

Questions & Answers for OSHA's 2024 Update to the Hazard Communication Standard (HCS)

Why did OSHA update the HCS?

OSHA updated the HCS to improve dissemination of information about chemical hazards by improving and streamlining precautionary statements, providing additional clarification of existing regulatory requirements, incorporating new hazard classes and categories and increasing alignment with other U.S. agencies and international trading partners.

What are some of the key changes in the update to the HCS and how do they align with international trading partners and other U.S. agencies?

Most of the key changes in this update fall under one of the following themes:

1. Maintaining alignment with the GHS (primarily Rev. 7) and U.S. trading partners (including Health Canada's WHMIS)

- Paragraph (f)(12) – small packages. Updates include special labeling provisions for 3 ml and 100 ml containers similar to Health Canada's Workplace Hazardous Materials Information System (WHMIS) requirements.
- Paragraph (i) – trade secrets. Updates include mandatory use of prescribed concentration ranges when exact percentages or percentage ranges of materials are claimed as a trade secret. The prescribed concentration ranges align with those used by Health Canada's WHMIS.
- Appendix A (health hazards) updates align primarily with revised health hazard definitions and general updates to hazard classes in GHS Rev. 7. Updates include, but are not limited to, the Skin corrosion/irritation and Serious eye damage/eye irritation chapters, with non-animal test methods from Rev. 8 added to skin corrosion/irritation to promote use of alternative methods.
- Appendix B (physical hazards) updates align primarily with Rev. 7 and include, but are not limited to, Flammable gases (expanding hazard categories), Desensitized explosives, and Aerosols (including additional hazard category).
- Appendix C (label elements) updates align primarily with Rev. 7 and include new or updated hazards, updated guidance, and precautionary statements.
- Appendix D (SDS) updates align primarily with Rev. 7 and include revisions to SDS Sections 2, 3, 9, and 11.

2. Addressing issues identified during implementation of the 2012 update to the HCS

- Paragraph (d)(1) – hazard classification. The final rule clarifies which hazards must be evaluated and the hazard information required on the label versus the SDS.
- Paragraph (f)(11) – labels. The final rule adds flexibility for label updates on packages that have been released for shipment.
- Paragraph (f)(12) – labels. The final rule clarifies labeling requirements for small packages.

3. Improving alignment/coordination with other U.S. agencies

- Paragraph (c) – released for shipment. The final rule defines “released for shipment” similarly to the Environmental Protection Agency's Pesticide Registration and Classification Procedures regulation, [40 CFR 152.3](#).
- Paragraph (f)(5) – bulk shipment. The final rule provisions on label placement and pictograms increased flexibility for shipments that are also regulated by the U.S. Department of Transportation.

What are some benefits of this update to the HCS?

OSHA believes this update to the HCS improves worker protections by clarifying existing regulatory requirements, incorporating new hazard classes and categories, and improving and streamlining precautionary statements. In addition, updates that increase alignment with key trading partners facilitate international trade.

How does this rule affect State Plans?

Those State Plans that have their own hazard communication standards must adopt provisions that are at least as effective as the final rule. OSHA evaluates those State Plans to ensure that any updates do not unduly burden interstate commerce. (OSH Act section 18(c), 29 U.S.C. 667(c)(2)).

What are the expected economic impacts of this update to the HCS?

OSHA estimates that the final rule affects 111,223 firms, 147,832 establishments, and 1,530,476 employees and, for each affected industry, either provides cost savings or the costs would be less than one percent of revenues or ten percent of profits. The net cost savings of the final rule are expected to be \$29.8 million per year (seven percent discount rate). For more information on OSHA's economic analysis of this rule please see Section VI. Final Economic Analysis and Regulatory Flexibility Analysis of the final rule.

How did paragraph (d)(1) change from HCS 2012 to HCS 2024?

OSHA specified that the hazard classification must include any hazards associated with the chemical's intrinsic properties, including a change in the chemical's physical form (new paragraph (d)(1)(i)) and chemical reaction products associated with known or reasonably anticipated uses or applications (new paragraph (d)(1)(ii)). In addition, the agency rearranged the order of two existing sentences. The changes are shown below in red line strikeout:

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

(i) A change in the chemical's physical form; and

(ii) Chemical reaction products associated with known or reasonably anticipated uses or applications.

How do the changes in paragraph (d)(1) affect classification of chemical hazards?

The changes in paragraph (d)(1) clarify that the classification process for a hazardous chemical must include hazards that result from a change to the chemical's physical form and from chemical reaction products associated with known or reasonably anticipated uses or applications of that chemical. The change to the text of (d)(1) does not change the requirements of the HCS for manufacturers and importers, which the agency has previously explained includes hazard assessment and communication obligations for all normal conditions of use of their chemicals and foreseeable emergencies associated with those chemicals (77 FR 17601-02).

To what extent are manufacturers and importers' hazard classifications required to account for downstream uses?

The hazard classification must account for downstream uses that are known to the classifier or can be reasonably anticipated by them. OSHA stated in the preamble of the 2024 HCS that paragraph (d)(1) does not require classifiers to anticipate every conceivable way the chemical could be used. Rather, the classification should provide downstream users with sufficient information to perform a hazard assessment specific to their own workplace and how employees use the chemical there (89 FR 44281).

OSHA stated in a [2016 Letter of Interpretation \(LOI\)](#) that the manufacturer or importer "must make a reasonable effort to obtain reliable information to determine how their product(s) or by-product(s) may expose workers under normal conditions of use or in foreseeable emergencies." A reasonable effort to classify the hazards associated with downstream uses would typically

include, for example, hazards arising from uses advertised on the chemical packaging and other uses the classifier is aware of at the outset of the classification process.

Manufacturers and suppliers may not always know the use(s) of a chemical substance or mixture they distribute, for example when a user is unwilling to divulge the use of a chemical due to concerns about confidential business information (CBI) or when the product moves through several steps of a supply chain. How does OSHA's requirement to classify the hazards associated with downstream uses apply in these cases?

OSHA does not intend for manufacturers, distributors, or importers to predict or anticipate every conceivable way their chemical could be used, but rather to include in their hazard classification the hazards that arise through downstream uses that are known to them or that they can reasonably anticipate. OSHA does not consider a manufacturer or supplier to know or be able to reasonably anticipate a downstream use if the downstream user uses the chemical in a proprietary process, producing derivatives that are trade secrets (89 FR 44283).

OSHA also does not intend for upstream manufacturers who supply chemicals to other manufacturers to conduct hazard analyses for chemical products or by-products created many steps further downstream. The first employer meeting the definition of a manufacturer does not need to consider downstream uses that are more than one step away from the manufacturer's chemical as sold in the chemical manufacturing supply chain (i.e. downstream uses that involve using a version of their product that has already been chemically reacted after its sale). An example of this is a company providing methyl methacrylate to a second manufacturer who creates polymethyl methacrylate and then makes products from the polymethyl methacrylate; the first manufacturer does not need to warn on the hazards of the products made from the polymethyl methacrylate (CPL-02-02-079, Inspection Procedures for the Hazard Communication Standard (HCS 2024)).

However, upstream chemical manufacturers who are removed from downstream chemical users by supply chain intermediaries that do not use the chemical in a production process of their own, such as importers or distributors, must make a reasonable effort to obtain reliable information to determine the chemical reaction products associated with known or reasonably anticipated uses or applications. As OSHA observed in the preamble to the 2024 HCS, manufacturers often have access to information about downstream uses, for example from product stewardship programs and information shared by industry associations (89 FR 44282). In contrast, as noted in a [2016 Letter of Interpretation \(LOI\)](#), classifiers are not required to contact every downstream workplace to obtain information about downstream uses.

Some chemicals, such as intermediate and commodity chemicals, have many uses. Does paragraph (d)(1)(ii) require that the hazard classification account for all of them?

OSHA is aware that some chemicals have so many uses it would be difficult to anticipate them all. For example some chemicals, such as toluene, that are used as starting materials for manufacturing other chemicals would likely have too many possible uses for the upstream chemical manufacturer to know or reasonably anticipate all the ways that it could be used. OSHA

would not expect manufacturers of toluene, for instance, to classify hazards of the products that use toluene as a starting material in the manufacture of a downstream user's products. However, manufacturers of toluene would still need to ensure that the SDS has the appropriate information in Section 10 on stability and reactivity that would help those downstream manufacturers consider the risks of their specific processes (89 FR 44282).

What are the compliance dates for HCS 2024?

OSHA has developed a tiered approach for establishments to come into compliance with the updated HCS. The table highlights those dates:

Compliance Date	Requirement(s)	Who
Effective date – July 19, 2024		Chemical manufacturers, importers, distributors and employers
May 19, 2026	Update labels and SDSs for substances	Chemical manufacturers, importers, distributors and employers
November 20, 2026	Update workplace labels, hazard communication program and training as necessary	Employers - substances
November 19, 2027	Update labels and SDSs for mixtures	Chemical manufacturers, importers, distributors and employers
May 19, 2028	Update workplace labels, hazard communication program and training as necessary	Employers - mixtures
Transition Period – July 19, 2024, to the compliance dates noted above	May comply with either 29 CFR 1910.1200 (this final standard), or the current standard, or both	Chemical manufacturers, importers, distributors, and employers