



PART I

MATERIAL SAFETY DATA SHEET

Exemptions

Concentration Cut-off

4. The sale or importation of a controlled product, other than a complex mixture or a component of a controlled product that is a complex mixture, is exempt from the application of paragraph 13(a) or 14(a) of the Act in respect of the requirement to disclose on a material safety data sheet the chemical identity and the concentration of

(a) an ingredient that is found in the controlled product in a concentration of less than 0.1 per cent and is a teratogen or an embryotoxin referred to in section 53, a carcinogen referred to in section 54, a reproductive toxin referred to in section 55, a respiratory tract sensitizer referred to in section 56 or a mutagen referred to in section 57; or

(b) an ingredient that is an ingredient other than an ingredient referred to in paragraph (a) and that is found in the controlled product in a concentration of less than one per cent, unless the ingredient is included in the *Ingredient Disclosure List* and the concentration specified for the ingredient in the List is 0.1 per cent.

INTERPRETATION / DISCUSSION of SECTION 4

This section establishes the cut-off concentrations for ingredients below which an ingredient does not have to be disclosed on an MSDS. (Where ingredients present below their cut-off may have an additive or synergistic effect, suppliers are encouraged to disclose the identity and concentration of those ingredients)

Ingredients that are teratogens, embryotoxins, carcinogens, reproductive toxins, respiratory tract sensitizers or mutagens as defined by the hazard criteria do not have to be disclosed if they are present below 0.1% (weight/weight). Any other ingredient referred to in subparagraphs 13(a)(i) to (iv) of the *Hazardous Products Act (HPA)* need not be disclosed if its concentration is less than 1% (weight/weight), unless it is on the *Ingredient Disclosure List (IDL)* and the concentration specified on the *IDL* for that ingredient is 0.1% (weight/weight).

It should be noted that, by virtue of section 3 of these Regulations, the cut-off concentrations set out in this



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section are expressed on a weight/weight basis. (By virtue of subsection 11(1), the concentration of an ingredient can be expressed on the MSDS as weight/volume or volume/volume.)

Complex mixtures: The cut-off exemptions from the requirements of paragraphs 13(a) and 14(a) of the *HPA* established by this section of the *CPR* do **not** apply to a controlled product that is a complex mixture nor to a component of a controlled product that is a complex mixture. (For requirements related to ingredient disclosure of complex mixtures, refer to section 5 of the *CPR*).

Conflicting cut-off concentrations: Where the concentration cut-off established under paragraph 4(a) of the *CPR* for an ingredient within a mixture is lower than the cut-off established in the *IDL*, the lower cut-off takes precedence; {ref.: PIS No. 59}.



Complex Mixtures

5. (1) The sale or importation of a controlled product that is a complex mixture is exempt from the application of paragraph 13(a) or 14(a) of the Act in respect of the requirement to disclose on a material safety data sheet the chemical identity and concentration of the ingredients of the complex mixture if the generic name of the complex mixture is disclosed on the material safety data sheet.

(2) The sale or importation of a controlled product that contains a component that is a complex mixture is exempt from the application of paragraph 13(a) or 14(a) of the Act in respect of the requirement to disclose on a material safety data sheet the chemical identity and concentration of the ingredients of the component if

(a) the component is found in the controlled product in a concentration of less than 0.1 per cent and is a teratogen or an embryotoxin referred to in section 53, a carcinogen referred to in section 54, a reproductive toxin referred to in section 55, a respiratory tract sensitizer referred to in section 56 or a mutagen referred to in section 57;

(b) the component is a component other than a component referred to in paragraph (a) and is found in the controlled product in a concentration of less than one per cent, unless the component is included in the *Ingredient Disclosure List* and the concentration specified for that component in the List is 0.1 per cent; or

(c) the commonly known generic name and concentration of the component in the controlled product is disclosed on the material safety data sheet.

INTERPRETATION / DISCUSSION of SECTION 5

In this section, cut-off concentrations are established for ingredients that are complex mixtures. The term "complex mixture" is defined in section 2 of the *CPR*. Turpentine, petroleum distillates and atmospheric air are examples of complex mixtures. A complex mixture can be comprised of a multitude of ingredients whose concentrations may vary from batch to batch. A synthetic mixture of gases which approximates the composition of atmospheric air does not fit the definition of a complex mixture because it is not naturally occurring. Therefore, for such a mixture, the MSDS must disclose the ingredients in accordance with Section 13(a) of the *HPA*.

Requirement to Disclose the Identity of a Complex Mixture: The intent of the *CPR* is that, subject to cut-offs, etc., the MSDS discloses the identity of all complex mixtures contained in the controlled product.

When WHMIS was being developed, WHMIS participants raised the issue of the common use of complex



Complex Mixtures

mixtures in "pure" form and as components of various products. Although these complex mixtures made up a significant portion (if not all) of a product, often many ingredients of the complex mixture would be present below cut-off concentrations in the final product.

As the composition of complex mixtures often varies, if normal ingredient disclosure requirements applied, extensive testing would have to be undertaken on the part of the supplier. Also, if normal ingredient disclosure requirements applied to complex mixtures, in many cases only a minor portion of the overall complex mixture would have to be disclosed. Had the cut-offs established in section 4 of the *CPR* applied to a product which contained, for example, 30% turpentine and the most abundant single ingredient in the turpentine was n-heptane at 3% (i.e., 0.9% of the total product consisted of n-heptane), a supplier would not be required to disclose any ingredient information in respect of a substance which constitutes 30% of the product. Furthermore, it was recognized that in a significant number of cases, toxicological studies as well as physical tests were conducted and results were only available for the complex mixture--not its individual ingredients.

As a compromise, it was agreed that the generic name of a complex mixture could be disclosed in place of the ingredients of the complex mixture but that the concentration cut-offs established in section 4 would not apply to complex mixtures or a component that was a complex mixture.

A complex mixture will likely contain numerous ingredients. The supplier has the option of:

disclosing the name and concentration of the complex mixture; or

disclosing the names and concentrations of all the ingredients of the complex mixture, even if the concentrations of each ingredient is below the applicable cut-off for single ingredients specified in section 4, i.e. below 0.1% or 1%, whichever is applicable.

Since the concentration cut-offs established in section 4 do not apply to "a complex mixture or a component of a controlled product that is a complex mixture", if the supplier does not take advantage of the exemption in subsection 5(2), the supplier cannot apply the cut-off established in section 4 in relation to the ingredients of the complex mixture. Although hypothetically possible, in practical terms, it is impossible to disclose all ingredients if there is no cut-off limit. Therefore, as the second choice is neither a pragmatic nor a realistic "option", the MSDS must disclose the identity of all complex mixtures in the controlled product.

Requirement to Associate Individual Ingredients with a Complex Mixture: Suppliers wishing to use a single MSDS in the marketing of their products in Canada and the United States (U.S.) may have to disclose certain chemicals comprising a complex mixture in order to respect individual U.S. state laws. If individual ingredients of a complex mixture are disclosed, the MSDS should clearly identify which of the disclosed ingredients are components of the complex mixture (or specify which ingredients are components of which complex mixture if there is more than one complex mixture in the controlled product). As stated above, the MSDS must still disclose the identity of all complex mixtures contained in the controlled product.



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Complex Mixtures

Subsection 5(1) and Paragraph 5(2)(c):

In the case of a controlled product comprised of 100% of a complex mixture (e.g. pure turpentine), the commonly known generic name for the complex mixture may be disclosed on the MSDS in lieu of the names of the individual ingredients of the complex mixture. When a complex mixture is a component of a controlled product (e.g. a controlled product that is a solution containing 5% turpentine), the generic name of the complex mixture and its concentration can also be disclosed in lieu of the chemical identity and concentration of the ingredients of the complex mixture.

Paragraphs 5(2)(a) and (b):

Complex mixtures that are teratogens, embryotoxins, carcinogens, reproductive toxins, respiratory tract sensitizers or mutagens and found in a concentration of less than 0.1% (weight/weight) do not have to be disclosed on the MSDS. Any other complex mixture included in the hazard criteria does not need to be disclosed if its concentration is less than 1% (weight/weight) unless the complex mixture is on the *IDL* and the concentration specified on the *IDL* for that complex mixture is 0.1% (weight/weight).



Flavours and Fragrances

5.1 (1) For the purposes of this section.

"flavour" means a product, material or substance that is used solely to impart a taste to another product, material or substance; (saveur)

"fragrance" means a product, material or substance that is used solely to impart a smell to another product, material or substance. (parfum)

(2) The sale or importation of a controlled product that is a flavour or fragrance is exempt, for as long as paragraph 12(b) of the Act is in force, from the application of paragraph 13(a) or 14(a) of the Act in respect of the requirement to disclose on a material safety data sheet the chemical identity and concentration of the ingredients of the controlled product if

(a) the generic chemical identities of the ingredients of the controlled product and the concentrations thereof are disclosed on the material safety data sheet;

(b) the supplier of the controlled product maintains a record of the chemical identities and concentrations of the ingredients of the controlled product at a place in Canada where an inspector may enter at any reasonable time for the purposes of the administration and enforcement of Parts II and III of the Act; and

(c) for the purposes of section 30, the supplier of the controlled product discloses on the material safety data sheet an emergency telephone number by means of which access to the information set out in the record referred to in paragraph (b) may be obtained at any time.

(3) The sale or importation of a controlled product that contains a component that is a flavour or fragrance is exempt, for as long as paragraph 12(b) of the Act is in force, from the application of paragraph 13(a) or 14(a) of the Act in respect of the requirement to disclose on a material safety data sheet the chemical identity and concentration of the ingredients of the component if

(a) the generic chemical identities of the ingredients of the component and the concentrations thereof are disclosed on the material safety data sheet;

(b) the supplier of the controlled product or of the component maintains a record of the chemical identities and concentrations of the ingredients of the component at a place in Canada where an inspector may enter at any reasonable time for the purposes of the administration and



enforcement of Parts II and III of the Act; and

(c) the supplier of the controlled product or of the component discloses on the material safety data sheet, in parentheses after the information referred to in paragraph (a), the following information, namely,

(i) the product identifier of the component,

(ii) for the purposes of section 30, an emergency telephone number by means of which access to the information set out in the record referred to in paragraph (b) may be obtained at any time, and

(iii) a statement to the effect that in a medical emergency, a physician or nurse may obtain the chemical identity and concentration of any ingredient of the component set out in the record maintained pursuant to paragraph (b) by calling the emergency telephone number disclosed under subparagraph (ii) and specifying the product identifier of the component.

(4) Where an inspector obtains information from a record referred to in paragraph (2)(b) or (3)(b), the inspector shall keep the information confidential except for the purposes of the administration and enforcement of Parts II and III of the Act.

INTERPRETATION / DISCUSSION OF SECTION 5.1

The addition of this section (through Amendment No. 2 to the *CPR*) established an exemption from the disclosure of the chemical identity and concentration of the ingredients of a controlled product, or component of a controlled product, if that product or component is a flavour or a fragrance. The other ingredients (ie. those that do not constitute a flavour or fragrance) must still be disclosed subject only to exemption under the *Hazardous Materials Information Review Act (HMIRA)* as specified in the *CPR*. Initially, it was agreed that the exemption relating to flavours and fragrances will only exist for as long as paragraph 12(b) of the *HPA* is in force (see below--"Continuation of Exemption...").

The exemption is subject to the condition that the generic chemical identities of the ingredients be disclosed on the MSDS. (The Hazardous Materials Information Review Commission has issued an information bulletin which provides guidance on the use of generic chemical identities.)

The supplier must also maintain a record of the chemical identities and concentrations of the ingredients of the controlled product or component of the controlled product. This information must be provided to a designated inspector upon request so that compliance with the provisions of the regulations can be verified.



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Paragraph 5.1(2)(a):

The concentration of the ingredients that correspond to the generic identities should represent the sum of the concentrations of all the ingredients with the same generic chemical identity.

Paragraphs 5.1(2)(b) and 5.1(3)(b):

When a foreign manufacturer exports flavours or fragrances to a Canadian supplier which is not part of the same company, the manufacturer may want only to entrust the required information to a third party. This amendment was drafted with this situation in mind. The requirement "at a place in Canada", stated in paragraphs 5.1(2)(b) and 5.1(3)(b), is satisfied if the required information is deposited with a third party (such as a legal firm, commercial subsidiary, etc.) anywhere in Canada, and the Canadian supplier is given the address of the third party so that it can be reached at any reasonable time by an inspector.

Continuation of Exemption for Flavours and Fragrances: The tripartite sectoral committee which reviewed the exemptions established by paragraph 12(b) of the HPA recommended that "the special provisions in respect to disclosure of chemical identities of flavours and fragrances, as described in Sections 5.1 of the CPR, be maintained subject to the following modifications:

- (1) the current reference to "for as long as paragraph 12(b) of the Act is in force" in subsections 5.1(2) and (3) be removed;
- (2) the "generic chemical identities" of the ingredients be listed in place of the actual chemical identities with greater consistency and precision;
- (3) clarify that the CAS number, LC₅₀ and LD₅₀, would not be required to be disclosed on the MSDS since the CAS number would, and LD₅₀ could, help reveal trade secret formulations;
- (4) modify section 31 of the CPR so that a supplier would be required to provide the source of information for toxicological data used in the preparation of a MSDS only to an inspector on request (and not to users or purchasers) for the purpose of administering and enforcing Parts II and III of the HPA; and
- (5) carcinogens as defined by the CPR be disclosed by their chemical identities."



Controlled Products With Same Product Identifier

6. The sale or importation of a controlled product is exempt from the application of paragraph 13(a) or 14(a) of the Act in respect of the requirement to transmit, obtain or prepare a material safety data sheet for the controlled product if

(a) the controlled product is part of a shipment of controlled products that have the same product identifier and a material safety data sheet is transmitted with the shipment or is obtained or prepared for one of the controlled products; or

(b) the supplier has transmitted to the person to whom the controlled product is sold or the supplier who imports the controlled product has in his possession a material safety data sheet for a controlled product that has the same product identifier and the material safety data sheet

(i) discloses information that is current at the time of the sale or importation, and

(ii) was prepared and dated not more than three years before the date of the sale or importation.

INTERPRETATION / DISCUSSION of SECTION 6

Section 6 of the *CPR* provides a MSDS exemption in respect of controlled products having "the same product identifier".

Kits, MSDSs for - a single MSDS will be acceptable for a kit subject to the following conditions:

- (a) the MSDS must disclose the product identifier of every individually packaged controlled product within the kit;
- (b) the MSDS must clearly disclose which ingredients (subject to disclosure under section 13 of the *HPA*) are contained in which individually packaged controlled product within the kit;
- (c) the MSDS must disclose all information required by the *CPR* for every individually packaged controlled product within the kit and clearly indicate to which individually packaged controlled product the information pertains; and
- (d) when new hazards can result from the intermixing of the contents of the individually packaged products in the kit, this information should be disclosed on the MSDS {ref.: PIS No. 32}.

If a supplier decides to provide an MSDS for each individually packaged controlled product in the kit, information on new hazards that can result from the intermixing of the contents of the individually packaged products in the kit should be disclosed on each relevant MSDS.



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Paragraph 6(a):

For a shipment of identical controlled products, by virtue of paragraph 6(a), the supplier is permitted to transmit (in the case of sale) or obtain or prepare (in the case of importation) a single MSDS for the whole shipment.

Paragraph 6(b):

If an "adequate" MSDS for a controlled product has already been sent to a customer prior to the date of sale, a supplier is not required to furnish MSDSs with subsequent shipments of the same product to that customer.

In addition, where the importer already has an adequate MSDS, an additional MSDS does not have to be obtained or prepared for subsequent importations of the same product by that importer.

An "adequate" MSDS, in this context, means a MSDS which bears information that is current when the product is sold or imported and was prepared and dated no more than 3 years (3 X 365 days) prior to the date on which the product is being sold or imported.