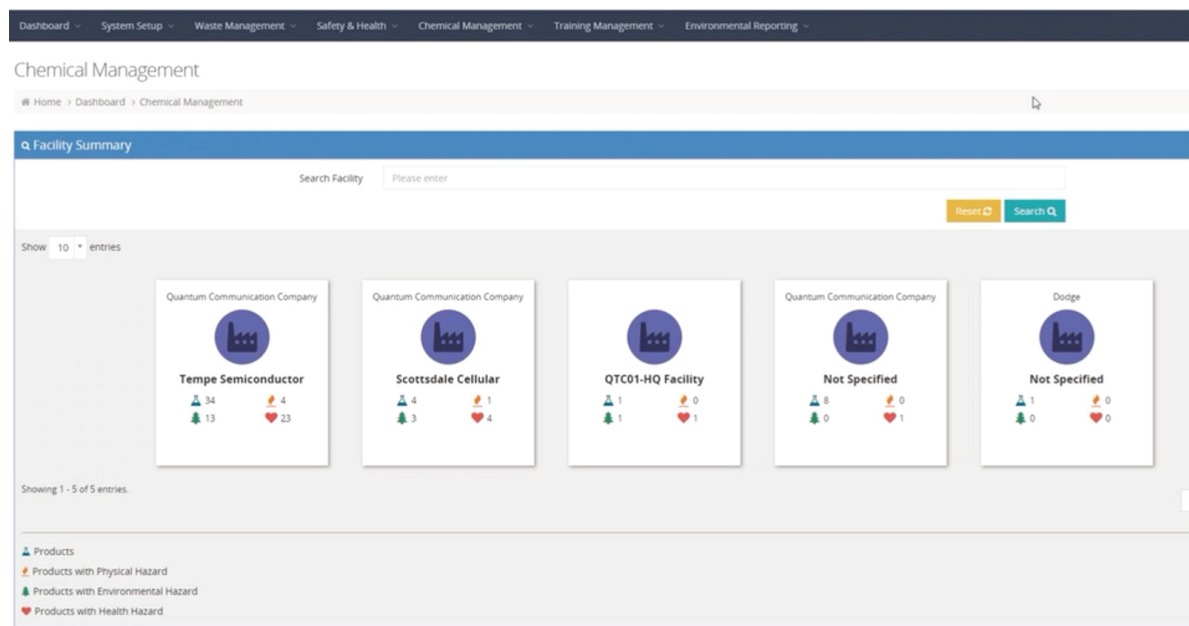
## What is HazCom?

Q-Chem is designed to help users of hazardous chemicals comply with governmental regulations such as OSHA’s Hazard Communication standard. In 2015 OSHA adopted the Hazard Communication Standard of 2012 also known as HAZCOM. This upgraded an existing regulation which was put into effect in 1994. Most importantly this update:

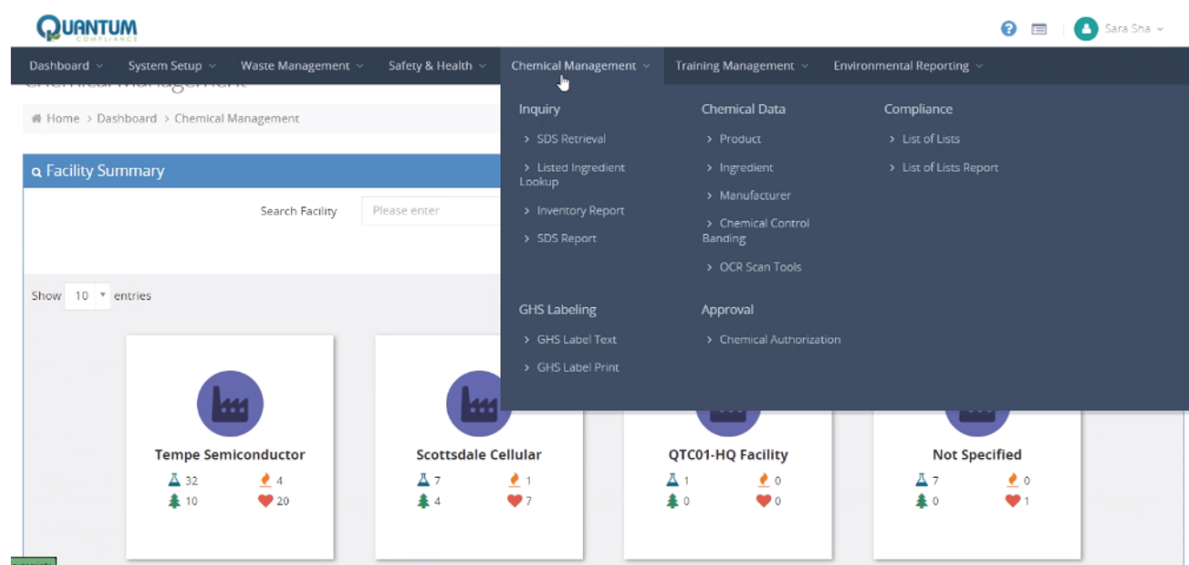
- Adopted the United Nation's GHS Revision 3 as the guideline for SDS and chemical labeling.
- It updated the hazard communication training requirements to include training employees on the understanding of the new SDS and labels based on the “Right to Know.”.
- It required hazard labels consistent with your hazard communications training on all containers including any containers that you've repackaged.
- And finally employers must maintain a copy of an SDS for each hazardous chemical and they must ensure that they're available during the work shift to all employees. This is within an 8-hour work shift common to most employees.

# THE DASHBOARD OF YOUR DREAMS

With Q-Chem's software interface, you'll begin with this key dashboard screen that is organized by facility. Our tiles and icons will show you health hazards, environment chemicals, physical hazards, and the total number of products at each facility all on one screen.



Q-Chem's overarching navigation includes inquiry, GHS labeling, compliance, approval, and the ability to enter your chemical data.



## Diving Into the Details

To complement our broad big picture view, Q-Chem also equips you with powerful search tools that will enable you to find anything and everything.

A great example of this is our SDS Management software where you can easily search for documents by chemical name, trade name, CAS number, and many more. Your company will also be able to monitor SDS by location, ingredient, and classification.

The screenshot shows the 'Document Query' interface of the Quantum Compliance software. At the top, there is a navigation bar with 'Dashboard', 'System Setup', and 'Chemical Management'. Below this is a search bar with a 'View Facility' button. The main search area includes a text input for 'Include Following Words', a 'Search Q' button, and a 'Show Historical Version' checkbox. An 'Advanced Search' section is expanded, showing 'Include 1 condition(s)'. The search criteria are organized into two columns. The left column contains fields for Product ID, Trade Name, Attachment Type, Language, Country, Manufacturer, and several date-based filters (Revision Date From, Created From, Last Updated From, Last Updated by). The right column contains Physical Structure (set to '[5000-5C] Tempe Semiconductor'), Components (CAS No, Name), Signal Word (radio buttons for Not Classified, Warning, and Danger), Hazard Classification, and Pictograms (a grid of hazard pictograms with checkboxes).

You can easily retrieve and update SDS information in just a few clicks and you'll never forget to update your SDS when you choose to receive SDS reminders that help you meet regulations and avoid expired SDS. Plus, an unlimited number of SDS can be uploaded, saved, and printed. In the same fashion, there is no limit to the number of users or devices that your company can use. And you aren't receiving a generic SDS or paying to rent the data. Instead, you have your own custom SDS, and you own that data.



# MEET REGULATIONS

Overwhelmed meeting multiple compliance regulations? Enter Q-Chem. The smart chemical management software that keeps track of regulations for you.

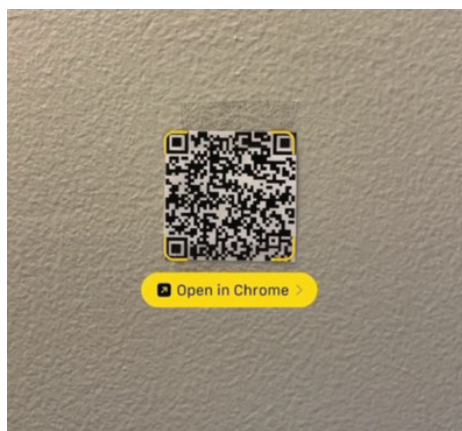
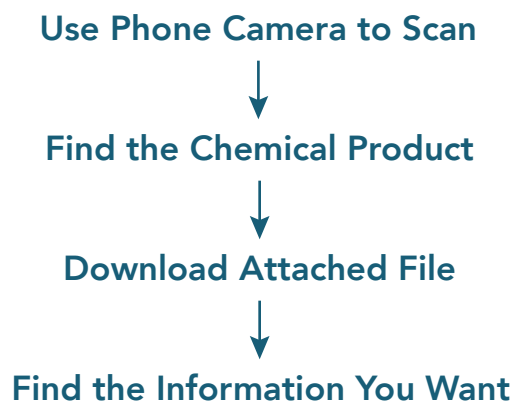
## Q-Chem's Solution

- Ace OSHA Site Reviews with GHS-compliant labels and a trained staff that has easy access to SDS with QR code scanning.
- Access Q-Chem's List of Lists feature that is equipped with 87 lists about the U.S., Europe, Taiwan, Korea, China, and Canada so that you can meet regulations everywhere you do business.

## SDS Easy Access

Ensure that all employees will be able to access SDS within seconds, with Q-Chem's QR Code scanning feature that takes you right to the SDS portal.

How does it work?



# Always Have Your Workplace Labels Up to Date

You'll be receiving drum size amounts of chemicals and you'll want to separate them into smaller batches. In order to do so, you need GHS compliant labels to keep everything organized, safe, and ready for OSHA site reviews.

Fill in basic label information with speed and ease such as the signal word, pictogram, and hazard classification. Q-Chem will automatically populate precautionary words based off the hazard code from the hazard classification you selected.



Product ID: 00001 Trade Name: Hand Sanitizer

Signal Word:  Not Classified  Warning  Danger

Pictograms:

Hazards:

Precautions:

Then choose a language and template.

- 2\*2 label will display a total of 4 labels on 1 page
- One-page Label will display 1 label on 1 page
- Small Label can display up to 8 labels on 1 page

### GHS Label Print

Home > Chemical Management > GHS Labeling > GHS Label Print

Label Print

Language  English  Chinese Simplified  Chinese Traditional

Template

- 2\*2 Label
- One-page Label
- Small Label

Here is an example of the 2\*2 label.

<p><b>Product ID:</b> Ant-954      <b>Flume Wash P20</b>  <b>Manufacturer:</b> AnTerra Group Inc.</p>  <p><b>Signal Word:</b> Danger            May be harmful if swallowed.Causes severe skin burns and eye damage.</p> <p>Call a POISON CENTER, doctor or physician if you feel unwell.Do not breathe dust, fume, mist, vapors or spray.Wash thoroughly after handling.Wear protective gloves, eye protection, face protection.IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.IF ON SKIN (or hair): Remove, take off immediately all contaminated clothing. Rinse skin with water, shower.IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.Immediately call a POISON CENTER, doctor or physician.</p>	<p><b>Product ID:</b> Ant-954      <b>Flume Wash P20</b>  <b>Manufacturer:</b> AnTerra Group Inc.</p>  <p><b>Signal Word:</b> Danger            May be harmful if swallowed.Causes severe skin burns and eye damage.</p> <p>Call a POISON CENTER, doctor or physician if you feel unwell.Do not breathe dust, fume, mist, vapors or spray.Wash thoroughly after handling.Wear protective gloves, eye protection, face protection.IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.IF ON SKIN (or hair): Remove, take off immediately all contaminated clothing. Rinse skin with water, shower.IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.Immediately call a POISON CENTER, doctor or physician.</p>
<p><b>Product ID:</b> AC08032020_1      <b>AC Hand Sanitizer</b>  <b>Manufacturer:</b> Not Available</p>  <p><b>Signal Word:</b> Danger            Highly flammable liquid and vapor.</p> <p>Keep away from heat, sparks, open flames, and other ignition sources - No smoking.Keep container tightly closed.Ground, bond container and receiving equipment.Use explosion-proof electrical, ventilating, light, equipment.Use only non-sparking tools.Take precautionary measures against static discharge.Wear protective gloves, eye protection, face protection.IF ON SKIN (or hair): Remove, take off immediately all contaminated clothing. Rinse skin with water, shower.In case of fire: Use extinguishing media listed in section 5 of SDS for extinction. Store in a well ventilated place. Keep cool.Dispose of contents or container in accordance with local and national regulations.</p>	<p><b>Product ID:</b> AC08032020_1      <b>AC Hand Sanitizer</b>  <b>Manufacturer:</b> Not Available</p>  <p><b>Signal Word:</b> Danger            Highly flammable liquid and vapor.</p> <p>Keep away from heat, sparks, open flames, and other ignition sources - No smoking.Keep container tightly closed.Ground, bond container and receiving equipment.Use explosion-proof electrical, ventilating, light, equipment.Use only non-sparking tools.Take precautionary measures against static discharge.Wear protective gloves, eye protection, face protection.IF ON SKIN (or hair): Remove, take off immediately all contaminated clothing. Rinse skin with water, shower.In case of fire: Use extinguishing media listed in section 5 of SDS for extinction. Store in a well ventilated place. Keep cool.Dispose of contents or container in accordance with local and national regulations.</p>

# Know Your Regulations Worldwide

With 87 List of Lists that span countries like the U.S., Taiwan, Korea, China, Europe, and Canada as well as subjects such as exposure, inventory, regulations, and specific hazards, Q-Chem will empower your company to meet regulations and reporting requirements worldwide.

With Q-Chem, our List of Lists software also allows you to search by a specific ingredient or list to cross reference chemicals and easily access what you need.

<input type="checkbox"/>	CAS Number	Ingredient Name	List ID	List Description	De Minimis %	Additional Information
<input type="checkbox"/>	0000050-00-0	Formaldehyde	TSCA-Inventory	TSCA Inventory		Commercial Status Designation: ACTIVE
<input type="checkbox"/>	0000050-00-0	Formaldehyde	SARA313	US EPA SARA 313 List		
<input type="checkbox"/>	0000050-00-0	Formaldehyde	DSL	Canadian Domestic Substance List		EINECS No. 200-001-8; ENC No. 2-482; ECL Serial No. KE-17074; SWISS No. G-1642; PAKISTAN 123; CANAD
<input type="checkbox"/>	0000050-00-0	Formaldehyde	IARC-1	IARC Category 1 Carcinogens		
<input type="checkbox"/>	0000050-00-0	Formaldehyde	NIOSH	NIOSH STEL TWA		Ca TWA 0.016 ppm C 0.1 ppm [15-minute]
<input type="checkbox"/>	0000050-00-0	Formaldehyde	OSHA	OSHA TWA/STEL Data		TWA 0.75 ppm STEL 2 ppm
<input type="checkbox"/>	0000050-00-0	Formaldehyde	ACGIH	ACGIH TWA and STEL data		STEL: 0.3 ppm Ceiling: 1 ppm S, A2, 1
<input type="checkbox"/>	0000050-00-0	Formaldehyde	Prop65Cancer	California Proposition 65 Cancer		from category list

# MINIMIZE RISK

Risks lurk at every corner of business and if not properly prevented, these risks can cause huge amounts of damage whether at the expense of employee safety or company profits.

This is why investing in minimizing risk is so important and with Q-Chem, you can do just that.

## Q-Chem's Safety Net

- See inventory management data with search tools, regulatory list status, and hazard classification.
- Track chemicals stored and used at each location.

# Stop Questioning Your Chemical Inventory

If you're finding mistakes in your inventory records, becoming irritated with the cost of inventory recordkeeping, or feel frustrated with the amount of time it takes to write reports about on-site chemicals, you know that it's time to rethink your software. And that's exactly what we did at Quantum.

With our Q-Chem software you can reduce the risk of:

1. Fines
2. Inventory loss
3. And liabilities

Q-Chem provides the following inventory management data so that you can make better informed chemical safety decisions:

1. Searchable inventory
2. Regulatory list status
3. Hazard classification

With these tools, you can track chemicals stored and used at each location, flag improperly stored or expired items, and generate reports for emergency responders if ever needed.

The screenshot shows the 'Edit Product' page in the Q-Chem software. At the top, there is a navigation menu with options like Dashboard, System Setup, Waste Management, Safety & Health, Chemical Management, Training Management, and Environmental Reporting. Below the menu, the page title is 'Product' and the breadcrumb trail is 'Home > Chemical Management > Chemical Data > Product > Edit Product'. The main content area features a progress bar with seven steps: 1. Main Record, 2. Properties, 3. Alias, 4. GHS Classification, 5. Components, 6. Inventory, and 7. Historical Versions. Below the progress bar is an 'Inventory Query' section with a search bar and a '+ List Inventory' button. Underneath, there are buttons for 'Add +', 'Export Report', and 'Delete'. A table displays the inventory data for one entry. The table has columns for Product, Facility, Building, Location, Storage Unit, Usage Unit, Max(Storage), Min(Storage), Avg(Storage), Max(Usage), Min(Usage), Avg(Usage), Batch Processing Temperature, Hazard Group, and Management Method (in). The data row shows: Product: [Ans-954] Flume Wash P20, Facility: [5000-SC] Tempe Semiconductor, Storage Unit: Gallons, Usage Unit: Gallons, Max(Storage): 10,000,000, Min(Storage): 0,000,000, Avg(Storage): 2,000,000, Max(Usage): 2,000,000, Min(Usage): 1,000,000, Avg(Usage): 1,000,000, Batch Processing Temperature: 20. At the bottom of the table, it says 'Showing 1 - 1 of 1 entries.' and there are 'Back' and 'Continue' buttons.

Product	Facility	Building	Location	Storage Unit	Usage Unit	Max(Storage)	Min(Storage)	Avg(Storage)	Max(Usage)	Min(Usage)	Avg(Usage)	Batch Processing Temperature	Hazard Group	Management Method (in)
[Ans-954] Flume Wash P20	[5000-SC] Tempe Semiconductor			Gallons	Gallons	10,000,000	0,000,000	2,000,000	2,000,000	1,000,000	1,000,000	20		

# Q-ESSENTIAL AND Q-PREMIUM

In addition to the Q-Chem Essential package, that includes the features we've just reviewed, Quantum also offers the Q-Chem Premium package for those looking to multiply their effectiveness at scale.

## What's the Difference?

### Q-Chem Essential

*\$150/month*

1. SDS Management
2. Inventory Module
3. Workplace GHS Labeling
4. List of Lists

### Q-Chem Premium

*\$500/month*

1. SDS Management
2. Inventory Module
3. Workplace GHS Labeling
4. List of Lists

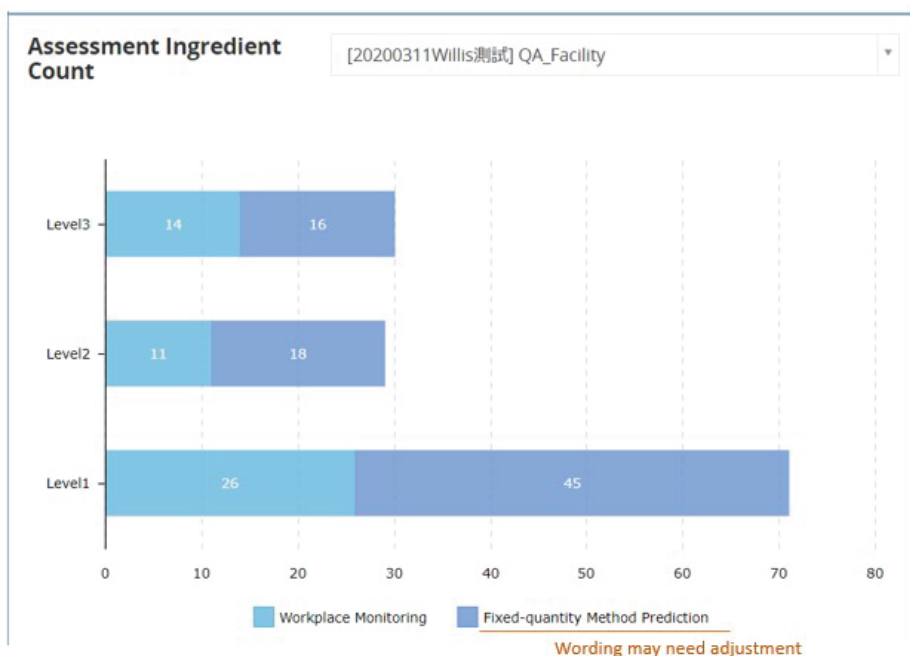
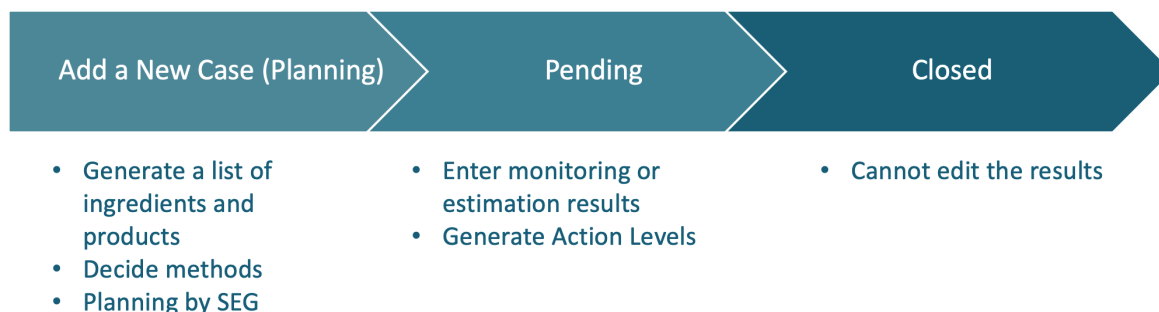
### PLUS

5. Chemical Exposure Assessment
6. Chemical Purchasing Authorization
7. Chemical Control Banding
8. Facility Mapping

# Chemical Exposure Assessment

This feature's goal is to meet regional regulations and market needs while utilizing chemical management data. The key tools in this feature include environment monitoring, quantitative model estimation, and chemical control banding.

## Chemical Exposure Assessment Workflow



This chart shows you the results of an assessment. It displays how many ingredients were evaluated, to which level depending on the concentration, and by which method. The different colors display the different monitoring methods such as workplace monitoring and fixed- quantity method prediction.



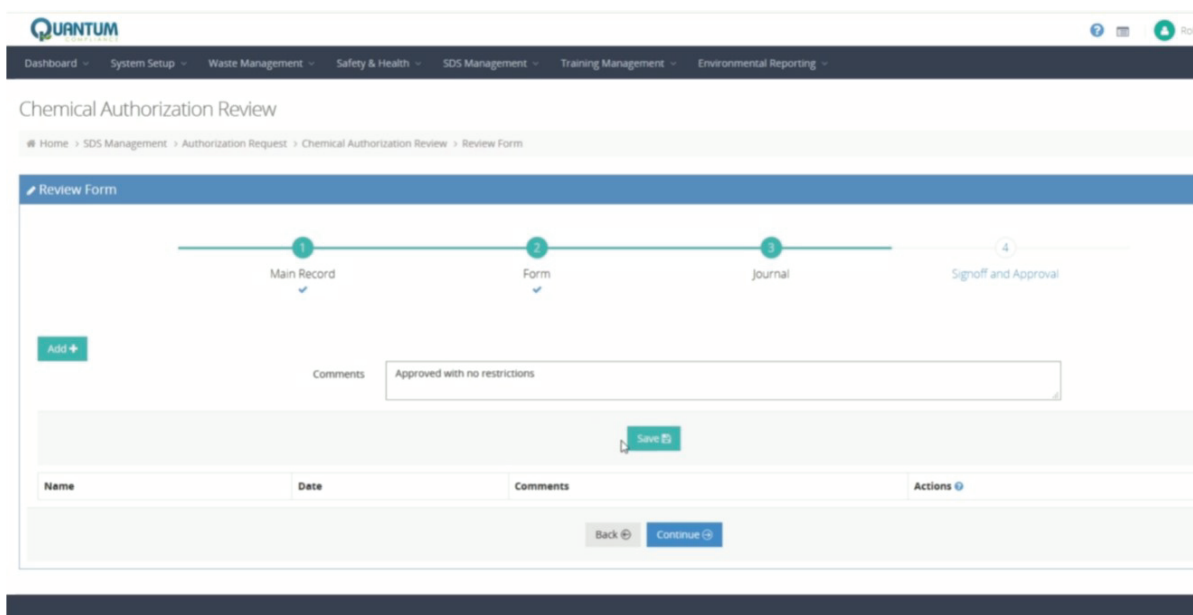
# Chemical Purchasing Authorization

Purchasing authorization is put in place because it can help your company review whether you have an SDS for the chemical you would like to buy, if it's safe to store that chemical onsite with other chemicals in your inventory, what quantity you are permitted to store, and so on.

Q-Chem provides a flexible chemical authorization process in which your company can select a form and then our software will customize it with information like the physical state.



A journal module is also provided for your employees to write any notes or concerns. From here, you can decide whether or not to approve and signoff. This streamlined process provides an efficient and effective chemical management process where each step can easily be followed and reviewed.



# Chemical Control Banding

Q-Chem’s Chemical Control Banding feature is a chemical risk assessment and rating method that evaluates hazards based on levels of risk and probability of exposure. This method leads to ratings that help you see what appropriate PPE and handling instructions are needed.

Home > Chemical Management > Chemical Data > Chemical Control Banding > Edit Chemical Control Banding [901052090] THERMALBOND 4951/4952/4953 PART A

**Edit Chemical Control Banding**

Product ID \* 901052090

Trade Name \* THERMALBOND 4951/4952/4953 PART A

Manufacturer \* [Inventory] SARA-Inventory

Company \* [QCCM] Quantum Communications (Company)

Facility \* [5000-5C] Tempe Semiconductor

Building \* Please select

Location \* Please select

Physical State \* Gas

GHS Classification  
 Acute toxicity(dermal), category 4:H312 x | Skin corrosion/irritation category 2:H315 x | Serious eye damage / eye irritation, category 2A:H319 x | Skin sensitizer category 1:H317 x  
 Respiratory sensitization, category 1:H334 x | Germ cell mutagenicity, category 2:H341 x | Carcinogen, category 2:H351 x | Reproductive toxicity, category 2:H361 x  
 Specific target organ toxicity, single exposure category 3:H336 x | Specific target organ toxicity, single exposure category 3:H336 x  
 Specific target organ toxicity, repeated exposure category 1:H372 x | Aquatic toxicity (acute), category 1:H400 x | Aquatic toxicity (chronic), category 2:H411 x

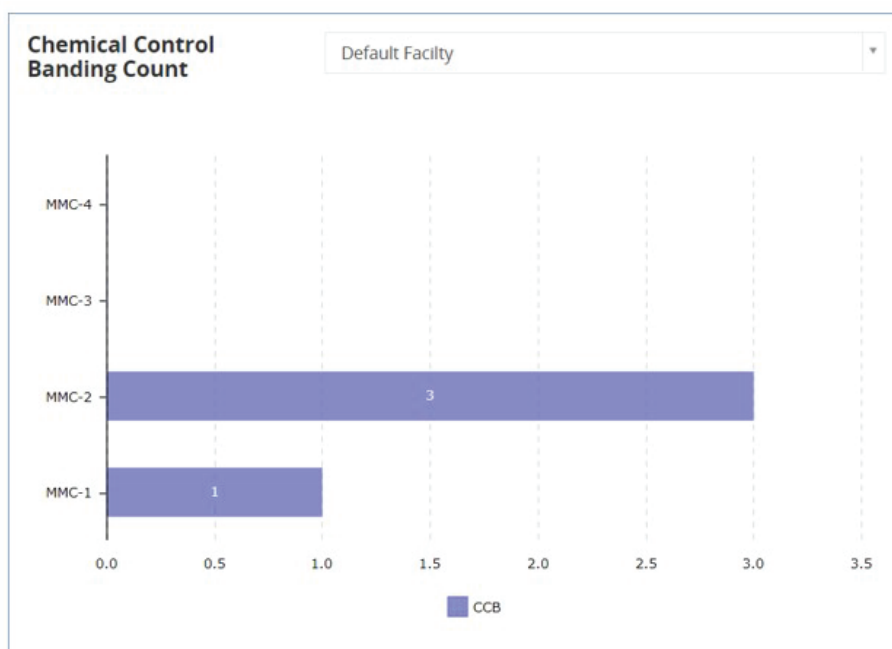
Hazard Group E/5

Management Method (Inhalation) MMC-4

Management Method (Skin) MMC-S/E

Management Method (Safety-Environment) MMC-Skin

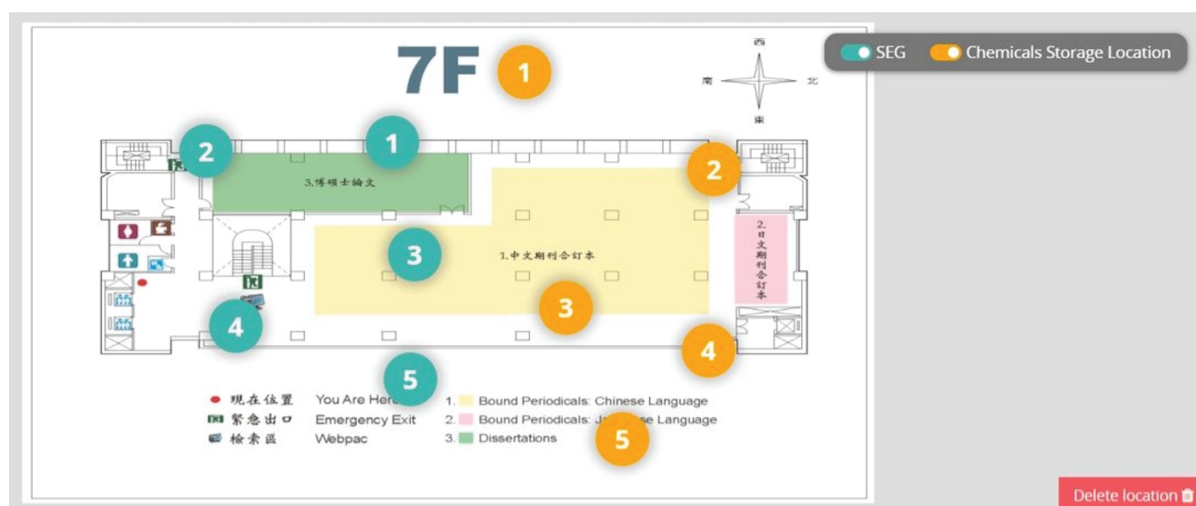
Cancel Clear All Calculate CCB Save



This chart shows the results of a CCB evaluation.

## Facility Mapping

This feature is made to help you quickly obtain chemical information, reduce costs electronically, and strengthen risk control. Q-Mapping can also add or adjust chemical placement or similar exposure groups in real time, enabling you to take quick and effective emergency response measures should you ever need too.



# Sleep Better Tonight with Q-Chem

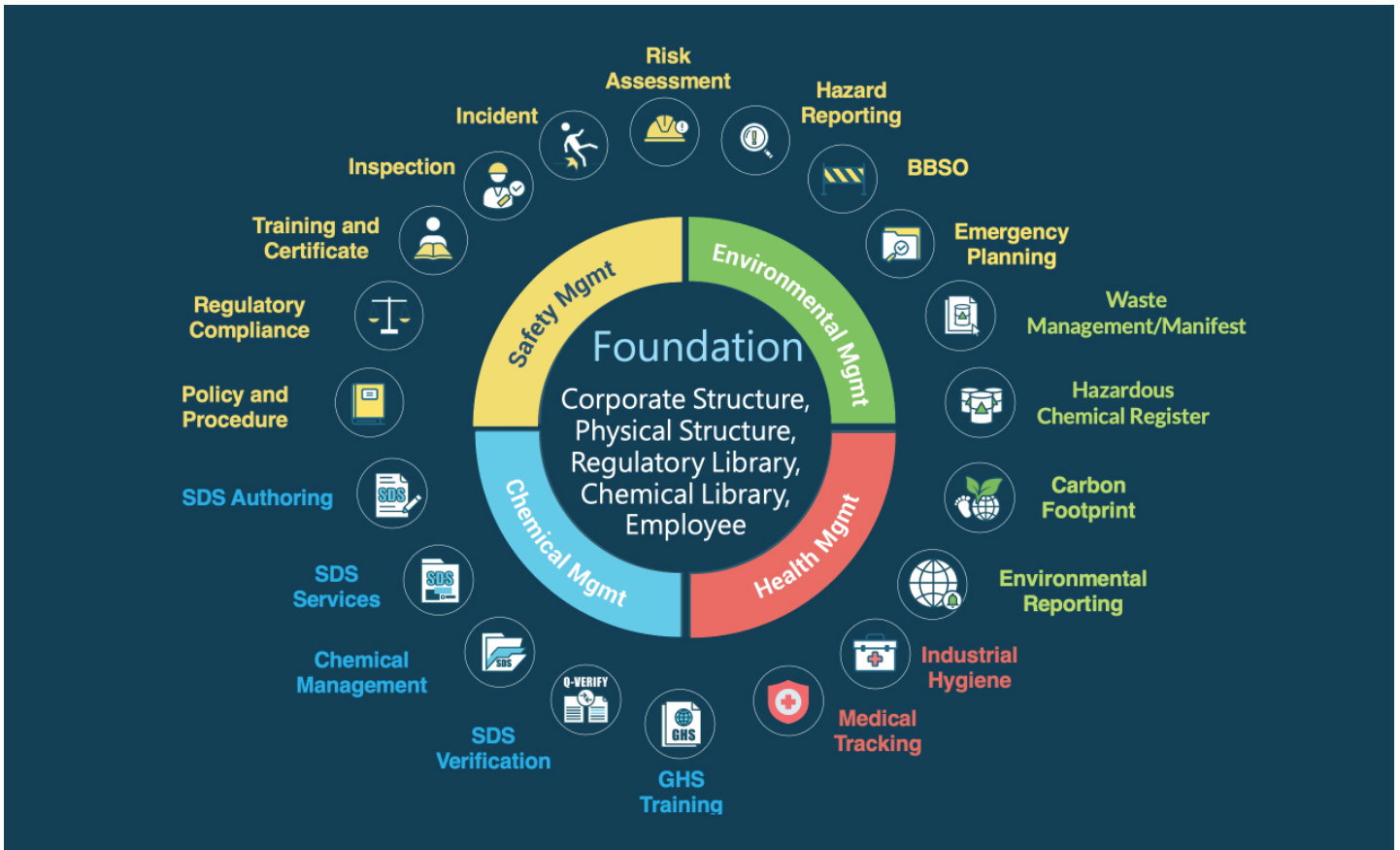
THE SMART CHEMICAL  
MANAGEMENT SOFTWARE



1. **MANAGE** the Entire Chemical Lifecycle with Q-Chem's comprehensive dashboards & powerful search tools like our SDS Management software.
2. **MEET** Regulations and ace OSHA site visits with SDS QR Codes, GHS-compliant labels, and access to 87 List of Lists .
3. **MINIMIZE** Risks with Inventory management tools, Regulatory List status, and Hazard Classification.
4. **MULTIPLY** your effectiveness with Q-Premium's Chemical Exposure Assessment, Chemical Purchasing Authorization, Chemical Control Banding, and Facility Mapping.

# Chemical Management doesn't have to be a nightmare. Make it a dream with Q-Chem.

Plus look to Quantum for software solutions in every EHS area. For more information, contact us at [info@usequantum.com](mailto:info@usequantum.com).



Smart Software for A Safer World