

**OSHA HazCom Panel:  
Navigating 2024 Amendments to  
Improve the Effectiveness of the  
Hazard Communication Standard.**

***Practitioners' Insights:  
"Where rubber meets the road!"***

**2024 SCHC Annual Meeting**





# Intellectual Property Statement

*The material contained in this presentation is the work of expert(s) selected by the Program Committee of SCHC and is intended solely for the purpose of professional development and continuing education. Material in an SCHC-sponsored presentation does not constitute a recommendation or endorsement of any kind. This material is believed to accurately represent current regulatory requirements and industry standards for hazard communication. However, SCHC cannot guarantee the accuracy or completeness of this information. Users are responsible for determining the suitability and appropriateness of these materials for any particular application.*



DEPARTMENT OF LABOR

Occupational Safety and Health  
Administration

29 CFR Part 1910

[Docket No. OSHA-2019-0001]

RIN 1218-AC93

Hazard Communication Standard

AGENCY: Occupational Safety and Health  
Administration (OSHA), Labor.

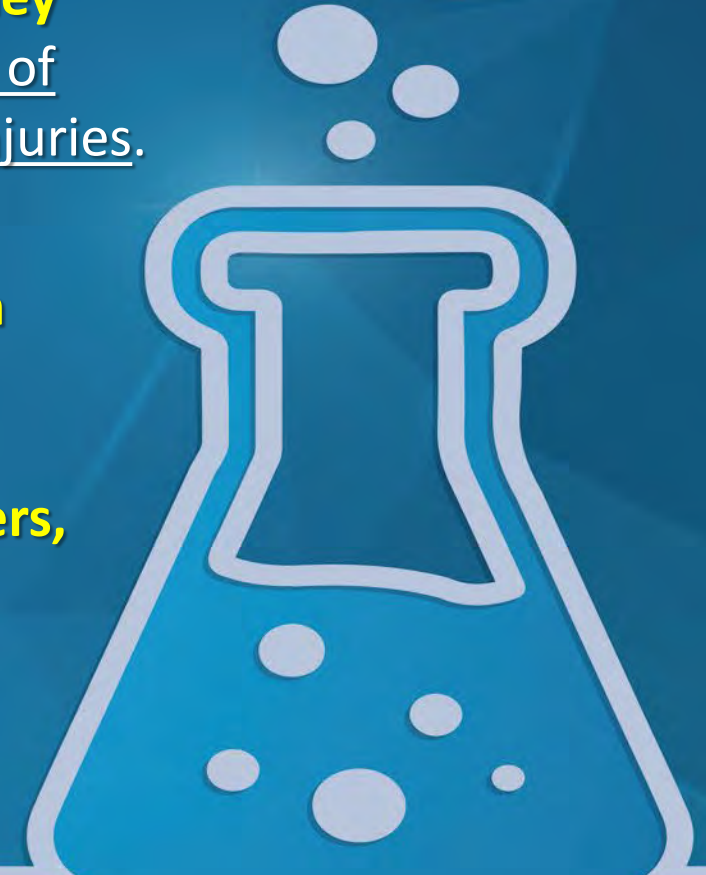
ACTION: Final rule.

SUMMARY: OSHA is amending the Hazard Communication Standard (HCS) to conform to the United Nations' Globally Harmonized System of Classification and Labelling of Chemicals (GHS), primarily Revision 7 (Rev. 7), address issues that arose during the implementation of the 2012 update to the HCS, and provide better alignment with other U.S. agencies and international trading partners, while enhancing the effectiveness of the standard. Consistent with Executive Order 13563 and the Regulatory Flexibility Act, which call for assessment and, where appropriate, modification and improvement of existing rules,

The agency has determined that the **revisions in this final rule will enhance the effectiveness of the HCS by ensuring employees are appropriately apprised of the chemical hazards to which they may be exposed**, thus reducing the incidence of chemical-related occupational illnesses and injuries.

The modifications to the standard include:

- **revised criteria for classification of certain health and physical hazards,**
- **revised provisions for updating labels,**
- **new labeling provisions for small containers,**
- **new provisions related to trade secrets,**
- **technical amendments related to the contents of safety data sheets (SDSs), and**
- **related revisions to definitions of terms...**



# Panel Discussion – Desired Outcomes

- Help Motivate SDS Authors, HazCom and Allied Professionals to continue to learn more about OSHA's intent to enhance effectiveness of the hazard communication
- Identify questions, uncertainties and concerns that SDS Authors, HazCom & Other allied professionals (IH, Toxicologists, EH&S) within the regulated community are encountering when interpreting and developing plans to comply with OSHA's 2024 HCS Amendments
- Discuss information that may be helpful for OSHA to consider for enforcement and interpretative guidance materials
- Other?



# 2024 HCS Amendments:

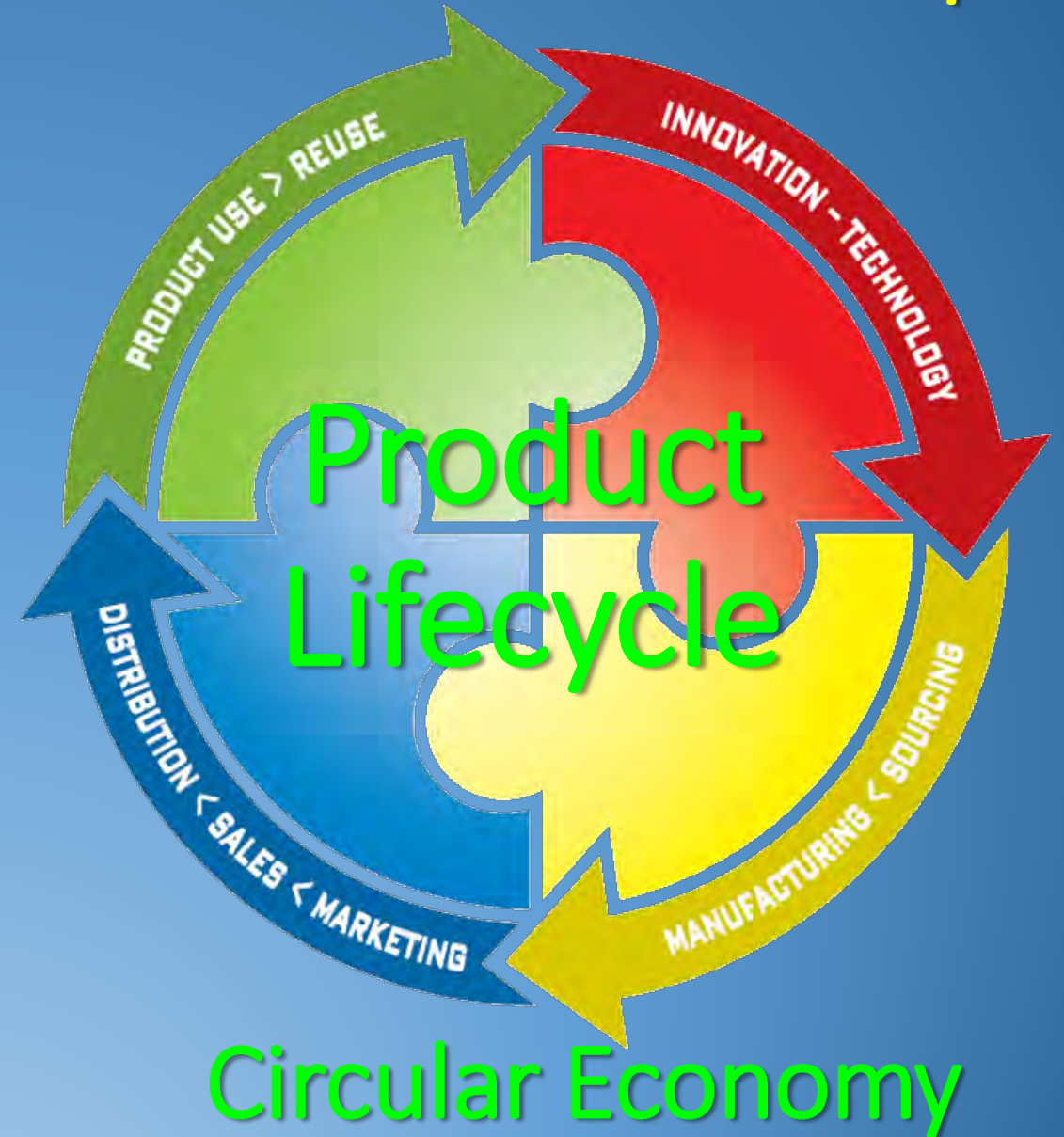
- *Let's Explore and Discuss some Principles of Product Stewardship, product lifecycles and the emerging circular economy in context of what and how hazard communication professionals and SDS authors should know or learn about downstream uses of products in classifying hazards.*
- *Does OSHA HCS require hazards of “articles” that undergo recycling or destruction need to be considered by SDS authors?*
- *How HazCom professionals can determine if a shipped solid product (not yet in the form of a “combustible dust”) presents a combustible dust hazard “under normal conditions of use?”*
- *Is there an obligation to label a solid product (“not yet in the form of a combustible dust”) and how to convey the warning label downstream to customers?*
- *What options are allowed for labeling “bulk shipments” of hazardous chemicals? How do these differ from requirements to label chemicals in “bulk containers”?*

# 2024 HCS Amendments:

# Product Stewardship

## *Product Stewardship Principles*

- *Responsibly managing the health, Safety and Environmental aspects of Raw Materials, Intermediates, and Consumer Products through their Lifecycle and Across the Value Chain in order to Prevent or Minimize Negative Impacts and Maximize Value.*

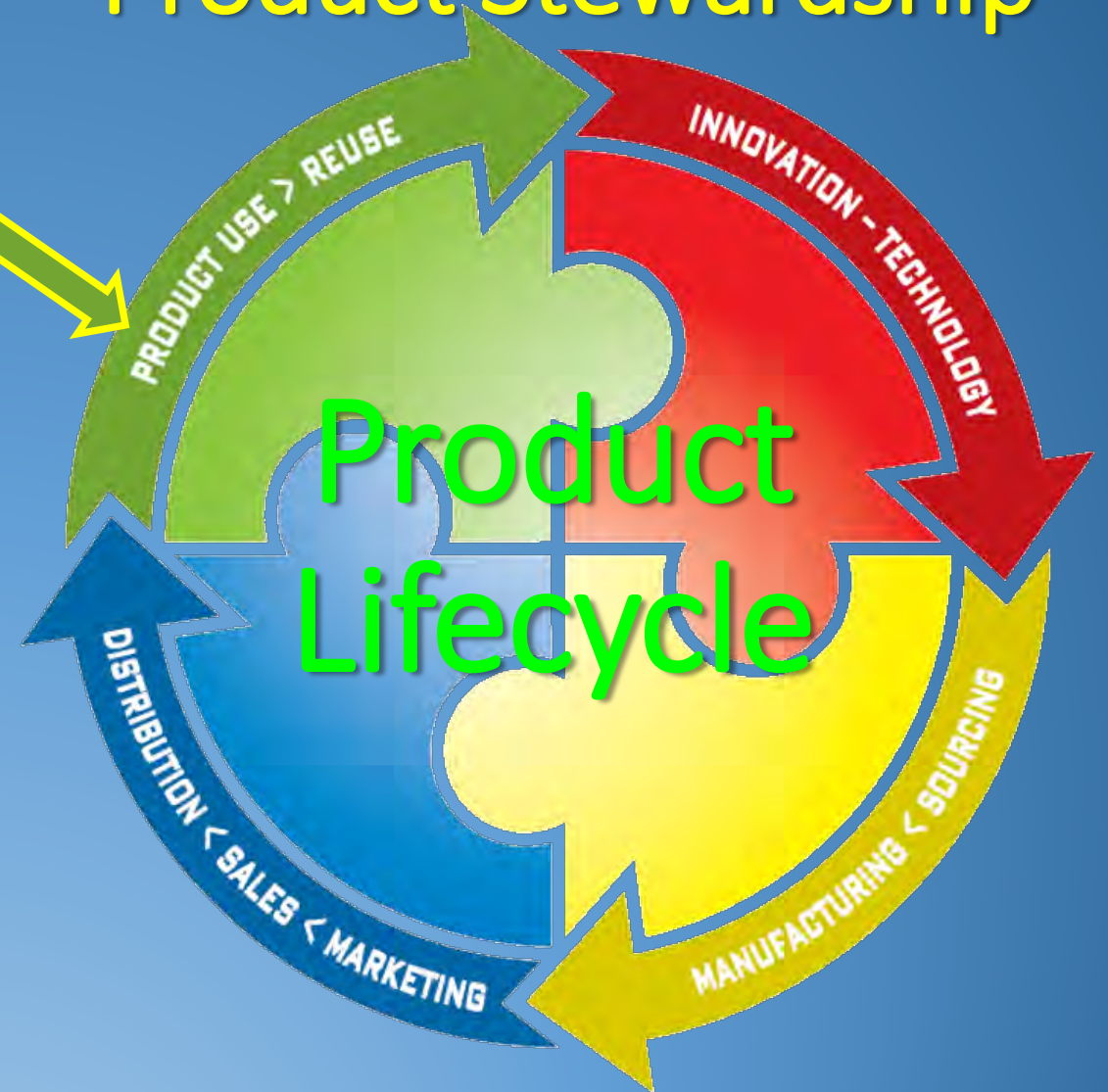




# 2024 HCS Amendments:

- Increase attention that manufacturers or suppliers need to **focus on the hazards from downstream uses** of their products along the supply chain.
- **SDS authors** will need to more thoroughly consider and classify hazards that may result from **“known or reasonably anticipated” downstream uses** of their products including any **changes in the physical form, chemical reactions and resulting chemicals generated**.
- OSHA’s intent was to **ensure classification only for those downstream uses where the manufacturer “knows or could reasonably anticipate” how the chemical will be used** and where that use creates a hazard that needs to be communicated in the workplace.

# Product Stewardship



# Circular Economy

# Panel Discussion of HCS Amendments

*We'll discuss several scenarios to provide some insights... We want input from the audience on other scenarios to discuss or seek clarification*

- *Bulk Rubber processing into tires before “rubber meets the road”*
- *Producing Paperboard and Plastic Packaging*
- *Multipart Systems Kits – (Base, Curative and/or Catalyst)*
- *Recycling end of life products into raw materials or feedstock*



## HCS Definitions 1910.1200(c)

Use means to package, handle, react, emit, extract, generate as a byproduct, or transfer



# HCS Hazard Classification

(d)(1)(i) Chemical manufacturers and importers shall evaluate chemicals produced in their workplaces or imported by them to classify the chemicals in accordance with this section. For each chemical, the chemical manufacturer or importer shall determine the hazard classes, and where appropriate, the category of each class classified. The hazard classification shall include any hazards associated with the chemical's intrinsic properties including:

- (A) a change in the chemical's physical form and;
- (B) chemical reaction products associated with known or reasonably anticipated uses or applications.

(ii) Employers are not required to classify chemicals unless they choose not to rely on the classification performed by the chemical manufacturer or importer for the chemical to satisfy this paragraph (d)(1).

# HCS Labeling Requirements

(f) \* \* \*

(1) Labels on shipped containers. The chemical manufacturer, importer, or distributor shall ensure that each container of hazardous chemicals leaving the workplace is labeled, tagged or marked.

**Hazards not otherwise classified and hazards identified and classified under (d)(1)(ii) do not have to be addressed on the container.**

Where the chemical manufacturer, importer, or distributor is required to label, tag or mark the following shall be provided:

- (i) Product identifier;
- (ii) Signal word;
- (iii) Hazard statement(s);
- (iv) Pictogram(s);
- (v) Precautionary statement(s);
- (vi) Name, U.S. address, and U.S. telephone number of the chemical manufacturer, importer, or other responsible party.**

# HCS Definitions

**(c) Article means a manufactured item other than a fluid or particle:**

- (i) Which is formed to a specific shape or design during manufacture;
- (ii) Which has end use function(s) dependent in whole or in part upon its shape or design during end use; and
- (iii) **Which under normal conditions of use** does not release more than very small quantities, *e.g.*, minute or trace amounts of a hazardous chemical (as determined under paragraph (d) of this section), and does not pose a physical hazard or health risk to employees.

**Combustible dust** means finely divided solid particulates of a substance or mixture that pose a flash-fire hazard or explosion hazard when dispersed in air or other oxidizing media.

**Hazardous chemical** means any chemical which is classified as a physical hazard or a health hazard, a simple asphyxiant, combustible dust, or hazard not otherwise classified.

**Use** means to package, handle, react, emit, extract, generate as a byproduct, or transfer.

# Communicating Hazards of Combustible Dusts

1. Chemical manufacturer or importer must label chemicals that are shipped in the form of dust and present a combustible dust hazard in that form when used downstream
2. Chemical Mfr or Importer shipping chemicals in a form (that is not yet a dust)... must provide a label to customers... if under normal conditions of use... the chemicals are processed in a downstream workplace in such a way they present a combustible dust hazard
3. Employer shall follow the workplace labeling requirements where combustible dust hazards are present

## C.4.31 Label elements for OSHA defined hazards

No pictogram

Hazard category	Signal word	Hazard statement
Combustible Dust <sup>2</sup>	Warning	May form combustible dust concentrations in air [if small particles are generated during further processing, handling or by other means.]  or May form explosible dust-air mixture [if small particles are generated during further processing, handling or by other means.]  <i>Text in square brackets may be used when the material can only create a combustible dust hazard due to the creation of small particles during the processing or handling of the chemical</i>

<sup>2</sup> 1) The chemical manufacturer or importer shall label chemicals that are shipped in dust form, and present a combustible dust hazard in that form when used downstream, under paragraph (f)(1) of this section:

2) the chemical manufacturer or importer shipping chemicals that are in a form that is not yet a dust must provide a label to customers, that follows the approach described under paragraph (f)(4) of this section if, under normal conditions of use, the chemicals are processed in a downstream workplace in such a way that they present a combustible dust hazard; and

3) the employer shall follow the workplace labeling requirements under paragraph (f)(6) of this section where combustible dust hazards are present.

Carefully read footnotes under in C.4.31 Label Elements  
Federal Register (Page 316 of 318)



# Is this change to (d)(1)(i) really new?

OSHA argues in the Preamble (FR 89, No. 98, pp 44277-44285) that, no, this is not a new requirement of HCS, citing:

- 1983 HCS Preamble, Letters of Interpretation (1994, 2016), 2007 Guidance, 2012 HCS and 2015 HCS Compliance Directive all support OSHA's position that including hazard information about *known or reasonably anticipated uses* is not a new interpretation.

# This is a clarification

- OSHA did not intend for an upstream supplier to identify every conceivable use and to classify these potential hazards of chemicals downstream (p. 44282)
- Intent was to ensure classification only for those downstream uses where the manufacturer knows or could reasonably anticipate how a chemical will be used and where that use creates a hazard in the workplace that needs to be communicated.



# Examples OSHA Cited

- Repeated use of an aerosol degreaser in automotive repair facilities linked to cases of neuropathy in service technicians
- Workers in hair salons exposed to excessive amounts of formaldehyde formed as a reaction product in hair straightening products
- Sawing of wood products creates dust exposure to which can cause lung disease

# Where Is This Info Placed?

- OSHA: **Section 2 of the SDS**, but not on labels
  - ACC said such hazards are already communicated in Sections 5, 9 and 10
  - ILMA suggested this information be in Sections 11 and 15.
- OSHA disagreed saying Section 2 is the appropriate location for specific hazard classifications that workers can easily access.



# Changes to 1910.1200(i)(1), Trade Secrets

(i) Trade secrets. (i)(1) The chemical manufacturer, importer, or employer may withhold the specific chemical identity, including the chemical name, other specific identification of a hazardous chemical, **and/or** the exact percentage (concentration) **or concentration range** of the substance in a mixture, from section 3 of the safety data sheet, provided that:

- (i) The claim that the information withheld is a trade secret can be supported;
- (ii) Information contained in the safety data sheet concerning the properties and effects of the hazardous chemical is disclosed;

# Changes to 1910.1200(i)(1), Trade Secrets

- (iii) The safety data sheet indicates that the specific chemical identity and/or ~~percentage~~ concentration or concentration range of composition is being withheld as a trade secret; ~~and~~...
- (iv) If the concentration or concentration range is being claimed as a trade secret, then the safety data sheet provides the ingredient's concentration as one of the prescribed ranges below in paragraphs (i)(1)(iv)(A) through (M) of this section

# Changes to 1910.1200(i)(1)(iv), Trade Secrets

(A) From 0.1% to 1%;

(B) From 0.5% to 1.5%;

(C) From 1% to 5%;

(D) From 3% to 7%;

(E) From 5% to 10%;

(F) From 7% to 13%;

(G) From 10% to 30%;

(H) From 15% to 40%;

(I) From 30% to 60%;

(J) From 45% to 70%;

(K) From 60% to 80%;

(L) From 65% to 85%; and (M)

From 80% to 100%



# Changes to 1910.1200(i), Trade Secrets

(v) The prescribed concentration range used must be the narrowest range possible. If the exact concentration range falls between 0.1% and 30% and does not fit entirely into one of the prescribed concentration ranges, a single range created by the combination of two applicable consecutive ranges (e.g., between (i)(1)(iv) (A) and (G)) may be disclosed instead, provided that the combined concentration range does not include any range that falls entirely outside the exact concentration range in which the ingredient is present.

(vi) Manufacturers may provide a range narrower than those prescribed in (i)(1)(v)

# Appendix D

3.	<b>Composition/ information on ingredients</b>	<p>Except as provided for in paragraph (i) of §1910.1200 on trade secrets:</p> <p><b>For Substances</b></p> <ul style="list-style-type: none"> <li>(a) Chemical name;</li> <li>(b) Common name and synonyms;</li> <li>(c) CAS number and other unique identifiers;</li> <li>(d) Impurities and stabilizing additives (<b>constituents</b>) which are themselves classified and which contribute to the classification of the substance.</li> </ul> <p><b>For Mixtures</b></p> <p>In addition to the information required for substances:</p> <ul style="list-style-type: none"> <li>(a) The chemical name, <b>CAS number or other unique identifier</b>, and concentration (exact percentage) or concentration ranges of all ingredients which are classified as health hazards in accordance with paragraph (d) of §1910.1200 and             <ul style="list-style-type: none"> <li>(1) are present above their cut-off/concentration limits; or</li> <li>(2) present a health risk below the cut-off/concentration limits.</li> </ul> <p><i>Note: When CAS number is not available or claimed as a trade secret, the preparer must indicate the source of unique identifier.</i></p> </li> <li>(b) The concentration (exact percentage) shall be specified unless a trade secret claim is made in accordance with paragraph (i) of §1910.1200, when there is batch-to-batch variability in the production of a mixture, or for a group of substantially similar mixtures (<i>See A.0.5.1.2</i>) with similar chemical composition. In these cases, concentration ranges may be used.</li> </ul> <p><b>For All Chemicals Where a Trade Secret is Claimed</b></p> <p>Where a trade secret is claimed in accordance with paragraph (i) of §1910.1200, a statement that the specific chemical identity, <b>and/or</b> concentration (exact or <b>range</b>) of the composition has been withheld as a trade secret is required. <b>When the concentration or concentration range is withheld as a trade secret, the prescribed concentration ranges used in §1910.1200(i)(1)(iv) – (vi) must be used. -</b></p>
4.	<b>First-aid measures</b>	<ul style="list-style-type: none"> <li>(a) Description of necessary measures, subdivided according to the different routes of exposure, <i>i.e.</i>, inhalation, skin and eye contact, and ingestion;</li> <li>(b) Most important symptoms/effects, acute and delayed.</li> <li>(c) Indication of immediate medical attention and special treatment needed, if necessary.</li> </ul>

# Changes to 1910.1200(i), Trade Secrets – What Does OSHA Say?

- In the NPRM, OSHA proposed several changes to paragraph (i). First, OSHA proposed to allow manufacturers, importers, and employers to withhold a chemical's concentration range as a trade secret, which had not previously been permitted, and to add language specifying that it is Section 3 of the SDS from which trade secret information may be withheld.



# Changes to 1910.1200(i), Trade Secrets

- Second, OSHA proposed to require the use of prescriptive concentration ranges in lieu of the actual concentration or concentration range whenever the actual concentration or concentration range is claimed as a trade secret. These changes were proposed to align with Canada's WHMIS, allowing manufacturers, importers, and employers the ability to use the same SDS for both U.S. and Canadian workplaces.

# Open Discussion



- What are some key questions, uncertainties and concerns that SDS Authors & HazCom professionals within the regulated community are encountering when interpreting and developing plans to comply with OSHA's 2024 HCS Amendments?
- What issues do the HCS Amendments present?
- What information may be helpful for OSHA to address in enforcement and interpretative guidance materials
- Other?