

Responses to Mr. Halprin's comments on the Extension of the ICR for OSHA's Hazard Communication Standard (HCS).

No. (Ref. only)	Comment	Collection of Information Yes/No	Response to comment/ Rationale for not being a collection of Information
INTERPRETATION OF HCS 2012			
1.	1. Interpretation and Clarification of HCS 2012 Labeling Deadlines		Mr. Halprin's letter to OMB quoted several previous correspondences with OSHA requesting various interpretations of the HCS 2012 standard that cumulated in a March 25th letter to Dr. Michaels, Assistant Secretary of the Occupational Safety and Health Administration. On September 1, 2015 OSHA responded to Mr. Halprin's (Attachment A –Response to Mr. Halprin's Request for Interpretation of HCS on behalf of a large manufacturer). A summary of his comments and the Agency's responses follow.
2.	Mr. Halprin requests OSHA to take a "released for shipment" approach with respect to labeling containers of hazardous chemicals with HCS 2012-compliant labels.	Yes	<p><u>Manufacturers and Importers of Hazardous Chemicals.</u> The HCS 2012 gave manufacturers and importers of hazardous chemicals (including businesses that repackage) until June 1, 2015 to label shipped containers with HCS 2012-compliant labels. See 29 CFR § 1910.1200(j)(2). OSHA used its enforcement discretion to allow manufacturers or importers with existing stock packaged (e.g., boxed, palletized, shrink-wrapped, etc.) for shipment prior to June 1, 2015, to continue to ship those containers downstream provided that the containers are HCS 1994-compliant labeled. In these limited instances, there is no requirement to re-label containers that have already been packaged for shipment with HCS 1994-compliant labels. However, the manufacturer or importer must provide HCS 2012-compliant labels for each and every individual container and the appropriate HCS 2012-compliant SDS(s) with the initial shipment. Any hazardous chemical container that is packaged for shipment after June 1, 2015 must have an HCS 2012-compliant label on it prior to shipping except as discussed below.</p> <p>If after June 1, 2015, the manufacturer or importer can demonstrate that it exercised reasonable diligence and good faith efforts to obtain hazard classification information from upstream suppliers but for circumstances beyond their control they received the necessary information to develop HCS 2012-compliant SDSs and labels later than June 1, 2015, they may continue to ship containers downstream provided the containers are HCS 1994-compliant labeled. The standard requires an HCS 1994-compliant MSDS or HCS 2012-compliant SDS be provided, as appropriate, to downstream users.</p> <p>All containers of hazardous chemicals shipped by a manufacturer or importer must have been made HCS-2012 compliant labeled by June 1, 2017.</p> <p><u>Distributors.</u> The HCS 2012 allowed distributors to ship chemicals with HCS 1994 labels until December 1, 2015. See 29 C.F.R. § 1910.1200(j)(2)(i). Again, using OSHA's enforcement discretion, after December 1, 2015, distributors may ship existing stock packaged for shipment if the immediate container label is HCS 1994-compliant. As described in the case with manufacturers and importers, in these limited instances, there is no requirement to re-label containers that have already been packaged for shipment with HCS 1994-compliant labels. Distributors must, however, provide a HCS 2012-compliant label for</p>

			each and every individual container shipped and the appropriate HCS 2012-compliant SDS(s) after December 1, 2015 or upon request unless they can demonstrate reasonable diligence and good faith efforts that they have not received HCS 2012-compliant labels and SDSs from the manufacturer or importer. OSHA allows an additional two-year period, i.e., until December 1, 2017, for distributors to ship products with HCS 1994 labels. Distributors must provide HCS 2012-compliant SDSs to downstream users with the first shipment after a new or revised SDS is provided by the manufacturer or importer.
3.	Mr. Halprin asked if OSHA will allow containers packaged for shipment prior to June 1, 2015 and HCS 1994 labeled to be deemed compliant for the life of the product in the container?	Yes	OSHA believes above timeframe, see Item 1, is a reasonable accommodation to the requirements in paragraphs (j)(2) and (j)(2)(i) to comply by June 1, 2017 and December 1, 2017, respectively. OSHA believes that most manufacturers, importers, and distributors will be able to avoid relabeling chemicals that were packaged for shipment before June 1, 2017. https://www.osha.gov/OshDoc/Directive_pdf/CPL_02-02-079.pdf page 42
4.	Mr. Halprin asked if the manufacturer or importer that is shipping existing stock packaged (e.g., boxed, palletized, shrink-wrapped, etc.) prior to June 1, 2015 with HCS 1994-compliant labels and MSDSs must provide HCS 2012-compliant labels and SDSs for each individual container of hazardous chemicals shipped downstream?	Yes	The manufacturer or importer must provide a label for each and every individual container, but only one HCS 2012-compliant SDS per hazardous chemical per employer.
5.	Mr. Halprin asked if after December 1, 2017, can distributors continue to ship existing stock packaged (e.g., boxed, palletized, shrink-wrapped, etc.) prior to June 1, 2015 that is HCS 1994-compliant labeled?	Yes	Limited. The Agency has offered relief by exercising enforcement discretion that permits distributors to continue shipping existing stock until December 1, 2017; however, the Agency will provide relieve on a case by case basis. In order to fulfill the purpose of HCS 2012 to provide adequate and consistent information to employers and employees who use hazardous chemicals, manufacturers, importers, and distributors must fully comply with the new labeling and SDS requirements.
6.	Mr. Halprin expressed concern regarding re-labeling existing stock with HCS 2012-compliant labels where feasible, of potential occupational hazards (e.g., hand injury to workers from removing labels and relabeling).	Questionable. Speaks to the safety of a worker not the practical utility or costs of the information collection requirement	Injuries would be mitigated by conducting a thorough hazard assessment, as required by 29 CFR 1910.132(d), and then providing the type(s) of personal protective equipment that will protect workers from the hazards identified (e.g., hand protection). The hazards, as described by Mr. Halprin that are associated with manual lifting can be lessened by developing and instituting an ergonomic lifting program. The National Institute for Occupational Safety and Health (NIOSH) published a document titled Ergonomic Solutions for Retailers. OSHA plans to discuss this issue in the next HCS rulemaking.
7.	2. Reliance on Chemical Hazard Information Developed by an Upstream Manufacturers		

8.	<p>Mr Halprin commented that OSHA has arbitrarily and unreasonably limited the ability of a party in the chain of distribution to rely on the chemical hazard information developed by an upstream manufacturer.</p> <p>In Mr. Halprin’s submission he provided several detailed scenarios between company A, which produces a product <i>x</i> and company B, which then resells the product either under company A’s or company B’s name, depending on the scenario. In essence, he argues that in each case company A retains responsibility for the hazard classification, SDS and label.</p>	Yes	<p>If the distributor maintains the original manufacturers name on the label and SDS, the original manufacturer is the “responsible party.” However, if the distributor removes the name of the original manufacturer and substitutes their own names they become the “responsible party.” The use of this term predates HCS 2012 and OSHA has not changed its position. Additionally, OSHA has not altered the definition of manufacturer in the directive to mean “an employer that manufactures, processes, formulates, or repackages a hazardous chemical. The first employer meeting the definition of a manufacturer will be responsible for performing the hazard classification, developing or obtaining the SDSs, and labeling containers of the hazardous chemicals.” While it does not require the downstream manufacturer to do a complete classification of their product it does require that they ensure that they are providing accurate information. From compliance perspective, if a downstream manufacturer repackages or relabels a hazardous chemical and removes the original manufacturer from the container, OSHA compliance inspectors only have the downstream manufacturer’s information to ensure compliance and do not have knowledge of the original source. Therefore, OSHA does not agree with Mr. Halprin’s interpretation.</p>
9.	<p>3. Classification Criteria for Flammable Aerosols</p>		<p>In his comments on the ICR extension, Mr. Halprin included comments he previously submitted to the Agency requesting for clarification on classification of flammable aerosols (proposed amendments). These comments were previously addressed in a letter to Mr. Halprin. (See Attachment B – Response to Mr. Halprin’s request for clarification of flammable aerosols). Summary of our response follows.</p>
10.	<p>Mr. Halprin argues that contrary to OSHA’s stated intent, the criteria for classification of flammable aerosols in Table B. 3.1 was inconsistent with the GHS and DOT regulations, and suggested that rulemaking would be needed to correct this problem and suggested means for OSHA to amend the table.</p>	Yes	<p>OSHA does not believe that a technical amendment is warranted, but plans to update the criteria for flammable aerosols in the next HCS rulemaking.</p>
11.	<p>Proposed Amendment #1: Insert a parenthetical statement under Table B.3.A that reads “(only applicable if aerosol contains a component classified as flammable)”</p>	Yes	<p>OSHA does not view this insertion as appropriate because OSHA considers any aerosol that contains more than 1 percent flammable component to be potentially flammable.</p>
12.	<p>Proposed Amendment #2: Capitalize the “or” phrases under Category 1 and Category 2 spray aerosols.</p>	No	<p>OSHA does not view that this proposed editorial amendment provides any clarity to the flammable aerosol criteria.</p>

13.	Proposed Amendment #3: For Category 2, the suggestion is to remove the phrase “Contains >1% flammable components, or the heat of combustion is \geq 1% flammable components, or the heat of combustion is \geq 20 kJ/g; and ...”	Yes	<p>This phrase clarifies the classification of a chemical as flammable. Should the phrase be removed, the chemical would not necessarily be flammable, and therefore not a flammable aerosol.</p> <p>This is consistent with Revision 3 of the GHS on which HCS 2012 is based. The decision logic for flammable aerosols examines whether the substance contains less than or equal to 1% flammable components, <u>and</u> the heat of combustion is less than 20 kJ/g. If the answer is “yes”, then the substance is not classified. Therefore, to be classified as a flammable aerosol, a substance must have more than 1 % flammable components or a heat of combustion \geq 20 kJ/g. Therefore the text in Table B.3.1 of the HCS provides that the chemical is considered flammable if it contains greater than 1% flammable components, or the heat of combustion is \geq to 20 kJ/g. This is also consistent with GHS Rev. 6.2.3.21., <i>Manual of Tests and Criteria</i> (MTC) 31.3, and applicable DOT regulations at 49 CFR § 173.115(l)(1)-(3).</p> <p>To clarify, the last statement in the table [“and it does not meet the criteria for Category 1”] applies to both spray and foam aerosols. However, OSHA will consider moving this phrase to the beginning of the Category 2 criteria in the table in the upcoming rulemaking to minimize any potential confusion.</p>
14.	Proposed Amendment #4: For category 2, insert “the heat of combustion is \geq 20kJ/g or” under spray aerosols.	Yes	OSHA plans to evaluate the flammable aerosols hazard class in the upcoming rulemaking since the chapter has been expanded to include on-flammable aerosols.
15.	<p>4. Section 1910.1200(g)(2) and Section 1910.1200(g)(10)</p> <p>Mr. Halprin argued that there is a conflict between 29 CFR 1910.1200(g)(2) and 29 CFR 1910.1200(g)(10).</p>	Yes	<p>29 CFR 1910.1200(g)(2) discusses the safety data sheet (SDS) format, that is, the order of presentation of the information required on the SDS.</p> <p>29 CFR 1910.1200(g)(10) discusses the alternative mechanisms by which the information of the SDS may be readily accessible to the employees in the work area. This paragraph is provided so that an employer may choose an alternative approach to warn employees of the hazards of a process rather than the hazards of a specific chemical (emphasis added). However, the standard requires that the SDS must still be available to employees for each hazardous chemical involved in the process.</p> <p>As explained in the Hazard Communication Standard 1983 preamble, the purpose of the section (g)(10) is to provide the employer with an alternative means of informing the employee of the hazards to which they may be exposed, similar to that of workplace labeling, found in 29 CFR 1910.1200(f)(6)-(7). 29 CFR 1910.1200(g)(10) explains that alternatives to SDSs are permitted as long as they provide the appropriate information and are readily accessible to the employees during each work shift. The 1983 preamble also provides examples when the alternative may be provided in notebooks containing operating procedures. There were no changes to paragraph (g)(10) in the HCS 2012.</p>
16.	II. BURDEN HOUR ESTIMATES		
17.	Mr. Halprin questioned OSHA’s assertion that 60% of employers were already in compliance with HCS 2012 at the time it was adopted is clearly erroneous.	Yes	OSHA continued to use the 60 percent factor in 1994 because it was based on existing compliance under existing state laws, and that it did not make the distinction OSHA had made between manufacturing and non-manufacturing sectors. However, the 60 percent compliance factor is virtually unused in the newer analysis being used to calculate compliance with the general requirement for a written hazard

			communication program. The 2012 ICR for the Final rule (https://www.reginfo.gov/public/do/PRAViewDocument?ref_nbr=201203-1218-001) used 1 percent, 5 percent, 25 percent, and 75 percent compliance rates for producers or importers of chemical products (based on the size of the firm): 75 percent for firms with over 500 employees; 25 percent for firms with 100 to 500 employees; 5 percent for firms with 20 to 99 employees; and 1 percent for firms with fewer than 20 employees.
18.	Mr. Halprin also commented that that number of chemicals should have been greatly expanded to address expansions in scope of chemicals covered in 1994 (addition of intermediates and wastes) and that coverage of “a potentially infinite number of chemical mixtures” would result in far greater number of chemicals than OSHA estimated. Mr. Halprin also suggested that each shade of paint is treated as a separate chemical, our understanding is that each major paint company would have hundreds of thousands of chemicals.	Yes	Mr. Halprin overestimates the impact of the 1994 rule in expanding the number of chemicals covered by HCS. The 1994 final rule included a number of minor changes and technical amendments to further clarify the requirements. The number of chemicals covered was not significantly expanded in this rulemaking. Chemical wastes not covered by EPA could, and still can, use the MSDS (SDS) for the product that the wastes were generated from. Also, similar mixtures may be covered by a single SDS in many cases so the suggestion that every shade of paint requires an unique SDS is incorrect. More generally, for HCS 2012, OSHA developed a new estimate of the total number of SDSs based on data submitted to the ANPRM docket and interviews with over fifty chemical producing firms. This approach would thus assure that the estimate would reflect SDS actually developed as a result of both the 1987 and 1994 rulemakings.
19.	Mr. Halprin suggested that OSHA asserts that only 1 out of every 200 products will require an updated SDS and label each year, and that the Agency understated estimates the Paperwork burden for compliance with HCS 2012.	Yes	In the Final Rule 2012 <i>Hazard Communication Standard --Incorporating Globally Harmonized System of Classification and Labelling of Chemicals</i> ICR, OSHA estimated the burden hours and costs for all employers to revise all of their existing labels and safety data sheets. The 2015 ICR is the first ICR after the compliance deadline, so the assumption was that everyone would have come into compliance recently; therefore, there would be few products that need to be updated. This was not a general estimate of the number of chemicals whose SDSs need revision every year, but of the number of chemicals that would need revision the year after all chemicals had already been revised. OSHA has increased the burden hours in this ICR to reflect the 2017 compliance date.
20.	Mr. Halprin questioned the hour estimate a supervisor/manager takes to revise/update an SDS or label and that the Agency fails to explain how a single supervisor would be qualified to update labels and SDSs.	Yes	The Agency notes that who does the classification is up to the individual manufacturer. The wage rate used in the FEA is that of a manager; it is not intended to indicate that only managers would be doing the classification or that the same person would update all labels or SDSs for a single company. A review of wages for toxicologists (SOC 19-1041) and industrial hygienists (SOC 29-9011) show they are lower than or comparable to wages for a manager, so the manager’s wage is an acceptable proxy for the wage of whoever is doing the classification. While the classification of a chemical product can sometimes involve large teams, the vast majority of mixtures and chemical products produced by smaller firms will normally only be an exercise in reviewing and combining SDSs or in using the many updated SDSs produced by other companies or available from academic repositories as a starting point for their classification.
21.	Mr. Halprin suggested that at minimum, to ensure quality control, we would expect one person to enter the agreed-upon SDS and label changes into the SDS and label data base, and a	Yes	As earlier noted, in the February 2012 <i>Hazard Communication Standard --Incorporating Globally Harmonized System of Classification and Labelling of Chemicals</i> ICR, OSHA estimated the burden hours and costs for all employers to revise their existing labels and safety data sheets. In that ICR, the Agency estimated that establishments would take on average three to seven hours to revise and update existing

	<p>second person to confirm they are correct. For several reasons, label changes are far more complicated than SDS revisions. There is often a limited area in which to place the required information on a label. He does not believe it would be appropriate to assume that a software package will automatically print out a revised label on a packaging line. It would be more realistic to assume that, in many cases, the relevant information will be sent to an outside labeling house, which will work with in-house personnel in developing a revised label layout that will be pre-printed on label rolls and often on bags and other containers. Then there are the material and energy costs of creating and distributing the new SDSs and labels. The costs will be substantially greater if old preprinted labels and containers on which they have been preprinted must be discarded.</p>		<p>SDS/labels. The 2015 ICR recognizes that employers have recently updated their SDSs/labels and estimates the time to revise labels would be substantially less than the previous ICR, since, in most situations SDS/labels would not require significant changes. More generally, OSHA aims to estimate the average burdens and costs of an activity. Some will be simpler and some more complex. OSHA bases its estimates on an average and cannot reasonably base its estimates solely on worst case scenarios.</p>
22.	<p>Mr. Halprin commented that OSHA's ICR failed to include any burden estimate for the transition from HCS 1994 to HCS 2012.</p>	Yes	<p>OSHA included costs for employers to become familiar with the 2012 HCS rule in the 2012 ICR. This ICR assumed that the employers have read and became familiar with the rule, and took a three million hour reduction (see Table 1, Summary of Annual Burden and Cost of the 2015 ICR). As noted by Mr. Halprin, the Agency annualized the burden hours for revisions to the safety data sheet over a three year period, resulting in an annualization of 1,138,560 hour reduction. OSHA concurs with his recommendation that the burden hours and costs for revisions to safety data sheets and labeling associated with HCS 2012 be annualized over a five year period to better account for current burden hours. This results in an annual burden of 683,136 hours at a cost of 44 million dollars for remaining employers to come into compliance with HCS 2012 SDS and label revisions.</p>
23.	<p>Mr. Halprin commented that the Inspection Procedures for Hazard Communication Standard (HCS 2012) (Directive No. CPL 02-02-079) (https://www.osha.gov/OshDoc/Directive_pdf/CPL_02-02-079.pdf) contains additional collections of information for employers that are not contained in the Hazard Communication Standard. He references information a CSHO may request from manufacturers or importers to demonstrate reasonable diligence or good faith efforts when attempting to obtain necessary information to update an SDS or label. (CPL 02-</p>	No.	<p>The PRA does not apply to collections of information during the conduct of an administrative action or investigation. This exception applies during the entire investigation once a case file is open. (5 CFR 1320.4 (a) (2) and (c)). Second, the HCS directive does not require employers to keep any records. The Directive contains guidelines that provide CSHOs with lists of information an employer may have gathered or actions an employer may have taken while trying to obtain necessary information to update their labels or SDSs. If employers have such information, they must provide this information to the CSHO upon request during the inspection.</p>

	02-079; pages 43, 44, and 55)		
24.	<p>“Reasonable diligence” under Section 1910.1200(d)(3)(ii) Mr. Halprin argues that, based on the interim compliance guidance and the language of the 2015 HCS CPL, it appears that OSHA has interpreted Section 1910.1200(d)(3)(ii) to mean that a “safety data sheet misstates or omits information required by this section” if it is not an HCS 2012-compliant SDS. He further states that there is no mention of that intent in the preamble to the final rule because at the time the preamble was written OSHA apparently had not yet recognized the infeasibility of compliance by June 1, 2015.</p>	Yes.	<p>Downstream manufacturers may continue to rely on the SDS from upstream suppliers except “...where they know information is incomplete or wrong, they have some responsibility for ensuring they have the correct information before using it for their own evaluations.” This text does not change the responsibility of the original manufacturer to ensure the accuracy of the SDS. Nor does it require the downstream manufacturer to do a complete classification of all of their ingredients of their product. It is however a safety net to ensure that no obvious errors are transmitted to downstream users. The compliance directive was just an additional clarification of the preamble language.</p>
25.	<p>PUBLIC PARTICIPATION IN THE GHS SUBCOMMITTEE PROCESS</p>		
26.	<p>Mr. Halprin commented that OSHA focuses on achieving a working consensus with the UN Subcommittee on GHS, rather than "advocating US interests, and the interest of OSHA and US industry." He states that by the time OSHA holds stakeholder meetings prior to meeting with the UN GHS Subcommittee, important decisions have already been made. He references the "Dust explosion hazards guidance" as an example of these processes.</p>	No.	<p>These comments address procedural concerns regarding OSHA, Un Subcommittee on GHS and the opportunity for public input. They do not address the information collection requirements or PRA requirements.</p>

Attachment A

Response to Mr. Halprin's Request for an Interpretation of OSHA's Hazard Communication Standard on behalf of a large manufacturer.



Reply to the attention of:

SEP 1 - 2015

Mr. Lawrence P. Halprin
Keller and Heckman LLP
1001 G Street, N.W., Suite 500 West
Washington, D.C. 20001

Dear Mr. Halprin,

This is in response to your letter to the Occupational Safety and Health Administration (OSHA) requesting an interpretation of OSHA's Hazard Communication standard (HCS 2012), 29 CFR 1910.1200, on behalf of a large manufacturer. Your letter was forwarded to the Directorate of Enforcement Programs for a response. In your letter you requested that OSHA withdraw its February 9, 2015 memorandum titled, *Enforcement Guidance for the Hazard Communication Standard's (HCS) June 1, 2015 Effective Date*, and modify and reissue it to be consistent with the points made in your letter. Specifically, you requested that OSHA adopt a "released for shipment" approach with respect to container labeling, and that the labeling be deemed compliant for the life of the product in that container.

The Agency understands the complexity and scale of the changes required of manufacturers and importers during this transition period. However, the Agency believes that the standard as currently written is necessary for the long-term safety of downstream users. Because of questions and requests for further clarification by manufacturers, importers, and distributors, OSHA issued an additional memorandum to field staff, titled, *Interim Enforcement Guidance for Hazard Communication 2012 (HCS 2012) June 1, 2015 Effective Date*, dated May 29, 2015, to address the limited continued use of HCS 1994-compliant labels on shipped containers. Following the issuance of the aforementioned interim policy, you requested that OSHA provide additional clarification in our response to your original request for interpretation. Below is a brief summary of the background you provided, followed by your paraphrased questions and our responses.

Background: Your client manufactures and distributes gypsum plaster products. In a typical year, the company sells over 250,000 tons of gypsum plaster in 80 and 100-pound bags. The gypsum plaster products consist of approximately 75 intermediate formulations manufactured from 20 to 25 raw materials. An individual formulation can consist of up to 10 different raw materials.

Your client has requested HCS 2012-compliant safety data sheets (SDSs) from suppliers and did not receive any as of March 25, 2015. Because the gypsum plaster product market is highly seasonal, your client built a substantial inventory before June 1, 2015. The need to meet customer demand prevents your client from timing production so that inventory with HCS 1994-compliant labels can be exhausted.

The 80 and 100-pound bags of gypsum plaster are filled, sealed, palletized and shrink-wrapped with 40 or 50 bags per pallet. You stated that from an ergonomics standpoint, the effort involved in manually removing 40 to 50 bags to re-label and re-palletize them would be substantial. In addition, you raised concern that the risk of harmful exposure to the plaster or material handling hazards would be greater.

Question 1: Will OSHA take a “released for shipment” approach with respect to labeling containers of hazardous chemicals with HCS 2012-compliant labels?

Response: The HCS 2012 gave manufacturers and importers of hazardous chemicals (including businesses that repackage) until June 1, 2015 to label shipped containers with HCS 2012-compliant labels. *See* 29 CFR § 1910.1200(j)(2). As you are aware, OSHA is using its enforcement discretion to allow manufacturers or importers with existing stock packaged (e.g., boxed, palletized, shrink-wrapped, etc.) for shipment prior to June 1, 2015, to continue to ship those containers downstream provided that the containers are HCS 1994-compliant labeled. In these limited instances, there is no requirement to re-label containers that have already been packaged for shipment with HCS 1994-compliant labels. However, the manufacturer or importer must provide HCS 2012-compliant labels for each and every individual container and the appropriate HCS 2012-compliant SDS(s) with each shipment.

Any hazardous chemical container that is packaged for shipment after June 1, 2015 must have an HCS 2012-compliant label on it prior to shipping. However, if after June 1, 2015, the manufacturer or importer can demonstrate that it exercised reasonable diligence and good faith efforts to obtain hazard classification information from upstream suppliers but for circumstances beyond their control they received the necessary information to develop HCS 2012-compliant SDSs and labels later than June 1, 2015, they may continue to ship containers downstream provided the containers are HCS 1994-compliant labeled. The standard requires an HCS 1994-compliant MSDS or HCS 2012-compliant SDS be provided, as appropriate, to downstream users.

Eventhough a manufacturer or importer may have built up a substantial inventory, overtime, containers of hazardous chemicals that were packaged for shipment prior to June 1, 2015 should become less of a labeling burden to manufacturers and importers as inventory is depleted. Therefore, all containers of hazardous chemicals shipped by a manufacturer or importer must be HCS-2012 compliant labeled by June 1, 2017.

With regard to distributors, the HCS 2012 permits distributors to continue to ship chemicals with HCS 1994 labels until December 1, 2015. *See* 29 C.F.R. § 1910.1200(j)(2)(i). We are mindful that due to potential delays in compliance on the part of manufacturers and importers, some distributors may have difficulty depleting their existing stock of HCS 1994-labeled hazardous chemicals by the December 1, 2015 deadline. Again, using OSHA’s enforcement discretion, after December 1, 2015, distributors may ship existing stock packaged (e.g., boxed, palletized, shrink-wrapped, etc.) for shipment if the immediate container label is HCS 1994-compliant. As described in the case with manufacturers and importers, in these limited instances, there is no requirement to re-label containers that have already been packaged for shipment with HCS 1994-

compliant labels. Distributors must, however, provide a HCS 2012-compliant label for each and every individual container shipped and the appropriate HCS 2012-compliant SDS(s) after December 1, 2015 or upon request unless they can demonstrate reasonable diligence and good faith efforts that they have not received HCS 2012-compliant labels and SDSs from the manufacturer or importer. The OSHA clarification in the compliance directive offers an additional two-year period, i.e., until December 1, 2017, for distributors to ship products with HCS 1994 labels. Distributors must provide HCS 2012-compliant SDSs to downstream users with the first shipment after a new or revised SDS is provided by the manufacturer or importer.

Question 2: Will OSHA allow containers packaged for shipment prior to June 1, 2015 and HCS 1994 labeled to be deemed compliant for the life of the product in the container?

Response: Although your recent correspondences and discussions suggest a different approach to determining the length of the labeling accommodation for manufacturers, importers and distributors, OSHA believes the above offered timeframes is a reasonable accommodation to the requirements in paragraphs (j)(2) and (j)(2)(i) to comply by June 1, 2015 and December 1, 2015, respectively. OSHA believes that this amount of time is reasonable, and that most manufacturers, importers, and distributors will be able to avoid relabeling chemicals that were packaged for shipment before June 1, 2015.

Question 3: Must the manufacturer or importer that is shipping existing stock packaged (e.g., boxed, palletized, shrink-wrapped, etc.) prior to June 1, 2015 with HCS 1994-compliant labels and MSDSs provide HCS 2012-compliant labels and SDSs for each individual container of hazardous chemicals shipped downstream?

Response: The manufacturer or importer must provide a label for each and every individual container, but only one HCS 2012-compliant SDS per hazardous chemical.

Question 4: After December 1, 2017, can distributors continue to ship existing stock packaged (e.g., boxed, palletized, shrink-wrapped, etc.) prior to June 1, 2015 that is HCS 1994-compliant labeled?

Response: Per CPL 02-02-079, the Agency has offered relief by exercising enforcement discretion that permits distributors to continue shipping existing stock until December 1, 2017. In order to fulfill the purpose of HCS 2012 to provide adequate and consistent information to employers and employees who use hazardous chemicals, manufacturers, importers, and distributors must fully comply with the new labeling and SDS requirements.

To address your concerns regarding re-labeling existing stock with HCS 2012-compliant labels where feasible, any potential hazards (e.g., hand injury to workers from removing labels and relabeling) could be mitigated by conducting a thorough hazard assessment, as required by 29 CFR 1910.132(d), and then providing the type(s) of personal protective equipment that will protect workers from the hazards identified (e.g., hand protection). The hazards, as you described, that are associated with manual lifting can be lessened by developing and instituting an ergonomic lifting program. The National Institute for Occupational Safety and Health (NIOSH) published a document titled Ergonomic Solutions for Retailers. This NIOSH

publication focuses on the grocery sector, but the easy-to-read format can be adapted to other scenarios, including for those working in warehousing and storage facilities.

Thank you for your interest in occupational safety and health. We hope you and your client find this information helpful. OSHA's requirements are set by statute, standards, and regulations. Our letters of interpretation do not create new or additional requirements but rather explain these requirements and how they apply to particular circumstances. This letter constitutes OSHA's interpretation of the requirements discussed. From time to time, letters are affected when the Agency updates a standard, a legal decision impacts a standard, or changes in technology affect the interpretation. To assure that you are using the correct information and guidance, please consult OSHA's website at <http://www.osha.gov>.

If you have further questions, please feel free to contact the Office of Health Enforcement at (202) 693-2190.

Sincerely,



Thomas Galassi, Director
Directorate of Enforcement Programs

Attachment B

Response to Mr. Halprin's request for a clarification of flammable aerosols.



Reply to the attention of:

FEB 9 2016

Mr. Lawrence P. Halprin
Keller and Heckman, LLP
1001 G Street, N.W.
Suite 500 West
Washington, D.C. 20001

Dear Mr. Halprin:

This letter is in response to your May 27, 2015 email requesting further clarification on the classification of flammable aerosols. In this email you requested OSHA amend Table B.3.1 of the Hazard Communication Standard (HCS) because, you said, that it was inconsistent with the GHS and applicable Department of Transportation regulations. OSHA has reviewed your request and provides a response to each amendment below based on review of the decision logics in Chapter 2.3 of the GHS, Revision 3. OSHA does not believe that a technical amendment is warranted, but plans to update the criteria for flammable aerosols in the next HCS rulemaking.

1. Proposed Amendment #1: Insert a parenthetical statement under Table B.3.1 that reads “(only applicable if aerosol contains a component classified as flammable)”.

RESPONSE: OSHA does not view this insertion as appropriate because OSHA considers any aerosol that contains more than 1 percent flammable component to be potentially flammable.

2. Proposed Amendment #2: Capitalize the “or” phrases under Category 1 and Category 2 spray aerosols.

RESPONSE: OSHA does not view that this proposed editorial amendment provides any clarity to the flammable aerosol criteria.

3. Proposed Amendment #3: For Category 2, the suggestion is to remove the phrase “Contains > 1% flammable components, or the heat of combustion is \geq 20 kJ/g; and...”

RESPONSE: This phrase clarifies the classification of a chemical as flammable. Should the phrase be removed, the chemical would not necessarily be flammable, and therefore not a flammable aerosol.

This is consistent with Revision 3 of the GHS, on which HCS 2012 is based. The decision logic for flammable aerosols examines whether the substance contains less than or equal to 1% flammable components, and the heat of combustion is less than 20 kJ/g. If the answer is “yes”, then the substance is not classified. Therefore, to be classified as a flammable aerosol, a substance must have **more than** 1% flammable components or a heat of combustion of **equal to**

or greater than 20 kJ/g. Therefore, the text in Table B.3.1 of the HCS provides that the chemical is considered flammable if it contains greater than 1% flammable components, or the heat of combustion is greater than or equal to 20 kJ/g. This is also consistent with GHS Rev. 6 2.3.2.1, Manual of Tests and Criteria (MTC) 31.3, and the applicable DOT regulations at 49 CFR § 173.115(l)(1)-(3).

To clarify, the last statement in the table [“and it does not meet the criteria for Category 1”] applies to both spray and foam aerosols. However, OSHA will consider moving this phrase to the beginning of the Category 2 criteria in the table in the upcoming rulemaking to minimize any potential confusion.

4. Proposed Amendment #4: For category 2, insert “the heat of combustion is \geq 20 kJ/g **or**” under spray aerosols.

RESPONSE: We appreciate you bringing this issue to OSHA’s attention. OSHA plans to evaluate the flammable aerosols hazard class in the upcoming rulemaking since the chapter has been expanded to include non-flammable aerosols; we also plan to address this issue.

Thank you for your interest in occupational safety and health. If you have further questions, please feel free to contact me at (202) 693-1950.

Sincerely,



Andrew Levinson
Deputy Director
Directorate of Standards and Guidance

Hazard Communication Standard

(29 CFR 1910.1200)

§ 1910.1200

29 CFR Ch. XVII (7-1-17 Edition)

New York, North Carolina, Texas, Tennessee, Oregon, Idaho, Arizona, Colorado, Louisiana, Nebraska, Washington, Maryland, North Dakota, South Carolina, and Georgia.

[39 FR 23502, June 27, 1974, as amended at 43 FR 49746, Oct. 24, 1978; 43 FR 51759, Nov. 7, 1978; 49 FR 18295, Apr. 30, 1984; 58 FR 35309, June 30, 1993. Redesignated at 61 FR 31430, June 20, 1996]

§ 1910.1200 Hazard communication.

(a) *Purpose.* (1) The purpose of this section is to ensure that the hazards of all chemicals produced or imported are classified, and that information concerning the classified hazards is transmitted to employers and employees. The requirements of this section are intended to be consistent with the provisions of the United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS), Revision 3. The transmittal of information is to be accomplished by means of comprehensive hazard communication programs, which are to include container labeling and other forms of warning, safety data sheets and employee training.

(2) This occupational safety and health standard is intended to address comprehensively the issue of classifying the potential hazards of chemicals, and communicating information concerning hazards and appropriate protective measures to employees, and to preempt any legislative or regulatory enactments of a state, or political subdivision of a state, pertaining to this subject. Classifying the potential hazards of chemicals and communicating information concerning hazards and appropriate protective measures to employees, may include, for example, but is not limited to, provisions for: developing and maintaining a written hazard communication program for the workplace, including lists of hazardous chemicals present; labeling of containers of chemicals in the workplace, as well as of containers of chemicals being shipped to other workplaces; preparation and distribution of safety data sheets to employees and downstream employers; and development and implementation of employee training programs regarding hazards of chemicals

and protective measures. Under section 18 of the Act, no state or political subdivision of a state may adopt or enforce any requirement relating to the issue addressed by this Federal standard, except pursuant to a Federally-approved state plan.

(b) *Scope and application.* (1) This section requires chemical manufacturers or importers to classify the hazards of chemicals which they produce or import, and all employers to provide information to their employees about the hazardous chemicals to which they are exposed, by means of a hazard communication program, labels and other forms of warning, safety data sheets, and information and training. In addition, this section requires distributors to transmit the required information to employers. (Employers who do not produce or import chemicals need only focus on those parts of this rule that deal with establishing a workplace program and communicating information to their workers.)

(2) This section applies to any chemical which is known to be present in the workplace in such a manner that employees may be exposed under normal conditions of use or in a foreseeable emergency.

(3) This section applies to laboratories only as follows:

(i) Employers shall ensure that labels on incoming containers of hazardous chemicals are not removed or defaced;

(ii) Employers shall maintain any safety data sheets that are received with incoming shipments of hazardous chemicals, and ensure that they are readily accessible during each workshift to laboratory employees when they are in their work areas;

(iii) Employers shall ensure that laboratory employees are provided information and training in accordance with paragraph (h) of this section, except for the location and availability of the written hazard communication program under paragraph (h)(2)(iii) of this section; and,

(iv) Laboratory employers that ship hazardous chemicals are considered to be either a chemical manufacturer or a distributor under this rule, and thus must ensure that any containers of hazardous chemicals leaving the laboratory are labeled in accordance with

paragraph (f) of this section, and that a safety data sheet is provided to distributors and other employers in accordance with paragraphs (g)(6) and (g)(7) of this section.

(4) In work operations where employees only handle chemicals in sealed containers which are not opened under normal conditions of use (such as are found in marine cargo handling, warehousing, or retail sales), this section applies to these operations only as follows:

(i) Employers shall ensure that labels on incoming containers of hazardous chemicals are not removed or defaced;

(ii) Employers shall maintain copies of any safety data sheets that are received with incoming shipments of the sealed containers of hazardous chemicals, shall obtain a safety data sheet as soon as possible for sealed containers of hazardous chemicals received without a safety data sheet if an employee requests the safety data sheet, and shall ensure that the safety data sheets are readily accessible during each work shift to employees when they are in their work area(s); and,

(iii) Employers shall ensure that employees are provided with information and training in accordance with paragraph (h) of this section (except for the location and availability of the written hazard communication program under paragraph (h)(2)(iii) of this section), to the extent necessary to protect them in the event of a spill or leak of a hazardous chemical from a sealed container.

(5) This section does not require labeling of the following chemicals:

(i) Any pesticide as such term is defined in the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 136 *et seq.*), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency;

(ii) Any chemical substance or mixture as such terms are defined in the Toxic Substances Control Act (15 U.S.C. 2601 *et seq.*), when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Environmental Protection Agency.

(iii) Any food, food additive, color additive, drug, cosmetic, or medical or

veterinary device or product, including materials intended for use as ingredients in such products (e.g., flavors and fragrances), as such terms are defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 *et seq.*) or the Virus-Serum-Toxin Act of 1913 (21 U.S.C. 151 *et seq.*), and regulations issued under those Acts, when they are subject to the labeling requirements under those Acts by either the Food and Drug Administration or the Department of Agriculture;

(iv) Any distilled spirits (beverage alcohols), wine, or malt beverage intended for nonindustrial use, as such terms are defined in the Federal Alcohol Administration Act (27 U.S.C. 201 *et seq.*) and regulations issued under that Act, when subject to the labeling requirements of that Act and labeling regulations issued under that Act by the Bureau of Alcohol, Tobacco, Firearms and Explosives;

(v) Any consumer product or hazardous substance as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 *et seq.*) and Federal Hazardous Substances Act (15 U.S.C. 1261 *et seq.*) respectively, when subject to a consumer product safety standard or labeling requirement of those Acts, or regulations issued under those Acts by the Consumer Product Safety Commission; and,

(vi) Agricultural or vegetable seed treated with pesticides and labeled in accordance with the Federal Seed Act (7 U.S.C. 1551 *et seq.*) and the labeling regulations issued under that Act by the Department of Agriculture.

(6) This section does not apply to: (i) Any hazardous waste as such term is defined by the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 *et seq.*), when subject to regulations issued under that Act by the Environmental Protection Agency;

(ii) Any hazardous substance as such term is defined by the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 U.S.C. 9601 *et seq.*) when the hazardous substance is the focus of remedial or removal action being conducted under CERCLA in accordance with Environmental Protection Agency regulations.

- (iii) Tobacco or tobacco products;
- (iv) Wood or wood products, including lumber which will not be processed, where the chemical manufacturer or importer can establish that the only hazard they pose to employees is the potential for flammability or combustibility (wood or wood products which have been treated with a hazardous chemical covered by this standard, and wood which may be subsequently sawed or cut, generating dust, are not exempted);
- (v) Articles (as that term is defined in paragraph (c) of this section);
- (vi) Food or alcoholic beverages which are sold, used, or prepared in a retail establishment (such as a grocery store, restaurant, or drinking place), and foods intended for personal consumption by employees while in the workplace;
- (vii) Any drug, as that term is defined in the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 301 *et seq.*), when it is in solid, final form for direct administration to the patient (e.g., tablets or pills); drugs which are packaged by the chemical manufacturer for sale to consumers in a retail establishment (e.g., over-the-counter drugs); and drugs intended for personal consumption by employees while in the workplace (e.g., first aid supplies);
- (viii) Cosmetics which are packaged for sale to consumers in a retail establishment, and cosmetics intended for personal consumption by employees while in the workplace;
- (ix) Any consumer product or hazardous substance, as those terms are defined in the Consumer Product Safety Act (15 U.S.C. 2051 *et seq.*) and Federal Hazardous Substances Act (15 U.S.C. 1261 *et seq.*) respectively, where the employer can show that it is used in the workplace for the purpose intended by the chemical manufacturer or importer of the product, and the use results in a duration and frequency of exposure which is not greater than the range of exposures that could reasonably be experienced by consumers when used for the purpose intended;
- (x) Nuisance particulates where the chemical manufacturer or importer can establish that they do not pose any physical or health hazard covered under this section;

(xi) Ionizing and nonionizing radiation; and,

(xii) Biological hazards.

(c) *Definitions.* *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.

Assistant Secretary means the Assistant Secretary of Labor for Occupational Safety and Health, U.S. Department of Labor, or designee.

Chemical means any substance, or mixture of substances.

Chemical manufacturer means an employer with a workplace where chemical(s) are produced for use or distribution.

Chemical name means the scientific designation of a chemical in accordance with the nomenclature system developed by the International Union of Pure and Applied Chemistry (IUPAC) or the Chemical Abstracts Service (CAS) rules of nomenclature, or a name that will clearly identify the chemical for the purpose of conducting a hazard classification.

Classification means to identify the relevant data regarding the hazards of a chemical; review those data to ascertain the hazards associated with the chemical; and decide whether the chemical will be classified as hazardous according to the definition of hazardous chemical in this section. In addition, classification for health and physical hazards includes the determination of the degree of hazard, where appropriate, by comparing the data with the criteria for health and physical hazards.

Commercial account means an arrangement whereby a retail distributor sells hazardous chemicals to an employer, generally in large quantities over time and/or at costs that are below the regular retail price.

Common name means any designation or identification such as code name,

code number, trade name, brand name or generic name used to identify a chemical other than by its chemical name.

Container means any bag, barrel, bottle, box, can, cylinder, drum, reaction vessel, storage tank, or the like that contains a hazardous chemical. For purposes of this section, pipes or piping systems, and engines, fuel tanks, or other operating systems in a vehicle, are not considered to be containers.

Designated representative means any individual or organization to whom an employee gives written authorization to exercise such employee's rights under this section. A recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

Director means the Director, National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designee.

Distributor means a business, other than a chemical manufacturer or importer, which supplies hazardous chemicals to other distributors or to employers.

Employee means a worker who may be exposed to hazardous chemicals under normal operating conditions or in foreseeable emergencies. Workers such as office workers or bank tellers who encounter hazardous chemicals only in non-routine, isolated instances are not covered.

Employer means a person engaged in a business where chemicals are either used, distributed, or are produced for use or distribution, including a contractor or subcontractor.

Exposure or *exposed* means that an employee is subjected in the course of employment to a chemical that is a physical or health hazard, and includes potential (e.g., accidental or possible) exposure. "Subjected" in terms of health hazards includes any route of entry (e.g., inhalation, ingestion, skin contact or absorption.)

Foreseeable emergency means any potential occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment which could result in an uncontrolled release of a hazardous chemical into the workplace.

Hazard category means the division of criteria within each hazard class, e.g., oral acute toxicity and flammable liquids include four hazard categories. These categories compare hazard severity within a hazard class and should not be taken as a comparison of hazard categories more generally.

Hazard class means the nature of the physical or health hazards, e.g., flammable solid, carcinogen, oral acute toxicity.

Hazard not otherwise classified (HNOC) means an adverse physical or health effect identified through evaluation of scientific evidence during the classification process that does not meet the specified criteria for the physical and health hazard classes addressed in this section. This does not extend coverage to adverse physical and health effects for which there is a hazard class addressed in this section, but the effect either falls below the cut-off value/concentration limit of the hazard class or is under a GHS hazard category that has not been adopted by OSHA (e.g., acute toxicity Category 5).

Hazard statement means a statement assigned to a hazard class and category that describes the nature of the hazard(s) of a chemical, including, where appropriate, the degree of hazard.

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

Health hazard means a chemical which is classified as posing one of the following hazardous effects: acute toxicity (any route of exposure); skin corrosion or irritation; serious eye damage or eye irritation; respiratory or skin sensitization; germ cell mutagenicity; carcinogenicity; reproductive toxicity; specific target organ toxicity (single or repeated exposure); or aspiration hazard. The criteria for determining whether a chemical is classified as a health hazard are detailed in Appendix A to §1910.1200—Health Hazard Criteria.

Immediate use means that the hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

Importer means the first business with employees within the Customs Territory of the United States which receives hazardous chemicals produced in other countries for the purpose of supplying them to distributors or employers within the United States.

Label means an appropriate group of written, printed or graphic information elements concerning a hazardous chemical that is affixed to, printed on, or attached to the immediate container of a hazardous chemical, or to the outside packaging.

Label elements means the specified pictogram, hazard statement, signal word and precautionary statement for each hazard class and category.

Mixture means a combination or a solution composed of two or more substances in which they do not react.

Physical hazard means a chemical that is classified as posing one of the following hazardous effects: explosive; flammable (gases, aerosols, liquids, or solids); oxidizer (liquid, solid or gas); self-reactive; pyrophoric (liquid or solid); self-heating; organic peroxide; corrosive to metal; gas under pressure; or in contact with water emits flammable gas. See Appendix B to § 1910.1200—Physical Hazard Criteria.

Pictogram means a composition that may include a symbol plus other graphic elements, such as a border, background pattern, or color, that is intended to convey specific information about the hazards of a chemical. Eight pictograms are designated under this standard for application to a hazard category.

Precautionary statement means a phrase that describes recommended measures that should be taken to minimize or prevent adverse effects resulting from exposure to a hazardous chemical, or improper storage or handling.

Produce means to manufacture, process, formulate, blend, extract, generate, emit, or repackage.

Product identifier means the name or number used for a hazardous chemical on a label or in the SDS. It provides a unique means by which the user can identify the chemical. The product identifier used shall permit cross-references to be made among the list of hazardous chemicals required in the

written hazard communication program, the label and the SDS.

Pyrophoric gas means a chemical in a gaseous state that will ignite spontaneously in air at a temperature of 130 degrees F (54.4 degrees C) or below.

Responsible party means someone who can provide additional information on the hazardous chemical and appropriate emergency procedures, if necessary.

Safety data sheet (SDS) means written or printed material concerning a hazardous chemical that is prepared in accordance with paragraph (g) of this section.

Signal word means a word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used in this section are “danger” and “warning.” “Danger” is used for the more severe hazards, while “warning” is used for the less severe.

Simple asphyxiant means a substance or mixture that displaces oxygen in the ambient atmosphere, and can thus cause oxygen deprivation in those who are exposed, leading to unconsciousness and death.

Specific chemical identity means the chemical name, Chemical Abstracts Service (CAS) Registry Number, or any other information that reveals the precise chemical designation of the substance.

Substance means chemical elements and their compounds in the natural state or obtained by any production process, including any additive necessary to preserve the stability of the product and any impurities deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition.

Trade secret means any confidential formula, pattern, process, device, information or compilation of information that is used in an employer’s business, and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it. Appendix E to § 1910.1200—Definition of Trade Secret, sets out the criteria to be used in evaluating trade secrets.

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

Work area means a room or defined space in a workplace where hazardous chemicals are produced or used, and where employees are present.

Workplace means an establishment, job site, or project, at one geographical location containing one or more work areas.

(d) *Hazard classification.* (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. 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.

(2) Chemical manufacturers, importers or employers classifying chemicals shall identify and consider the full range of available scientific literature and other evidence concerning the potential hazards. There is no requirement to test the chemical to determine how to classify its hazards. Appendix A to §1910.1200 shall be consulted for classification of health hazards, and Appendix B to §1910.1200 shall be consulted for the classification of physical hazards.

(3) *Mixtures.* (i) Chemical manufacturers, importers, or employers evaluating chemicals shall follow the procedures described in Appendices A and B to §1910.1200 to classify the hazards of the chemicals, including determinations regarding when mixtures of the classified chemicals are covered by this section.

(ii) When classifying mixtures they produce or import, chemical manufacturers and importers of mixtures may rely on the information provided on the current safety data sheets of the individual ingredients, except where the chemical manufacturer or importer knows, or in the exercise of reasonable diligence should know, that the safety data sheet misstates or omits information required by this section.

(e) *Written hazard communication program.* (1) Employers shall develop, im-

plement, and maintain at each workplace, a written hazard communication program which at least describes how the criteria specified in paragraphs (f), (g), and (h) of this section for labels and other forms of warning, safety data sheets, and employee information and training will be met, and which also includes the following:

(i) A list of the hazardous chemicals known to be present using a product identifier that is referenced on the appropriate safety data sheet (the list may be compiled for the workplace as a whole or for individual work areas); and,

(ii) The methods the employer will use to inform employees of the hazards of non-routine tasks (for example, the cleaning of reactor vessels), and the hazards associated with chemicals contained in unlabeled pipes in their work areas.

(2) *Multi-employer workplaces.* Employers who produce, use, or store hazardous chemicals at a workplace in such a way that the employees of other employer(s) may be exposed (for example, employees of a construction contractor working on-site) shall additionally ensure that the hazard communication programs developed and implemented under this paragraph (e) include the following:

(i) The methods the employer will use to provide the other employer(s) on-site access to safety data sheets for each hazardous chemical the other employer(s)' employees may be exposed to while working;

(ii) The methods the employer will use to inform the other employer(s) of any precautionary measures that need to be taken to protect employees during the workplace's normal operating conditions and in foreseeable emergencies; and,

(iii) The methods the employer will use to inform the other employer(s) of the labeling system used in the workplace.

(3) The employer may rely on an existing hazard communication program to comply with these requirements, provided that it meets the criteria established in this paragraph (e).

(4) The employer shall make the written hazard communication program available, upon request, to employees, their designated representatives, the Assistant Secretary and the Director, in accordance with the requirements of 29 CFR 1910.20 (e).

(5) Where employees must travel between workplaces during a workshift, *i.e.*, their work is carried out at more than one geographical location, the written hazard communication program may be kept at the primary workplace facility.

(f) *Labels and other forms of warning—*

(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 do not have to be addressed on the container. Where the chemical manufacturer or importer is required to label, tag or mark the following information shall be provided:

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

(2) The chemical manufacturer, importer, or distributor shall ensure that the information provided under paragraphs (f)(1)(i) through (v) of this section is in accordance with Appendix C to §1910.1200, for each hazard class and associated hazard category for the hazardous chemical, prominently displayed, and in English (other languages may also be included if appropriate).

(3) The chemical manufacturer, importer, or distributor shall ensure that the information provided under paragraphs (f)(1)(ii) through (iv) of this section is located together on the label, tag, or mark.

(4) *Solid materials.* (i) For solid metal (such as a steel beam or a metal casting), solid wood, or plastic items that are not exempted as articles due to their downstream use, or shipments of whole grain, the required label may be transmitted to the customer at the time of the initial shipment, and need not be included with subsequent ship-

ments to the same employer unless the information on the label changes;

(ii) The label may be transmitted with the initial shipment itself, or with the safety data sheet that is to be provided prior to or at the time of the first shipment; and,

(iii) This exception to requiring labels on every container of hazardous chemicals is only for the solid material itself, and does not apply to hazardous chemicals used in conjunction with, or known to be present with, the material and to which employees handling the items in transit may be exposed (for example, cutting fluids or pesticides in grains).

(5) Chemical manufacturers, importers, or distributors shall ensure that each container of hazardous chemicals leaving the workplace is labeled, tagged, or marked in accordance with this section in a manner which does not conflict with the requirements of the Hazardous Materials Transportation Act (49 U.S.C. 1801 *et seq.*) and regulations issued under that Act by the Department of Transportation.

(6) *Workplace labeling.* Except as provided in paragraphs (f)(7) and (f)(8) of this section, the employer shall ensure that each container of hazardous chemicals in the workplace is labeled, tagged or marked with either:

(i) The information specified under paragraphs (f)(1)(i) through (v) of this section for labels on shipped containers; or,

(ii) Product identifier and words, pictures, symbols, or combination thereof, which provide at least general information regarding the hazards of the chemicals, and which, in conjunction with the other information immediately available to employees under the hazard communication program, will provide employees with the specific information regarding the physical and health hazards of the hazardous chemical.

(7) The employer may use signs, placards, process sheets, batch tickets, operating procedures, or other such written materials in lieu of affixing labels to individual stationary process containers, as long as the alternative method identifies the containers to which it is applicable and conveys the information required by paragraph

(f)(6) of this section to be on a label. The employer shall ensure the written materials are readily accessible to the employees in their work area throughout each work shift.

(8) The employer is not required to label portable containers into which hazardous chemicals are transferred from labeled containers, and which are intended only for the immediate use of the employee who performs the transfer. For purposes of this section, drugs which are dispensed by a pharmacy to a health care provider for direct administration to a patient are exempted from labeling.

(9) The employer shall not remove or deface existing labels on incoming containers of hazardous chemicals, unless the container is immediately marked with the required information.

(10) The employer shall ensure that workplace labels or other forms of warning are legible, in English, and prominently displayed on the container, or readily available in the work area throughout each work shift. Employers having employees who speak other languages may add the information in their language to the material presented, as long as the information is presented in English as well.

(11) Chemical manufacturers, importers, distributors, or employers who become newly aware of any significant information regarding the hazards of a chemical shall revise the labels for the chemical within six months of becoming aware of the new information, and shall ensure that labels on containers of hazardous chemicals shipped after that time contain the new information. If the chemical is not currently produced or imported, the chemical manufacturer, importer, distributor, or employer shall add the information to the label before the chemical is shipped or introduced into the workplace again.

(g) *Safety data sheets.* (1) Chemical manufacturers and importers shall obtain or develop a safety data sheet for each hazardous chemical they produce or import. Employers shall have a safety data sheet in the workplace for each hazardous chemical which they use.

(2) The chemical manufacturer or importer preparing the safety data sheet shall ensure that it is in English (although the employer may maintain

copies in other languages as well), and includes at least the following section numbers and headings, and associated information under each heading, in the order listed (*See* Appendix D to §1910.1200—Safety Data Sheets, for the specific content of each section of the safety data sheet):

- (i) Section 1, Identification;
- (ii) Section 2, Hazard(s) identification;
- (iii) Section 3, Composition/information on ingredients;
- (iv) Section 4, First-aid measures;
- (v) Section 5, Fire-fighting measures;
- (vi) Section 6, Accidental release measures;
- (vii) Section 7, Handling and storage;
- (viii) Section 8, Exposure controls/personal protection;
- (ix) Section 9, Physical and chemical properties;
- (x) Section 10, Stability and reactivity;
- (xi) Section 11, Toxicological information;
- (xii) Section 12, Ecological information;
- (xiii) Section 13, Disposal considerations;
- (xiv) Section 14, Transport information;
- (xv) Section 15, Regulatory information; and
- (xvi) Section 16, Other information, including date of preparation or last revision.

NOTE 1 TO PARAGRAPH (g)(2): To be consistent with the GHS, an SDS must also include the headings in paragraphs (g)(2)(xii) through (g)(2)(xv) in order.

NOTE 2 TO PARAGRAPH (g)(2): OSHA will not be enforcing information requirements in sections 12 through 15, as these areas are not under its jurisdiction.

(3) If no relevant information is found for any sub-heading within a section on the safety data sheet, the chemical manufacturer, importer or employer preparing the safety data sheet shall mark it to indicate that no applicable information was found.

(4) Where complex mixtures have similar hazards and contents (*i.e.*, the chemical ingredients are essentially the same, but the specific composition varies from mixture to mixture), the chemical manufacturer, importer or employer may prepare one safety data

sheet to apply to all of these similar mixtures.

(5) The chemical manufacturer, importer or employer preparing the safety data sheet shall ensure that the information provided accurately reflects the scientific evidence used in making the hazard classification. If the chemical manufacturer, importer or employer preparing the safety data sheet becomes newly aware of any significant information regarding the hazards of a chemical, or ways to protect against the hazards, this new information shall be added to the safety data sheet within three months. If the chemical is not currently being produced or imported, the chemical manufacturer or importer shall add the information to the safety data sheet before the chemical is introduced into the workplace again.

(6)(i) Chemical manufacturers or importers shall ensure that distributors and employers are provided an appropriate safety data sheet with their initial shipment, and with the first shipment after a safety data sheet is updated;

(ii) The chemical manufacturer or importer shall either provide safety data sheets with the shipped containers or send them to the distributor or employer prior to or at the time of the shipment;

(iii) If the safety data sheet is not provided with a shipment that has been labeled as a hazardous chemical, the distributor or employer shall obtain one from the chemical manufacturer or importer as soon as possible; and,

(iv) The chemical manufacturer or importer shall also provide distributors or employers with a safety data sheet upon request.

(7)(i) Distributors shall ensure that material data sheets, and updated information, are provided to other distributors and employers with their initial shipment and with the first shipment after a safety data sheet is updated;

(ii) The distributor shall either provide safety data sheets with the shipped containers, or send them to the other distributor or employer prior to or at the time of the shipment;

(iii) Retail distributors selling hazardous chemicals to employers having a commercial account shall provide a

safety data sheet to such employers upon request, and shall post a sign or otherwise inform them that a material safety data sheet is available;

(iv) Wholesale distributors selling hazardous chemicals to employers over-the-counter may also provide safety data sheets upon the request of the employer at the time of the over-the-counter purchase, and shall post a sign or otherwise inform such employers that a material safety data sheet is available;

(v) If an employer without a commercial account purchases a hazardous chemical from a retail distributor not required to have safety data sheets on file (*i.e.*, the retail distributor does not have commercial accounts and does not use the materials), the retail distributor shall provide the employer, upon request, with the name, address, and telephone number of the chemical manufacturer, importer, or distributor from which a safety data sheet can be obtained;

(vi) Wholesale distributors shall also provide safety data sheets to employers or other distributors upon request; and,

(vii) Chemical manufacturers, importers, and distributors need not provide safety data sheets to retail distributors that have informed them that the retail distributor does not sell the product to commercial accounts or open the sealed container to use it in their own workplaces.

(8) The employer shall maintain in the workplace copies of the required safety data sheets for each hazardous chemical, and shall ensure that they are readily accessible during each work shift to employees when they are in their work area(s). (Electronic access and other alternatives to maintaining paper copies of the safety data sheets are permitted as long as no barriers to immediate employee access in each workplace are created by such options.)

(9) Where employees must travel between workplaces during a workshift, *i.e.*, their work is carried out at more than one geographical location, the safety data sheets may be kept at the primary workplace facility. In this situation, the employer shall ensure that employees can immediately obtain the required information in an emergency.

(10) Safety data sheets may be kept in any form, including operating procedures, and may be designed to cover groups of hazardous chemicals in a work area where it may be more appropriate to address the hazards of a process rather than individual hazardous chemicals. However, the employer shall ensure that in all cases the required information is provided for each hazardous chemical, and is readily accessible during each work shift to employees when they are in their work area(s).

(11) Safety data sheets shall also be made readily available, upon request, to designated representatives, the Assistant Secretary, and the Director, in accordance with the requirements of § 1910.1020(e).

(h) *Employee information and training.*

(1) Employers shall provide employees with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new chemical hazard the employees have not previously been trained about is introduced into their work area. Information and training may be designed to cover categories of hazards (e.g., flammability, carcinogenicity) or specific chemicals. Chemical-specific information must always be available through labels and safety data sheets.

(2) *Information.* Employees shall be informed of:

(i) The requirements of this section;

(ii) Any operations in their work area where hazardous chemicals are present; and,

(iii) The location and availability of the written hazard communication program, including the required list(s) of hazardous chemicals, and safety data sheets required by this section.

(3) *Training.* Employee training shall include at least:

(i) Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);

(ii) The physical, health, simple asphyxiation, combustible dust, and pyrophoric gas hazards, as well as haz-

ards not otherwise classified, of the chemicals in the work area;

(iii) The measures employees can take to protect themselves from these hazards, including specific procedures the employer has implemented to protect employees from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and,

(iv) The details of the hazard communication program developed by the employer, including an explanation of the labels received on shipped containers and the workplace labeling system used by their employer; the safety data sheet, including the order of information and how employees can obtain and use the appropriate hazard information.

(i) *Trade secrets.* (1) The chemical manufacturer, importer, or employer may withhold the specific chemical identity, including the chemical name, other specific identification of a hazardous chemical, or the exact percentage (concentration) of the substance in a mixture, from 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;

(iii) The safety data sheet indicates that the specific chemical identity and/or percentage of composition is being withheld as a trade secret; and,

(iv) The specific chemical identity and percentage is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of this paragraph (i).

(2) Where a treating physician or nurse determines that a medical emergency exists and the specific chemical identity and/or specific percentage of composition of a hazardous chemical is necessary for emergency or first-aid treatment, the chemical manufacturer, importer, or employer shall immediately disclose the specific chemical identity or percentage composition of a trade secret chemical to that treating physician or nurse, regardless of the

existence of a written statement of need or a confidentiality agreement. The chemical manufacturer, importer, or employer may require a written statement of need and confidentiality agreement, in accordance with the provisions of paragraphs (i)(3) and (4) of this section, as soon as circumstances permit.

(3) In non-emergency situations, a chemical manufacturer, importer, or employer shall, upon request, disclose a specific chemical identity or percentage composition, otherwise permitted to be withheld under paragraph (i)(1) of this section, to a health professional (*i.e.*, physician, industrial hygienist, toxicologist, epidemiologist, or occupational health nurse) providing medical or other occupational health services to exposed employee(s), and to employees or designated representatives, if:

- (i) The request is in writing;
- (ii) The request describes with reasonable detail one or more of the following occupational health needs for the information:
 - (A) To assess the hazards of the chemicals to which employees will be exposed;
 - (B) To conduct or assess sampling of the workplace atmosphere to determine employee exposure levels;
 - (C) To conduct pre-assignment or periodic medical surveillance of exposed employees;
 - (D) To provide medical treatment to exposed employees;
 - (E) To select or assess appropriate personal protective equipment for exposed employees;
 - (F) To design or assess engineering controls or other protective measures for exposed employees; and,
 - (G) To conduct studies to determine the health effects of exposure.

(iii) The request explains in detail why the disclosure of the specific chemical identity or percentage composition is essential and that, in lieu thereof, the disclosure of the following information to the health professional, employee, or designated representative, would not satisfy the purposes described in paragraph (i)(3)(ii) of this section:

(A) The properties and effects of the chemical;

(B) Measures for controlling workers' exposure to the chemical;

(C) Methods of monitoring and analyzing worker exposure to the chemical; and,

(D) Methods of diagnosing and treating harmful exposures to the chemical;

(iv) The request includes a description of the procedures to be used to maintain the confidentiality of the disclosed information; and,

(v) The health professional, and the employer or contractor of the services of the health professional (*i.e.*, downstream employer, labor organization, or individual employee), employee, or designated representative, agree in a written confidentiality agreement that the health professional, employee, or designated representative, will not use the trade secret information for any purpose other than the health need(s) asserted and agree not to release the information under any circumstances other than to OSHA, as provided in paragraph (i)(6) of this section, except as authorized by the terms of the agreement or by the chemical manufacturer, importer, or employer.

(4) The confidentiality agreement authorized by paragraph (i)(3)(iv) of this section:

(i) May restrict the use of the information to the health purposes indicated in the written statement of need;

(ii) May provide for appropriate legal remedies in the event of a breach of the agreement, including stipulation of a reasonable pre-estimate of likely damages; and,

(iii) May not include requirements for the posting of a penalty bond.

(5) Nothing in this standard is meant to preclude the parties from pursuing non-contractual remedies to the extent permitted by law.

(6) If the health professional, employee, or designated representative receiving the trade secret information decides that there is a need to disclose it to OSHA, the chemical manufacturer, importer, or employer who provided the information shall be informed by the health professional, employee, or designated representative prior to, or at the same time as, such disclosure.

(7) If the chemical manufacturer, importer, or employer denies a written request for disclosure of a specific chemical identity or percentage composition, the denial must:

(i) Be provided to the health professional, employee, or designated representative, within thirty days of the request;

(ii) Be in writing;

(iii) Include evidence to support the claim that the specific chemical identity or percent of composition is a trade secret;

(iv) State the specific reasons why the request is being denied; and,

(v) Explain in detail how alternative information may satisfy the specific medical or occupational health need without revealing the trade secret.

(8) The health professional, employee, or designated representative whose request for information is denied under paragraph (i)(3) of this section may refer the request and the written denial of the request to OSHA for consideration.

(9) When a health professional, employee, or designated representative refers the denial to OSHA under paragraph (i)(8) of this section, OSHA shall consider the evidence to determine if:

(i) The chemical manufacturer, importer, or employer has supported the claim that the specific chemical identity or percentage composition is a trade secret;

(ii) The health professional, employee, or designated representative has supported the claim that there is a medical or occupational health need for the information; and,

(iii) The health professional, employee or designated representative has demonstrated adequate means to protect the confidentiality.

(10)(i) If OSHA determines that the specific chemical identity or percentage composition requested under paragraph (i)(3) of this section is not a "bona fide" trade secret, or that it is a trade secret, but the requesting health professional, employee, or designated representative has a legitimate medical or occupational health need for the information, has executed a written confidentiality agreement, and has shown adequate means to protect the confidentiality of the information, the

chemical manufacturer, importer, or employer will be subject to citation by OSHA.

(ii) If a chemical manufacturer, importer, or employer demonstrates to OSHA that the execution of a confidentiality agreement would not provide sufficient protection against the potential harm from the unauthorized disclosure of a trade secret, the Assistant Secretary may issue such orders or impose such additional limitations or conditions upon the disclosure of the requested chemical information as may be appropriate to assure that the occupational health services are provided without an undue risk of harm to the chemical manufacturer, importer, or employer.

(11) If a citation for a failure to release trade secret information is contested by the chemical manufacturer, importer, or employer, the matter will be adjudicated before the Occupational Safety and Health Review Commission in accordance with the Act's enforcement scheme and the applicable Commission rules of procedure. In accordance with the Commission rules, when a chemical manufacturer, importer, or employer continues to withhold the information during the contest, the Administrative Law Judge may review the citation and supporting documentation "in camera" or issue appropriate orders to protect the confidentiality of such matters.

(12) Notwithstanding the existence of a trade secret claim, a chemical manufacturer, importer, or employer shall, upon request, disclose to the Assistant Secretary any information which this section requires the chemical manufacturer, importer, or employer to make available. Where there is a trade secret claim, such claim shall be made no later than at the time the information is provided to the Assistant Secretary so that suitable determinations of trade secret status can be made and the necessary protections can be implemented.

(13) Nothing in this paragraph shall be construed as requiring the disclosure under any circumstances of process information which is a trade secret.

(j) *Effective dates.* (1) Employers shall train employees regarding the new

§ 1910.1200

29 CFR Ch. XVII (7–1–17 Edition)

label elements and safety data sheets format by December 1, 2013.

(2) Chemical manufacturers, importers, distributors, and employers shall be in compliance with all modified provisions of this section no later than June 1, 2015, except:

(i) After December 1, 2015, the distributor shall not ship containers labeled by the chemical manufacturer or importer unless the label has been modified to comply with paragraph (f)(1) of this section.

(ii) All employers shall, as necessary, update any alternative workplace labeling used under paragraph (f)(6) of this section, update the hazard communication program required by paragraph (h)(1), and provide any additional employee training in accordance with paragraph (h)(3) for newly identified physical or health hazards no later than June 1, 2016.

(3) Chemical manufacturers, importers, distributors, and employers may comply with either § 1910.1200 revised as of October 1, 2011, or the current version of this standard, or both during the transition period.

APPENDIX A TO § 1910.1200—HEALTH HAZARD CRITERIA (MANDATORY)

A.0 GENERAL CLASSIFICATION CONSIDERATIONS

A.0.1 CLASSIFICATION

A.0.1.1 The term “hazard classification” is used to indicate that only the intrinsic hazardous properties of chemicals are considered. Hazard classification incorporates three steps:

(a) Identification of relevant data regarding the hazards of a chemical;

(b) Subsequent review of those data to ascertain the hazards associated with the chemical;

(c) Determination of whether the chemical will be classified as hazardous and the degree of hazard.

A.0.1.2 For many hazard classes, the criteria are semi-quantitative or qualitative and expert judgment is required to interpret the data for classification purposes.

A.0.2 AVAILABLE DATA, TEST METHODS AND TEST DATA QUALITY

A.0.2.1 There is no requirement for testing chemicals.

A.0.2.2 The criteria for determining health hazards are test method neutral, i.e., they do not specify particular test methods,

as long as the methods are scientifically validated.

A.0.2.3 The term “scientifically validated” refers to the process by which the reliability and the relevance of a procedure are established for a particular purpose. Any test that determines hazardous properties, which is conducted according to recognized scientific principles, can be used for purposes of a hazard determination for health hazards. Test conditions need to be standardized so that the results are reproducible with a given substance, and the standardized test yields “valid” data for defining the hazard class of concern.

A.0.2.4 Existing test data are acceptable for classifying chemicals, although expert judgment also may be needed for classification purposes.

A.0.2.5 The effect of a chemical on biological systems is influenced, by the physico-chemical properties of the substance and/or ingredients of the mixture and the way in which ingredient substances are biologically available. A chemical need not be classified when it can be shown by conclusive experimental data from scientifically validated test methods that the chemical is not biologically available.

A.0.2.6 For classification purposes, epidemiological data and experience on the effects of chemicals on humans (e.g., occupational data, data from accident databases) shall be taken into account in the evaluation of human health hazards of a chemical.

A.0.3 CLASSIFICATION BASED ON WEIGHT OF EVIDENCE

A.0.3.1 For some hazard classes, classification results directly when the data satisfy the criteria. For others, classification of a chemical shall be determined on the basis of the total weight of evidence using expert judgment. This means that all available information bearing on the classification of hazard shall be considered together, including the results of valid *in vitro* tests, relevant animal data, and human experience such as epidemiological and clinical studies and well-documented case reports and observations.

A.0.3.2 The quality and consistency of the data shall be considered. Information on chemicals related to the material being classified shall be considered as appropriate, as well as site of action and mechanism or mode of action study results. Both positive and negative results shall be considered together in a single weight-of-evidence determination.

A.0.3.3 Positive effects which are consistent with the criteria for classification, whether seen in humans or animals, shall