5 Things You Can Do to Select Safer Chemicals for Your Company’s Product Formulations

Co-Sponsored With
INTERSTATE CHEMICALS
C2 CLEARINGHOUSE

October 24, 2018

GREEN CHEMISTRY & COMMERCE COUNCIL
Business Mainstreaming Green Chemistry
What is the GC3?

The Green Chemistry & Commerce Council (GC3) is a multi-stakeholder collaborative that drives the commercial adoption of green chemistry by catalyzing and guiding action across all industries, sectors and supply chains.
Our Vision and Mission

Vision: A world where green chemistry is standard practice throughout the value chain.

Mission: To drive the commercial adoption of green chemistry by catalyzing and guiding action across all industries, sectors and supply chains.
More than 130 Members Across Sectors and the Value Chain
Interstate Chemicals Clearinghouse (IC2)

The IC2 is an association of state and local governments that promotes a clean environment, healthy communities, and a vital economy through the development and use of safer chemicals and products.

http://theic2.org
IC2 Goals

- Avoid duplication and enhance efficiency and effectiveness of agency initiatives on chemicals through collaboration and coordination
- Build governmental capacity to identify and promote safer chemicals and products
- Ensure that agencies, businesses, and the public have ready access to high-quality and authoritative chemicals data, information, and assessment methods
Ground Rules

- Due to the number of participants in the webinar, all lines will be muted.
- If you have a question or comment, please type it in the “Questions” box located in the control panel.
- Questions will be answered at the end of the presentation.
Today’s Speaker

Joe Rinkevich
President
Scivera
Green Chemistry & Commerce Council (GC3) Webinar Series

5 Things You Can Do to Select Safer Chemicals for Your Company’s Product Formulations

Joe Rinkevich, Scivera joe@scivera.com
Topics

1. Chemical screening is changing
2. 5 Things
3. Q&A + Discussion

GOAL: Understand through examples ways you can identify and select safer chemicals for your products and processes.
Chemical and formulation decisions occur upstream, while brands and retailers incur quality and reputational costs downstream.
Chemicals management for consumer products has shifted dramatically.

Increased expectations from diverse stakeholders drives this change.

All retailers, brands, and their supplier networks need to update critical business processes in response.

Global brands and their suppliers need scalable, reliable, and cost-effective solutions to meet these new requirements.
20-year process transformation

- Basic chemical compliance
- M/RSL Screening
- Risk-based Certification
- Qualitative hazard assessment
- Quantitative chemical screening and scoring

scivera
Problem: Conventional responses not working

1. Finished product testing is too late
2. Brands incur too much risk
3. Chemicals decisions occur upstream
Solution: Upstream Chemicals Management

1. Clearly communicate expectations to suppliers
2. Enable preferred chemicals selection upstream
3. Save money and reduce risk
4. Protect supplier IP and meet new requirements

- Move beyond lists
- Select safer alternatives
- Protect ingredient IP
- Reduce risk
- Score products
- Encourage achievement
- Knowledge
- Confidence
5 Things You Can Do to Select Safer Chemicals for Your Company’s Product Formulations
5 Things for Safer Chemicals Selection

1. Understand the different types of chemical screening
2. Full formulation + impurities
3. List screen
4. Comprehensive hazard assessment
5. Scoring (Qualitative + Quantitative)
Different screens, different goals

Basic chemical compliance
M/RSL Screening
Risk-based Certification
Qualitative hazard assessment
Quantitative chemical screening and scoring
Full formulation + impurities

1. All intentional ingredients
2. Impurities [≥100 ppm]
3. Protect supplier confidential information
Lists as first step (but not the last)

Case Study: California Prop 65 List

~600 Chemicals listed on Prop 65 as “Known to cause Cancer”

>6,000 Chemicals assessed as carcinogens by Scivera Toxicologists

>40,000 Chemicals in SciveraLENS Rapid Screen show evidence of high hazard for carcinogenicity
Comprehensive Hazard Assessment

1. 23 Human and environmental health endpoints
2. Regulatory Lists + Authoritative Data
3. Experimental data
4. Modeled data + analogous data
5. Based on accepted frameworks: GHS, US EPA, ECHA, etc.
Qualitative screening categorization

Case Study: Solvent Alternatives [US EPA CP-CAT]

- **Concern**: 210
- **OK**: 307
- **Good**: 39
“I just need a number.”
Quantitative chemical screening

1. Complement qualitative frameworks
2. Result in a numeric score
3. Enable easier comparative review of chemicals and formulations
Quantitative screening examples

1. Screened Chemistry
2. NIKE Priority Chemistry
3. Scivera Quantitative Chemistry Index
Summary

1. Explore the 5 Things
2. Safer alternatives require deep assessment
3. Join us at the Alternatives Assessment Symposium next week in Sacramento
2nd International Symposium on Alternatives Assessment:
Building the Field

California Environmental Protection Agency (CalEPA)
Sacramento, California | November 1-2, 2018
Question & Answer

Please enter questions or comments in the “Questions” box located in the control panel.
14th Annual GC3 Innovators Roundtable
May 7-9, 2019 | Cincinnati, OH

Sponsorship opportunities available!

For more information, please visit www.greenchemistryandcommerce.org
Thank you for joining us!

For more information about the GC3: www.greenchemistryandcommerce.org