 Health Canada    Santé Canada	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>Sch 1 - 1</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 Schedule 1 - TEST FOR DETERMINING THE FLASHBACK AND THE LENGTH OF THE FLAME PROJECTION OF A FLAMMABLE PRODUCT ENCLOSED IN A SPRAY CONTAINER</b>			

**SCHEDULE 1**  
*(Subsections 1(1), 48(1) and 49(1) and section 52)*

**TEST FOR DETERMINING THE FLASHBACK AND THE LENGTH OF THE FLAME PROJECTION OF A FLAMMABLE PRODUCT ENCLOSED IN A SPRAY CONTAINER**


*Application*

1. This test is to be used to determine the flashback and the length of the flame projection of a flammable product enclosed in a spray container.

*Apparatus*

2. The following apparatus is to be used in this test:

- (a) a flammability tester, as illustrated in Figures 1 and 2 to the Schedule, that
  - (i) is constructed so that the spray container can be secured in place by means of a holding device, such as a three-pronged clamp affixed to a ring stand, in such a manner that the discharge from the spray container is in the horizontal plane,
  - (ii) may include a remote control device by which
    - (A) the valve of a pressurized container can be activated, such as a side-pull, caliper-type bicycle hand brake, or
    - (B) the trigger or plunger of a pump-spray container can be pneumatically activated, as illustrated in Figures 3 and 4 to the Schedule,
  - (iii) has a vertically mounted burner that
    - (A) has an inside diameter of 1.2 mm,
    - (B) has a Luer-Lock 16-gauge needle affixed to a metal tube or another suitable device, and
    - (C) is placed at a distance of 15 cm from the discharge orifice of the spray container, which distance is to be measured horizontally between the vertical planes of the discharge orifice and the burner orifice, and
  - (iv) has two support frameworks, placed on the opposite side of the burner from the spray container, one at a distance of 15 cm from the burner and the other at a distance of 100 cm from the burner, each of which
    - (A) has an internal open space for testing a pressurized container of 35 cm wide by 100 cm high or, for testing a pump-spray container, of 35 cm wide by 60 cm high,
    - (B) is constructed from metal or other non-flammable material,

 Health Canada    Santé Canada	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>Sch 1 - 2</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 Schedule 1 - TEST FOR DETERMINING THE FLASHBACK AND THE LENGTH OF THE FLAME PROJECTION OF A FLAMMABLE PRODUCT ENCLOSED IN A SPRAY CONTAINER</b>			

- (C) is mounted in a vertical plane perpendicular to the direction of discharge from the spray container, and  
 (D) is adjustable in the vertical plane;
- (b) a cylinder of chemically pure (C.P.) grade propane fitted with a regulator capable of delivering pressure to the burner appropriate to maintaining a flame height of 5 cm; and  
 (c) loosely woven cotton fabric commonly referred to as cheesecloth that has, in the bleached state, a mass per unit area of not less than 35 g/m<sup>2</sup> and not more than 65 g/m<sup>2</sup>.

#### *Test Specimen*

3. (1) When there are instructions by the manufacturer respecting the shaking of the spray container, a test composed of the following number of discharges from each of three spray containers of the same product and of the same size must be conducted:

- (a) in the case of a pressurized container, three discharges; and  
 (b) in the case of a pump-spray container, 10 discharges.


(2) When there are no instructions by the manufacturer respecting the shaking of the spray container, a test, using each of three spray containers of the same product and of the same size, must be conducted as follows:

- (a) in the case of a pressurized container, without shaking the container, discharge it three times and then, after shaking it in the manner set out in paragraph 4(9)(a), discharge it a further three times; or  
 (b) in the case of a pump-spray container, without shaking the container, discharge it 10 times and then, after shaking it in the manner set out in paragraph 4(9)(a), discharge it a further 10 times.

#### *Procedure*

4. (1) A test

- (a) must be conducted at a room temperature of 22 ± 2°C in the absence of air currents, with an allowance made for a clearance of 50 cm beyond the support framework that is set at a distance of 100 cm from the burner; and  
 (b) may be conducted in a fume hood with the exhaust fan turned off and the protecting door lowered.

 Health Canada    Santé Canada	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>Sch 1 - 3</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 Schedule 1 - TEST FOR DETERMINING THE FLASHBACK AND THE LENGTH OF THE FLAME PROJECTION OF A FLAMMABLE PRODUCT ENCLOSED IN A SPRAY CONTAINER</b>			

(2) Any fume must be removed from the test area and any residue cleaned up after each discharge.

(3) Before testing, each spray container must be

(a) maintained at a temperature of  $22 \pm 2^{\circ}\text{C}$  for at least four hours; and

(b) primed by

(i) in the case of a pressurized container, discharging the container for five seconds, and

(ii) in the case of a pump-spray container, activating the trigger or pump using each of 18 N, 36 N and 54 N of pressure for each possible nozzle position until

(A) in the case of the "stream" position, a continuous stream is produced, and

(B) in the case of the "spray" position, a mist is produced.

(4) Install the first spray container in the holding device and ensure that the burner orifice is 15 cm from the discharge orifice of the spray container in the horizontal plane and 5 cm below it in the vertical plane and that the discharge orifice points in the direction of the burner.

(5) Adjust the burner to give a flame height of 5 cm and release the following trial discharges from the spray container:

(a) in the case of a pressurized container, a single discharge; and

(b) in the case of a pump-spray container, three discharges.

(6) If the operation set out in subsection (5) does not produce a flame projection, lower the burner orifice by 5 cm and adjust the burner to give a flame height of 12 cm.

(7) Attach the cheesecloth to the flammability tester with bulldog clips or in any other manner so as to cover the entire internal space of the support framework set at a distance of 15 cm from the burner and verify that the cheesecloth is at a proper horizontal distance from the vertical plane of the burner orifice on the opposite side of the burner from the spray container.


(8) Adjust the height of the support framework so that the cheesecloth will intercept the line of flame projection.

(9) Prepare the spray container in accordance with the manufacturer's instructions and

(a) if shaking is applicable,

(i) shake vigorously for five seconds, or for the period specified in the manufacturer's instructions,

(ii) install the spray container in the holding device,

 Health Canada    Santé Canada	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>Sch 1 - 4</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 Schedule 1 - TEST FOR DETERMINING THE FLASHBACK AND THE LENGTH OF THE FLAME PROJECTION OF A FLAMMABLE PRODUCT ENCLOSED IN A SPRAY CONTAINER</b>			

(iii) 15 seconds after the cessation of shaking, release the first discharge in accordance with subsection (10), and

(iv) allow the spray container to stand for at least 60 seconds between discharges; or  
 (b) if shaking is not applicable, install the spray container in the holding device and release the discharge in accordance with subsection (10), allowing the spray container to stand for at least 60 seconds between discharges.

**(10) Discharge the spray container**

(a) in the case of a pressurized container, for five seconds or until the cheesecloth ignites; or

(b) in the case of a pump-spray container, for 10 sprays or until the cheesecloth ignites.

**(11) In the case of a pump-spray container, repeat the procedure set out in paragraph (10)(b) for each nozzle position and each of 18 N, 36 N and 54 N of pressure.**

**(12) If the cheesecloth attached to the support framework that is set at a distance of 15 cm from the burner ignites, the remaining discharges referred to in section 3 must be carried out in accordance with subsections (1) to (11) using a new piece of cheesecloth attached to the support framework that is set at a distance of 100 cm from the burner.**

*Determination and Reporting of Flame Projection and Flashback*

**5. (1) If at any time during the test the cheesecloth that is mounted at a distance of 100 cm from the burner is ignited, the length of the flame projection is 100 cm or more.**

**(2) If at any time during the test the cheesecloth that is mounted at a distance of 15 cm from the burner is ignited and, at all times during the test, the cheesecloth that is mounted at a distance of 100 cm from the burner remains unignited, the length of the flame projection is 15 cm or more but less than 100 cm.**


**(3) If at any time during the test the cheesecloth mounted at a distance of 15 cm from the burner is not ignited but there is a flame projection, the length of the flame projection is less than 15 cm.**

**6. The following test results must be recorded:**

(a) the length of the flame projection

(i) in the case of a pressurized container, for each discharge, and

(ii) in the case of a pump-spray container, for each discharge at each nozzle position and each pressure applied;

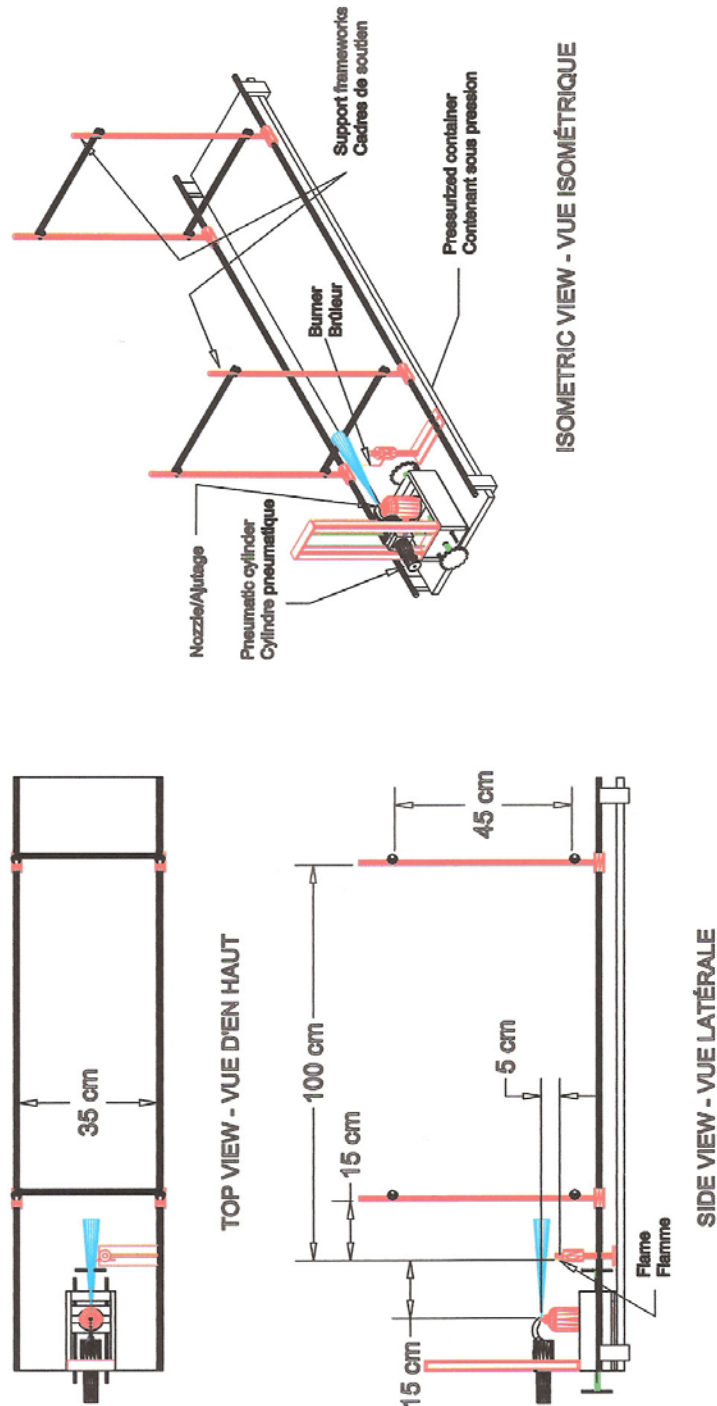
 Health Canada    Santé Canada	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>Sch 1 - 5</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 Schedule 1 - TEST FOR DETERMINING THE FLASHBACK AND THE LENGTH OF THE FLAME PROJECTION OF A FLAMMABLE PRODUCT ENCLOSED IN A SPRAY CONTAINER</b>			

- (b) a lack of flame projection resulting from any of the test discharges; and
- (c) any flashback.



CCCR, 2001 Schedule 1 - TEST FOR DETERMINING THE FLASHBACK AND THE LENGTH OF THE FLAME PROJECTION OF A FLAMMABLE PRODUCT ENCLOSED IN A SPRAY CONTAINER

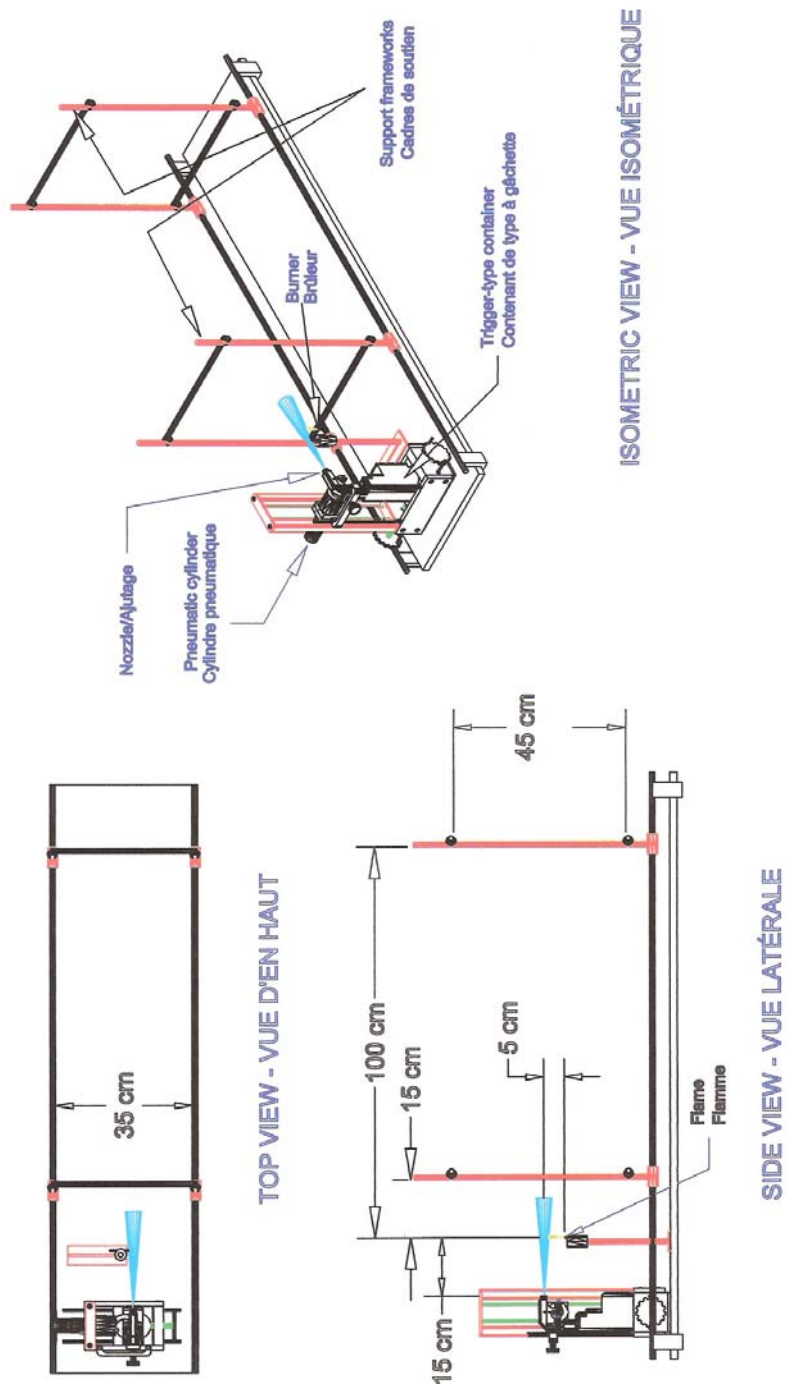
FIGURE 1  
FLAMMABILITY TESTER - PRESSURIZED CONTAINER






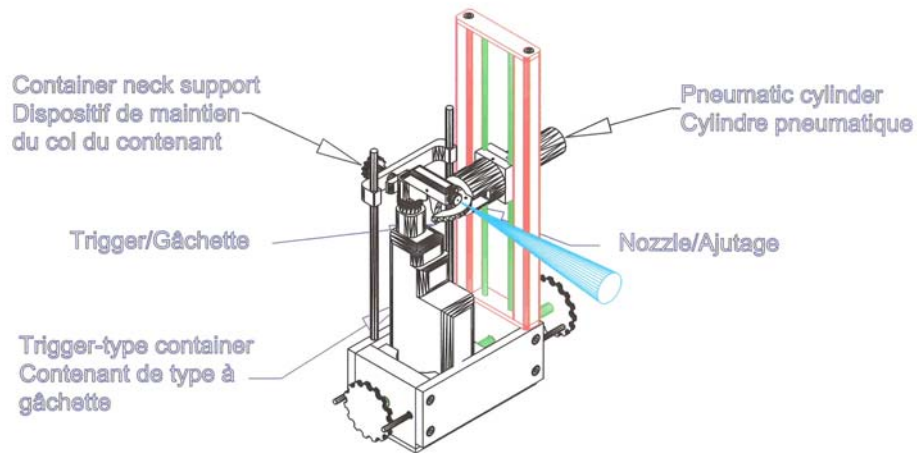
**CCCR, 2001 Schedule 1 - TEST FOR DETERMINING THE FLASHBACK AND THE LENGTH OF THE FLAME PROJECTION OF A FLAMMABLE PRODUCT ENCLOSED IN A SPRAY CONTAINER**

**FIGURE 2  
FLAMMABILITY TESTER - PUMP-SPRAY CONTAINER**

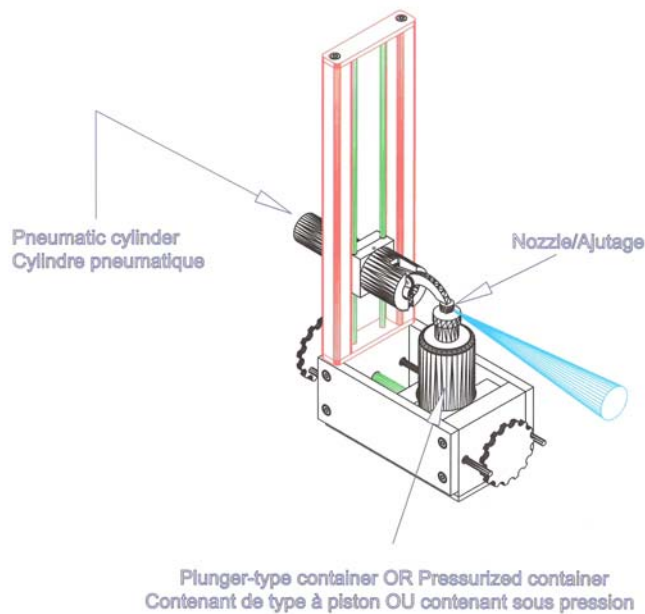


 Health Canada / Santé Canada	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>Sch 1 - 8</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 Schedule 1 - TEST FOR DETERMINING THE FLASHBACK AND THE LENGTH OF THE FLAME PROJECTION OF A FLAMMABLE PRODUCT ENCLOSED IN A SPRAY CONTAINER</b>			


**FIGURE 3**  
**HOLDING APPARATUS FOR A TRIGGER-TYPE CONTAINER - ISOMETRIC VIEW**



**FIGURE 4**  
**HOLDING APPARATUS FOR A PLUNGER TYPE OR PRESSURIZED CONTAINER ISOMETRIC VIEW**










 Health Canada    Santé Canada	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>Sch 2 - 1</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 Schedule 2 - HAZARD SYMBOLS</b>			

**SCHEDULE 2**  
*(Subsection 1(1) and section 21)*

**HAZARD SYMBOLS**

<b>Item</b>	<b>Column 1 Description</b>	<b>Column 2 Symbol</b>
1.	<b>TOXIC</b>	
2.	<b>CORROSIVE</b>	
3.	<b>FLAMMABLE</b>	
4.	<b>EXPLOSIVE</b>	

 Health Canada Santé Canada	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>Sch 3 - 1</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 Schedule 3 - TEST METHOD FOR DETERMINING WHETHER A CONTAINER LEAKS</b>			

**SCHEDULE 3**  
*(Section 7)*

**TEST METHOD FOR DETERMINING WHETHER A CONTAINER LEAKS**

*Interpretation*

**Definitions**

1. The definitions in this section apply in this Schedule.

“seal”  
« sceau  
d'étanchéité »

“seal”, in respect of a container, means any device or membrane under the closure that covers the opening of the container, including any membrane that is part of the container, such as a heat induction seal or a sonic seal. It does not include a liner or a mechanism that is an integral part of the closure.

“test sample”  
« échantillon  
d'essai »

"test sample" means  
(a) in the case of a container of a chemical product, the container filled with the product in the manner in which it is sold to the consumer; or  
(b) in the case of an empty container that is destined to receive a chemical product, the container filled with the product that it is destined to receive.

*Test Method*


**Preparation of Sample for Testing**

**Remove seal**

2. Except in the case of a single-use container,  
(a) open the test sample;  
(b) remove any seal that is present under the closure in accordance with the manufacturer's instructions or, if no instructions are provided, puncture the seal; and  
(c) reclose the sample as tightly as possible without stripping the threads of the closure.

**Bring to room temperature**

3. Place the test sample in a test location that has a constant temperature of  $23 \pm 2^{\circ}\text{C}$  for at least four hours to permit the container and its contents to reach the temperature of the test location.

 Health Canada Santé Canada	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>Sch 3 - 2</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 Schedule 3 - TEST METHOD FOR DETERMINING WHETHER A CONTAINER LEAKS</b>			

### Testing for Leaks

- |                                |   |
|--------------------------------|---|
| <b>Position of test sample</b> | <b>4. Position the test sample</b><br><b>(a) over a clean piece of blotting paper or another paper that stains on contact with a liquid;</b><br><b>(b) in an inverted position at a 45° angle below the horizontal; and</b><br><b>(c) with the closure in the lowest possible position and free of any obstruction.</b> |
| <b>Examine paper</b>           | <b>5. After one hour, remove the test sample and examine the paper described in paragraph 4(a) for evidence that any of the contents have leaked from the sample.</b>   |

### PASS OR FAIL

- |             |  |
|-------------|--|
| <b>Fail</b> | <b>6. If an examination of the paper described in paragraph 4(a) discloses any trace of the contents of the test sample, the sample has failed the leakage test and a container of the same type as the test sample must not be used for a chemical product.</b> |
| <b>Pass</b> | <b>7. If no trace of the contents of the test sample is found on the paper described in paragraph 4(a), the sample has passed the leakage test and a container of the same type as the test sample may be used for a chemical product.</b>                       |

### DISCUSSION OF CCCR, 2001 SCHEDULE 3

#### Definitions:


The following terms are defined in section 1 of the CCCR, 2001: chemical product, container, manufacturer, single-use container.

#### Requirements:

Section 7 requires that a container of a liquid chemical product must pass the leakage test described in this Schedule, or an equivalent test.

#### Topics

- Definitions
- Requirements
- Test Sample
- Removing the Seal
- Temperature Conditioning
- Testing for Leaks
- Non-Mandatory Tests
  - Field Test
  - Ageing Test
  - Life Test
  - Coding System

 Health Canada Santé Canada	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>Sch 3 - 3</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 Schedule 3 - TEST METHOD FOR DETERMINING WHETHER A CONTAINER LEAKS</b>			

### Test Sample:

The leakage test does not have to be performed on every container in a production lot. The test sample would be a representative sample of that lot. However, every new production lot would require a new test sample.

If a test sample fails, then the whole production lot of containers fails.

### Removing the Seal:


Experiments conducted by industry and the Product Safety Laboratory showed that sonic-sealed containers will leak when the seal has been removed or punctured. Similar container-closure systems leaked far less when the container had not previously been sonic-sealed.

The Product Safety Laboratory observed that containers with punctured sonic seals leaked within the same amount of time as those where the sonic seal was completely removed. In addition, the amount of product which leaked from containers with punctured seals was similar to containers with completely removed seals. During the reasonably foreseeable use of liquid chemical products, it is unlikely that a consumer would be meticulous to the point that he or she would take the time to completely remove a seal. Some consumers may simply puncture the seal with a tool or a key, while others may rip the seal or make an opening large enough to allow the liquid to flow out. Hence in the leakage test, the seal should be removed according to instructions, if present, or otherwise punctured.

The exception for opening, breaking the seal and re-closing single-use containers recognizes that these containers are intended to be opened only once and not re-closed. Note that if it is possible to re-close the container, then that container is not considered to be a single-use container, and that product must meet the full requirements of the CCCR, 2001 for recloseable containers.

### Temperature Conditioning:

Often, in packaging locations, the plastic containers coming from their moulds are hot, while the products that go into them may be very cold, especially in winter when exterior storage tanks are used. This difference in temperature creates a stress between the closure and the container which could make the package leak. However, once the two temperatures equilibrate and the product is in the hands of consumers, the performance of the package may be different. Thus the leakage test should be carried out with the container and the contents at the same temperature. The temperature of  $23 \pm 2^{\circ}\text{C}$  is used because this is the average temperature most likely to be found throughout the lifetime of a container.

 Health Canada Santé Canada	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>Sch 3 - 4</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 Schedule 3 - TEST METHOD FOR DETERMINING WHETHER A CONTAINER LEAKS</b>			

### Testing for Leaks:

Besides blotting paper, examples of other papers that stain on contact include thermal paper and filter paper. These other papers are not specifically referenced in Schedule 3 in order to be consistent with the leak test described in the standard CSA Z76.1-99 (entitled *Recloseable Child-Resistant Packages*).

Thermal paper imprints a spot on the paper where the liquid has fallen. If the liquid is a volatile clear solvent, an analyst might not notice a spot on blotting paper. But with thermal paper, it is easier to see clear liquids and the stain does not disappear when the liquid dries up. Hence thermal paper may be used to obtain a permanent record of the leak.

An incline of 45 degrees below the horizontal increases the pressure of the contents against the closure compared with having the container on its side. Paragraph 4(c) ensures that the liquid will touch the closure when inclined. For example, a rectangular container with the closure in the centre of the top should be inclined on its widest edge, to put the closure in the lowest possible position.

The amount of liquid must be enough that it falls to the paper that is positioned below the closure during the test. If the liquid collects around the cap but does not drop to the paper, this would not be considered a leak and the container would not fail.

The quantity of product which leaks-out within the test period is not specified for reasons of simplicity and clarity. Since this requirement applies to products which are inherently hazardous, any evidence of leakage is considered a failure. However, corrective or enforcement actions required as a result of a leaking container would be related to the risk posed by the product. That is, the quantity of product delivered and the nature of the hazard posed by the product.


### Non-Mandatory Tests:

A number of non-mandatory screening tests are recommended, to support the leakage requirement. Numerous standards have been reviewed to find test methods to support the general packaging guidelines, including those of the U.S., U.K., Transport Canada, the CSA and ASTM. Information from these standards was combined with practical experience and by using technical and scientific support provided by Health Canada. The following recommended test procedures were validated by two non-government laboratories:

#### Field Test

The following screening test could be performed in the field to help Product Safety Inspectors determine whether compliance testing would be required:

Take a container, without exerting any torque on the lid, and invert it at an angle of 45 degrees below the horizontal line for a period of five minutes.

 Health Canada Santé Canada	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>Sch 3 - 5</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 Schedule 3 - TEST METHOD FOR DETERMINING WHETHER A CONTAINER LEAKS</b>			

Detection of any trace of liquid on a blotter placed beneath the lid may indicate that the container does not meet section 7, and that compliance testing according to Schedule 3 should be carried out.

### **Aging Test**

Since a filled container may deteriorate over time, the person responsible may conduct the following ageing tests to insure that the product will comply with the leakage requirement during its feasible shelf-life:

1. Subject the container to the one-hour leakage test after it has been filled for a minimum of six months.

Research has found that the typical shelf-life of a consumer chemical product is six months. This also corresponds with Transport Canada guidelines.

2. Conduct an accelerated aging test after conditioning the container for a shorter period but at an elevated temperature. For example, test the product after it has been left at 50°C for 28 days.


The accelerated test simulates what might occur at ambient temperatures over a six-month period. Tests have shown that most leakages from containers stored at 50°C will occur within seven days of aging. Note that this test may not be appropriate for certain flammable solvents. Also keep in mind that the 50°C test will only examine the effect of the temperature on the containers, and may have little to do with measuring any interactions between the product and the container or aging over time.

### **Life Test**

The following test verifies the ruggedness of the closure during its anticipated life expectancy:

Subject the container to the one-hour leakage test after it has been opened and re-closed according to the container manufacturer's instructions, if present, or otherwise a minimum of 50 times to a maximum of 100 times.

The use of 100 openings and reclosings comes from the CSA Z76-1.99 standard (entitled *Recloseable Child-Resistant Packages*) and is based upon the average life of a 250 mL container. This standard prescribes mechanical "life tests" to assess whether the container is capable of maintaining its security for the number of uses corresponding to the normal depletion of the product. The limitation of this standard is that it is performed on empty container prototypes or with a placebo. This practice may be acceptable for assessing child-resistant containers that are intended to dispense pills, but may not adequately assess the effect of incompatibility of a chemical product with the container. Hence the life test is presented to evaluate a child-resistant container when it is filled with the chemical product.


 Health Canada    Santé Canada	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>Sch 3 - 6</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 Schedule 3 - TEST METHOD FOR DETERMINING WHETHER A CONTAINER LEAKS</b>			

Furthermore the life test is presented for use on chemical products which do not need child-resistant containers.

### **Coding System**

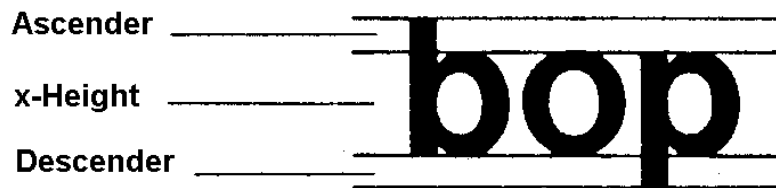
The use of a coding system, which may be lot numbering or some other system, is recommended as a quality control mechanism because it is a simple way of differentiating between lots. If a problem is found with a product, enforcement and corrective actions could be limited to the specific problem lot and not the entire product line. It will also make it easier for Poison Control Centres to know they have up-to-date product ingredient information when there has been a change in formula.

In the absence of a lot number, all units would be considered as coming from a single lot.

 Health Canada    Santé Canada	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>Sch 4 - 1</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 Schedule 4 - ILLUSTRATION - STANDARD SANS SERIF TYPE</b>			

**SCHEDULE 4**  
*(Paragraph 19(1)(b))*

**ILLUSTRATION - STANDARD SANS SERIF TYPE**







CCCR, 2001 - INDEX

**A**

**absolute pressure,**  
pressurized container criterion  
..... C-58(1)(b)

**absolute vapour pressure,**  
pressurized container criterion  
..... C-58(1)(a)

**acetone,**  
flammability of  
..... C-53

**acid reserve,**  
calculation ..... C-43, 44  
classification criteria using  
C-41(1)(c)(ii);C-42(2)  
defined ..... C-1(1)  
test method ..... C-44(2)

**Act,**  
defined ..... C-1(1)

**adhesive, quick skin-bonding,**  
defined ..... C-1(1)  
labelling for ..... C-55; C-56  
child-resistant container requirement ..... C-57

**advertising,**  
labelling exemption ..... C-15(1)  
pictures, use of ..... C-15(2)  
restriction ..... C-2

**alkali reserve,**  
calculation ..... C-43, 44  
classification criteria using ..... C-41(1)(c)(ii); C-42(3)  
defined ..... C-1(1)  
test method ..... C-44(2)

**acute lethality,**  
classification criteria for ..... C-34(2) to (4)

**advertise,**  
defined ..... H-2

**aerosol container,**  
integrity ..... C-7  
pressurized container, classification criteria ..... C-58  
pressurized container, defined ..... C-58(1)  
pressurized container, labelling ..... C-59  
spray container, defined ..... C-1(1)  
spray container flammability criteria ..... C-49  
spray container flammability test method ..... C-52; C-Sch1

**aging test,**  
recommendation for ..... Sch 3

**analyst,**  
defined ..... H-2

**animal tests,**  
for acute lethality ..... C-34(2) to (4)

**Key:**

**C** - *Consumer Chemicals and Containers Regulations, 2001*  
**H** - *Hazardous Products Act*  
**Sch** - Schedule to the CCCR, 2001  
**Note:** Information may be in the *HPA/CCCR, 2001* and/or the “discussion” corresponding to the cited section(s).

**appearance [of product],**  
- see label

**American Society for Testing and Materials**  
- see ASTM

**area of the display panel,**  
- see main display panel

**aspiration hazard,**  
classification criteria for ..... C-33(d); C-34(5)  
isopropyl alcohol ..... C-33, 34  
mixture that separates ..... C-33, 34  
pine oil ..... C-33, 34  
turpentine ..... C-33, 34  
defined ..... C-1(1)  
labelling for ..... C-39

**ASTM,**  
defined ..... C-1(2)

**ASTM Tests, referenced in the CCCR, 2001**  
D 56 - flash point, Tag ..... C-50(a)  
D 93 - flash point, Penskey-Martens ..... C-50(b)  
D 323 - vapour pressure ..... C-58(1)(a)  
D 1293 - pH ..... C-44(1)  
D 3278 - flash point, liquids, small scale ..... C-51  
D 3828 - flash point, small scale ..... C-50(a)

**B**

**barbecue cylinder,**  
exception, pressurized container classification ..... C-58(2)

**batteries, lead/acid,**  
exception ..... C-2

**blister card,**  
labelling of ..... C-15, 16  
main display panel ..... C-1(1)

**border,**  
format ..... C-30  
requirement ..... C-29(b)

**C**


**Canadian Standards Association**  
- see CSA

**caulking,**  
aerosol flammable product classification ..... C-48, 49  
guns, child-resistance ..... C-10


**cement,**  
additional labelling ..... C-46

**chemical product,**  
defined ..... C-1(1)

**child-resistant container,**  
exceptions, toxic products ..... C-40(2)  
functional integrity ..... C-10  
labelling of ..... C-11  
large container, exception ..... C-14  
need for,  
corrosive products ..... C-47  
quick skin-bonding adhesives ..... C-57  
toxic products ..... C-40

 <b>Health Canada</b> <b>Santé Canada</b>	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>INDEX-2</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 - INDEX</b>			

record keeping requirements	C-12	<b>container,</b>	
testing standards for	C-9	aerosol	
tool, use of	<b>C-9</b>	- see aerosol container	
<b>classification criteria,</b>		child-resistant,	
Category 1 - toxic products	C-33 to C-37	- see child-resistant container	
precedence of data sources	C-33	blister cards	
subcategories - very toxic, toxic, harmful		main display panel	C-1(1)
- substances of special concern	C-34(1)	cylindrical	
- oral exposure	C-34(2)	main display panel	C-1(1)
- dermal exposure	C-34(3)	defined	C-1(1)
- inhalation exposure	C-34(4)	empty, included in definition of container	C-1(1)
- aspiration hazard	C-34(5)	fuel,	
determination of toxicity		labelling exception	C-39(3)
- data sources	C-35	portable gasoline, exception	C-2(2)(b)
- LD <sub>50</sub> and LC <sub>50</sub> of mixtures, formulas for	C-36	indented	
- LC <sub>50</sub> , 4-hour, conversion	C-37	main display panel	C-1(1)
Category 2 - corrosive products	C-41 to C-44	integrity	C-7
precedence of data sources	C-41	leakage test	C-7;C-Sch3
subcategories - very corrosive, corrosive, irritant		pressurized,	
- substances of special concern	C-42(1)	- see pressurized container	
- acids	C-42(2)	single-use,	
- bases	C-42(3)	defined	C-1(1)
- substances causing necrosis or ulceration	C-42(4)	labelling of	C-8; C-13
- substances causing other effects	C-42(5)	small	
test methods		labelling exemption	C-25
- necrosis and ulceration	C-43	quick skin-bonding adhesive	C-55, 56
- pH	C-44	spray, defined	C-1(1)
Category 3 - flammable products	C-48 to C-52	tubes, label format for	C-26(2)
data sources	C-48	wide and short, label format for	C-26(3)
subcategories - very flammable, flammable, combustible, spontaneously combustible	C-49	<b>corneal damage,</b>	
test methods		criteria involving	C-41(1)(e)
- liquids	C-50	<b>corrosion,</b>	
- solids	C-51	versus irritation	C-42
- flame projection	C-52; C-Sch1	<b>corrosive product,</b>	
Category 4 - quick skin-bonding adhesives		child-resistant container requirement	C-47
defined	C-1(1)	classification criteria for	C-41 to C-44
Category 5 - pressurized containers	C-58	defined	C-1(1)
<b>cloth, wiping,</b>		labelling of	C-46
exception, first aid statement	C-39; C-46	symbol	C-Sch2
<b>coding system,</b>		prohibition and exception	C-45
recommendation for	Sch 3	<b>cosmetic,</b>	
<b>combustible liquids,</b>		exemption for	H-3(1)(b)
classification criteria for	C-49	<b>cylindrical container,</b>	
exemption, water based product	C-48(2)	main display panel	C-1(1)
<b>complex mixture,</b>		<b>CSA</b>	
defined	C-1(1)	defined	C-1(2)
disclosure requirements	C-32	<b>CSA Tests, Referenced in the CCCR, 2001</b>	
<b>compressed gas,</b>		B 306 - portable fuel tanks	C-2(2)(b)
classification, criteria for pressurized containers	C-58(1)	B 339 - dangerous goods cylinders	C-58(2)
exceptions	C-2(2); C-58(2)	B 336 - portable gasoline containers	C-2(2)(b)
flammability criteria	C-49	Z 76.1 - child-resistant packages	C-9(b)
labelling of pressurized containers	C-59		
<b>concentration,</b>		<b>D</b>	
cut-off	C-34(1); C-34(5); C-36(1)	<b>data,</b>	
expression of	C-1(4)	sources	C-6
<b>conjunctival swelling,</b>		for corrosive products	C-41
criteria for eye irritation	C-41(1)(e)		

 <b>Health Canada</b> <b>Santé Canada</b>	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>INDEX-3</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 - INDEX</b>			

- for flammable products ..... C-48
- for toxic products ..... C-35
- disclaimers,**
- on labels ..... C-15(2)
- dispensers, single drop**
- child-resistant container exception, toxic products ... C-40(2)
- limited flow orifices ..... C-40(2)
- display card,**
- labelling of ..... C-15, 16
- display surface,**
- defined ..... C-1(1)
- Draize test,**
- skin or eye irritation, criterion for ..... C-1(2); C-43(2)
- drug,**
- exemption for ..... H-3(1)(b)
- dust,**
- defined ..... C-1(1)

**E**

- edema formation,**
- skin or eye irritation, criterion for ..... C-41; C-42
- empty container,**
- included in definition of container ..... C-1(1)
- erythema formation,**
- skin or eye irritation, criterion for ..... C-41; C-42
- excluded product,**
- HPA ..... H-3(1)(a)
- CCCR, 2001 ..... C-2(2)
- explosive,**
- exemption for ..... H-3(1)(a)
- eye irritation,**
- classification criteria for ..... C-41(1)(e)

**F**

- field test,**
- recommendation for ..... Sch 3
- fire extinguishers,**
- exception for ..... C-2(2)(d)
- first aid statement,**
- defined ..... C-1(1)
- label, disclosure of ..... C-31
- label, format for ..... C-20(b); C-24; C-25; C-29; C-31
- methanol, for ..... C-39
- flame projection,**
- defined ..... C-1(1)
- flammable spray containers, as a criterion for ..... C-52
- test method ..... C-Sch1
- flammable product,**
- classification criteria for ..... C-48 to C-52
- defined ..... C-1(1)
- labelling of ..... C-54
- symbol ..... C-Sch2
- prohibition and exceptions ..... C-53


- flammable aerosols,**
- caulking, classification criteria for ..... C-48, 49
- classification criteria for ..... C-49
- foam, classification criteria for ..... C-48, 49
- spray string, classification criteria for ..... C-48, 49
- test method ..... C-52; C-Sch1
- flammable gas,**
- classification criteria for ..... C-49
- flammable liquids,**
- classification criteria for ..... C-49
- exemption, water-based product ..... C-48(2)
- flammable sprays,**
- classification criteria for ..... C-49
- flammable solids,**
- classification criteria for ..... C-49
- flashback,**
- defined ..... C-1(1)
- flammable spray containers, as a criterion for ..... C-52
- test method ..... C-Sch1
- flash point,**
- combustible liquid, as a criterion for ..... C-49
- defined ..... C-1(1)
- flammable liquid, as a criterion for ..... C-49
- test methods for ..... C-50; C-51
- foam,**
- aerosol, flammability classification ..... C-48, 49
- food,**
- exemption for ..... H-3(1)(b)
- fuels,**
- sale of ..... C-2(2)(b); C-39(3); C-53
- fume,**
- defined ..... C-1(1)

**G**

- gas,**
- see compressed gas
- gasoline,**
- sale of ..... C-2(2)(b); C-39; C-53
- good scientific practices,**
- defined ..... C-1(1)

**H**

- hazard symbol(s),**
- defined ..... C-1(1)
- depiction ..... C-21
- design ..... C-Sch2
- label disclosure ..... C-25
- label format ..... C-26; C-27
- size ..... C-22
- hazardous ingredient,**
- complex mixtures, in ..... C-1(1); C-31
- concentration cut-offs for ..... C-36(1)
- defined ..... C-1(1)
- disclosure of ..... C-31
- percentages, expressed as ..... C-1(4)
- use of, in classification ..... C-6(1)(d)

 <b>Health Canada / Santé Canada</b>	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>INDEX-4</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 - INDEX</b>			

**hazardous product,**  
defined ..... H-2  
**Hazardous Products Act (HPA),**  
Part I (prohibited and restricted products) ..... H-3 to H-10  
Part II (controlled products) ..... H-11 to H-20  
Part III (administration and enforcement) ..... H-21 to 31  
**human experience data,**  
defined ..... C-1(1)  
precedence of, in classification ..... C-6(1)(a)

**I**


**import,**  
defined ..... H-2  
**importer,**  
defined ..... H-13  
**importation,**  
of non-compliant chemical products ..... C-3  
prohibited products ..... H-4(1)  
record keeping requirements ..... C-5  
restricted products ..... H-4(2)  
**information,**  
data sources ..... C-6  
**Ingredient,**  
hazardous, defined ..... C-1(1)  
hazardous, disclosure of ..... C-31  
**ingredients, hazardous**  
complex mixtures, in ..... C-1(1); C-31  
concentration cut-offs for ..... C-36(1)  
defined ..... C-1(1)  
disclosure of ..... C-31  
percentages, expressed as ..... C-1(4)  
**inhalation,**  
corrosive product, additional labelling ..... C-46  
gas / vapour, units of classification criteria ..... C-33, 34  
saturation vapour concentration ..... C-33, 34  
toxic product classification criteria for ..... C-33, 34  
**inspector,**  
defined ..... H-2  
**isopropyl alcohol,**  
aspiration hazard of ..... C-33, 34  
**iris damage,**  
criteria involving ..... C-41(1)(e)  
**irritants,**  
classification of ..... C-42  
test methods for ..... C-43; C-44  
**ISO Tests, Referenced in the CCCR, 2001**  
8317 - child-resistant packaging ..... C-9(b)

**K**

**kits,**  
labelling of ..... C-16(1)

**L**

**label,**  
format, clarity  
contrast ..... C-18  
durability ..... C-17  
legibility ..... C-17  
print type ..... C-19(1)  
format, layout  
location and order ..... C-25  
main display panel ..... C-25(1)(a)  
- defined ..... C-1(1)  
- hazard symbol(s) ..... C-26; C-27  
- signal word ..... C-26; C-28  
- primary hazard statement ..... C-26  
secondary information ..... C-25(1)(b)  
- border ..... C-30  
- specific hazard statement ..... C-29  
- instructions ..... C-29  
- first aid statement ..... C-29, C-31; C-32  
format, technical specifications  
first aid statement, size ..... C-24(2)  
hazard symbol, depiction ..... C-21  
hazard symbol, size ..... C-22  
other information, size ..... C-24(1)  
print type, measurement of height ..... C-19(2)  
signal word, size ..... C-23  
upper-case print ..... C-20  
languages ..... C-17  
required information  
additional information ..... C-15(2)  
child-resistant containers ..... C-11; C-13  
corrosive products ..... C-46  
disclaimers ..... C-15(2)  
flammable products ..... C-54  
kits ..... C-16(1)  
pictographs, use of ..... C-25  
pictures, use of ..... C-15(2)  
pressurized containers ..... C-59  
quick skin-bonding adhesives ..... C-56  
single-use containers ..... C-8; C-13  
toxic products ..... C-39  
**labels, exceptions/exemptions,**  
lighters ..... C-2(2)  
fire extinguishers ..... C-2(2)  
fuels ..... C-39(3); C-53  
imported products ..... C-3  
kits ..... C-16(1)  
pens ..... C-33, 34  
petroleum containers, portable ..... C-2(2)  
shipping containers ..... C-16(2)  
short and wide containers ..... C-26(3)  
small containers ..... C-25(2)  
transparent packaging ..... C-16(1)  
tubes, collapsible ..... C-26(2)  
water-based product ..... C-48(2)  
**language requirements,**  
child-resistant container instructions ..... C-11  
labelling ..... C-17

 <b>Health Canada</b> <b>Santé Canada</b>	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>INDEX-5</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 - INDEX</b>			

official, defined ..... C-1(1)

**leakage,**  
test method ..... C-Sch3  
requirement involving ..... C-7

**life test,**  
recommendation for ..... Sch 3

**LC<sub>50</sub>,**  
criteria involving ..... C-34(4)  
defined ..... C-1(1)  
equivalent formulae ..... C-37  
formula, for mixtures ..... C-36

**LD<sub>50</sub>,**  
criteria involving ..... C-34(2); C-34(3)  
defined ..... C-1(1)  
formula, for mixtures ..... C-36

**legibility,**  
label ..... C-17

**M**

**main display panel,**  
defined ..... C-1(1)  
for blister cards ..... C-1(1)  
for cylindrical containers ..... C-1(1)  
for indented containers ..... C-1(1)  
format for ..... C-26 to C-28  
label elements ..... C-25(1)(a)

**manufacturer,**  
defined ..... C-1(1)

**medical device,**  
exemption for ..... H-3(1)(b)

**methanol,**  
first aid statement ..... C-39  
flammability of ..... C-48, 49  
toxicity of ..... C-33, 34

**mineral spirits,**  
vapour toxicity of ..... C-33, 34

**Minister,**  
defined ..... H-2

**mist,**  
defined ..... C-1(1)

**mixture,**  
defined ..... C-1(1)  
hazard of mixing with other products,  
labelling of ..... C-46  
that separates,  
classification of ..... C-35  
toxicological evaluation of ~ using LC<sub>50</sub> and LD<sub>50</sub> ..... C-36

**N**

**National standard,**  
defined ..... C-1(1)

**O**

**OECD,**  
defined ..... C-1(2)

**OECD Test Guideline,**  
classification using ..... C-6(1); C-35(1); C-43(2); C-44(2)  
defined ..... C-1(2)

**OECD Test Guidelines, referenced in the CCCR, 2001**  
404 acute dermal irritation/corrosion ..... C-43(2)(a)  
405 acute eye irritation/corrosion ..... C-43(2)(b)  
Principles of Good Laboratory Practice .. C-1(1); C-44(2)(a)  
OECD Test Guidelines,  
mutual acceptance of data in the assessment of chemicals  
..... C-1(1); C-6(1); C-35(1)

**official languages,**  
defined ..... C-1(1)

**Organization for Economic Co-operation and Development,**  
- see "OECD"

**P**

**packaging performance,**  
child-resistant - see child-resistant container  
coding system ..... Sch 3  
integrity requirement ..... C-7  
leakage requirement ..... C-7  
tests  
leakage test ..... Sch 3  
screening tests  
- aging test ..... Sch 3  
- field test ..... Sch 3  
- life test ..... Sch 3

**pens,**  
toxic product exception ..... C-33, 34

**person responsible,**  
defined ..... C-1(1)  
obligations ..... C-4

**[pest] control product,**  
exemption for ..... H-3(1)(c)


**pictogram(s),**  
for child-resistant container instructions ..... C-11(1)  
symbols - see hazard symbol(s)

**poisonous substance,**  
- see toxic product

**pine oil,**  
aspiration hazard of ..... C-33, 34

**precautionary measures,**  
label disclosure of ..... C-25(1)(b)(ii); C-25(b)(iii)

**pressurized container,**  
classification criteria ..... C-58  
defined ..... C-58(1)  
exceptions ..... C-59(2)  
labelling ..... C-59  
package integrity ..... C-7  
spray container, defined ..... C-1(1)  
spray container flammability criteria ..... C-49  
spray container flammability test method ..... C-52; C-Sch1

 <b>Health Canada</b> <b>Santé Canada</b>	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>INDEX-6</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 - INDEX</b>			

**preventive measures,**  
label disclosure of . . . . . C-25(1)(b)(ii); C-25(b)(iii)

**principle display panel,**  
labelling format . . . . . C-25(1)(a); C-26 to C-28  
language requirements . . . . . C-17(a)  
main display panel, defined . . . . . C-1(1)

**product specific,**  
aerosol foam product,  
flammability classification . . . . . C-48, 49  
barbecue cylinders,  
exception . . . . . C-58(2)  
batteries, lead/acid  
exception . . . . . C-2  
caulking guns,  
child-resistance . . . . . C-10  
caulking,  
aerosol flammability . . . . . C-48, 49  
cement,  
additional labelling . . . . . C-46  
fuel tanks,  
exception . . . . . C-39; C-53  
spray containers with tube attachments  
child-resistance . . . . . C-40  
flammability testing for . . . . . C-52  
spray-string,  
flammability classification . . . . . C-48, 49  
pens,  
toxic product exception . . . . . C-33, 34  
water-based product,  
flammable product exemption . . . . . C-48(2)  
wiping cloth,  
exception: first aid statement . . . . . C-39; C-46

**professional judgement,**  
use of, in classification . . . . . C-6; C-33; C-35; C-41

**prohibited product,**  
defined . . . . . H-2  
very corrosive product . . . . . C-45  
very flammable product . . . . . C-53  
very toxic product . . . . . C-38

**Q**

**quick skin-bonding adhesive,**  
defined . . . . . C-1(1)  
labelling for . . . . . C-55; C-56  
child-resistant container requirement . . . . . C-57

**R**

**radioactive substance,**  
exemption for prescribed substance . . . . . H-1(e)

**reactivity,**  
label disclosure of . . . . . C-46

**record keeping requirements,**  
by importer . . . . . C-3(2)  
by person responsible . . . . . C-5  
for child-resistant containers . . . . . C-12

for hazard classification . . . . . C-4(1)(a)  
for labelling disclosure . . . . . C-4(1)(c)

**regulation,**  
authority to make . . . . . H-5

**restricted product,**  
defined . . . . . H-2  
prohibition . . . . . H-4(2)  
regulations, authority to establish . . . . . H-5

**retailer,**  
transition period for . . . . . C-60

**S**

**sale,**  
defined . . . . . H-2

**single-use container,**  
defined . . . . . C-1(1)  
labelling of . . . . . C-8; C-13

**skin-bonding adhesive, quick,**  
defined . . . . . C-1(1)  
labelling for . . . . . C-55; C-56  
child-resistant container requirement . . . . . C-57

**skin irritant,**  
classification criteria . . . . . C-42

**source(s) of information,**  
for corrosive products . . . . . C-41; C-43  
for flammable products . . . . . C-48  
for toxic products . . . . . C-33; C-35  
precedence of data sources . . . . . C-6


**spray container,**  
defined . . . . . C-1(1)  
flammable product criteria . . . . . C-49  
flammability test method . . . . . C-52; C-Sch1  
not exempt from toxic product classification . . . . . C-33, 34  
pressurized container,  
classification criteria . . . . . C-58  
defined . . . . . C-58(1)  
labelling of . . . . . C-59  
spray string,  
flammability classification . . . . . C-48, 49  
tube attachments,  
child-resistance . . . . . C-40  
flammability testing for . . . . . C-52

**standards,**  
list . . . . . C-1(2)  
National, defined . . . . . C-1(1)

**storage requirements,**  
label disclosure of . . . . . C-59

**sub-category,**  
defined . . . . . C-1(1)

**substances of special concern**  
toxic product,  
applicable route of exposure . . . . . C-33, 34  
mixtures with, classification of . . . . . C-33, 34  
table of ~ . . . . . C-33, 34  
corrosive product,  
table of ~ . . . . . C-41, 42

 <b>Health Canada</b> <b>Santé Canada</b>	<b>Reference Manual</b>  <i>Consumer Chemicals and Containers Regulations, 2001</i>	Page  <b>INDEX-7</b>	Manual updated:  <b>2006/11/16</b>
<b>CCCR, 2001 - INDEX</b>			

**substance-specific,**

- acetone
  - flammability of ..... C-53
- isopropyl alcohol,
  - aspiration hazard ..... C-33, 34
- methanol,
  - first aid statement ..... C-39
  - flammability of ..... C-48, 49
  - toxicity of ..... C-33, 34
- mineral spirits,
  - vapour toxicity ..... C-33, 34
- turpentine,
  - aspiration hazard ..... C-33, 34
- pine oil,
  - aspiration hazard ..... C-33, 34

**supplier,**

- see person responsible

**symbols,**

- see hazard symbols

**T**

**testing requirements,**

- Child-resistant container testing standards ..... C-9
- obligations to test ..... C-6

**tobacco/tobacco product,**

- exemption for ..... H-5(2)

**toxic product,**

- child-resistant container requirement ..... C-40
- classification criteria for ..... C-33 to C-36
- defined ..... C-1(1)
- labelling of ..... C-39
- symbol ..... C-Sch2
- prohibition ..... C-38

**toxicological properties,**

- obligation not to mislead ..... C-15(2)
- label disclosure of ..... C-39

**transition period,**

- manufacturers/importers ..... C-60(2)
- retailers ..... C-60(2)

**tubes, collapsable**

- labelling of ..... C-26(2)

**turpentine,**

- aspiration hazard of ..... C-33, 34

**U**

**Underwriters' Laboratories of Canada**

- see ULC

**ULC,**

- defined ..... C-1(2)
- tests, for fire extinguishers ..... C-2(2)(d)

**units of measure,**

- defined ..... C-1(3)

**untested mixtures,**

- classification criteria for ..... C-34; C-36
- use of ingredients, for classification ..... C-6(1)(d)

**V**

**vapour,**

- defined ..... C-1(1)

**W**

**WHMIS,**

- consumer chemical product exclusion ..... H-12(f)
- harmonization with,
  - corrosive product classification comparison ..... C-41, 42
  - flammable product classification comparison ..... C-48, 49
  - pressurized container classification comparison ..... C-58
  - toxic product classification comparison ..... C-33, 34

**water-based product,**

- exemption, flammable product classification ..... C-48(2)

**wiping cloth,**

- exception, first aid statement ..... C-39; C-46