

having a capacity equal to or greater than 13,248 L (3,500 gallons) for liquids or gases or more than 13.24 cubic meters (468 cubic feet) for solids;

(5) A shipment in other than a bulk packaging of 2,268 kg (5,000 pounds) gross weight or more of one class of hazardous materials for which placarding of a vehicle, rail car, or freight container is required for that class under the provisions of subpart F of this part;

(6) A select agent or toxin regulated by the Centers for Disease Control and Prevention under 42 CFR part 73 or, by April 1, 2007, a select agent or toxin regulated by the United States Department of Agriculture under 9 CFR part 121; or

(7) A quantity of hazardous material that requires placarding under the provisions of subpart F of this part.

(c) *Exceptions.* Transportation activities of a farmer, who generates less than \$500,000 annually in gross receipts from the sale of agricultural commodities or products, are not subject to this subpart if such activities are:

(1) Conducted by highway or rail;

(2) In direct support of their farming operations; and

(3) Conducted within a 150-mile radius of those operations.

[68 FR 14521, Mar. 25, 2003, as amended at 70 FR 73164, Dec. 9, 2005; 71 FR 32258, June 2, 2006]

§ 172.802 Components of a security plan.

(a) The security plan must include an assessment of possible transportation security risks for shipments of the hazardous materials listed in § 172.800 and appropriate measures to address the assessed risks. Specific measures put into place by the plan may vary commensurate with the level of threat at a particular time. At a minimum, a security plan must include the following elements:

(1) *Personnel security.* Measures to confirm information provided by job applicants hired for positions that involve access to and handling of the hazardous materials covered by the security plan. Such confirmation system must be consistent with applicable Federal and State laws and require-

ments concerning employment practices and individual privacy.

(2) *Unauthorized access.* Measures to address the assessed risk that unauthorized persons may gain access to the hazardous materials covered by the security plan or transport conveyances being prepared for transportation of the hazardous materials covered by the security plan.

(3) *En route security.* Measures to address the assessed security risks of shipments of hazardous materials covered by the security plan en route from origin to destination, including shipments stored incidental to movement.

(b) The security plan must be in writing and must be retained for as long as it remains in effect. Copies of the security plan, or portions thereof, must be available to the employees who are responsible for implementing it, consistent with personnel security clearance or background investigation restrictions and a demonstrated need to know. The security plan must be revised and updated as necessary to reflect changing circumstances. When the security plan is updated or revised, all copies of the plan must be maintained as of the date of the most recent revision.

§ 172.804 Relationship to other Federal requirements.

To avoid unnecessary duplication of security requirements, security plans that conform to regulations, standards, protocols, or guidelines issued by other Federal agencies, international organizations, or industry organizations may be used to satisfy the requirements in this subpart, provided such security plans address the requirements specified in this subpart.

APPENDIX A TO PART 172—OFFICE OF HAZARDOUS MATERIALS TRANSPORTATION COLOR TOLERANCE CHARTS AND TABLES

The following are Munsell notations and Commission Internationale de L'Eclairage (CIE) coordinates which describe the Office of Hazardous Materials Transportation Label and Placard Color Tolerance Charts in tables 1 and 2, and the CIE coordinates for the color tolerances specified in table 3. Central colors and tolerances described in table 2 approximate those described in table 1 while allowing for differences in production methods

and materials used to manufacture labels and placards surfaced with printing inks. Primarily, the color charts based on table 1 are for label or placard colors applied as opaque coatings such as paint, enamel or plastic, whereas color charts based on table 2 are intended for use with labels and placards surfaced only with inks.

For labels printed directly on packaging surfaces, table 3 may be used, although compliance with either table 1 or table 2 is sufficient. However, if visual reference indicates that the colors of labels printed directly on package surfaces are outside the table 1 or 2 tolerances, a spectrophotometer or other instrumentation may be required to insure compliance with table 3.

TABLE 1—SPECIFICATIONS FOR COLOR TOLERANCE CHARTS FOR USE WITH LABELS AND PLACARDS SURFACED WITH PAINT, LACQUER, ENAMEL, PLASTIC, OTHER OPAQUE COATINGS, OR INK ¹

| Color | Munsell notations | CIE data for source C | | |
|------------------------|-------------------|-----------------------|-------|-------|
| | | Y | x | y |
| Red: | | | | |
| Central color | 7.5R 4.0/14 | 12.00 | .5959 | .3269 |
| Orange | 8.5R 4.0/14 | 12.00 | .6037 | .3389 |
| Purple and vivid | 6.5R 4.0/14 | 12.00 | .5869 | .3184 |
| Grayish | 7.5R 4.0/12 | 12.00 | .5603 | .3321 |
| Vivid | 7.5R 4.0/16 | 12.00 | .6260 | .3192 |
| Light | 7.5R 4.5/14 | 15.57 | .5775 | .3320 |
| Dark | 7.5R 3.5/14 | 09.00 | .6226 | .3141 |
| Orange: | | | | |
| Central color | 5.OYR 6.0/15 | 30.05 | .5510 | .4214 |
| Yellow and Grayish | 6.25YR 6.0/15 | 30.05 | .5452 | .4329 |
| Red and vivid | 3.75YR 6.0/15 | 30.05 | .5552 | .4091 |
| Grayish | 5.OYR 6.0/13 | 30.05 | .5311 | .4154 |
| Vivid | 5.OYR 6.0/16 | 30.05 | .5597 | .4239 |
| Light | 5.OYR 6.5/15 | 36.20 | .5427 | .4206 |
| Dark | 5.OYR 5.5/15 | 24.58 | .5606 | .4218 |
| Yellow: | | | | |
| Central color | 5.OY 8.0/12 | 59.10 | .4562 | .4788 |
| Green | 6.5Y 8.0/12 | 59.10 | .4498 | .4865 |
| Orange and vivid | 3.5Y 8.0/12 | 59.10 | .4632 | .4669 |
| Grayish | 5.OY 8.0/10 | 59.10 | .4376 | .4601 |
| Vivid | 5.OY 8.0/14 | 59.10 | .4699 | .4920 |
| Light | 5.OY 8.5/12 | 68.40 | .4508 | .4754 |
| Dark | 5.OY 7.5/12 | 50.68 | .4620 | .4823 |
| Green: | | | | |
| Central color | 7.5G 4.0/9 | 12.00 | .2111 | .4121 |
| Bluish | 0.5BG 4.0/9 | 12.00 | .1974 | .3809 |
| Green-yellow | 5.0G 4.0/9 | 12.00 | .2237 | .4399 |
| Grayish A | 7.5G 4.0/7 | 12.00 | .2350 | .3922 |
| Grayish B ² | 7.5G 4.0/6 | 12.00 | .2467 | .3822 |
| Vivid | 7.5G 4.0/11 | 12.00 | .1848 | .4319 |
| Light | 7.5G 4.5/9 | 15.57 | .2204 | .4060 |
| Dark | 7.5G 3.5/9 | 09.00 | .2027 | .4163 |
| Blue: | | | | |
| Central color | 2.5PB 3.5/10 | 09.00 | .1691 | .1744 |
| Purple | 4.5PB 3.5/10 | 09.00 | .1796 | .1711 |
| Green and vivid | 10.0B 3.5/10 | 09.00 | .1557 | .1815 |
| Grayish | 2.5PB 3.5/8 | 09.00 | .1888 | .1964 |
| Vivid | 2.5PB 3.5/12 | 09.00 | .1516 | .1547 |
| Light | 2.5PB 4.0/10 | 12.00 | .1805 | .1888 |
| Dark | 2.5PB 3.0/10 | 06.55 | .1576 | .1600 |
| Purple: | | | | |
| Central color | 10.0P 4.5/10 | 15.57 | .3307 | .2245 |
| Reddish purple | 2.5RP 4.5/10 | 15.57 | .3584 | .2377 |
| Blue purple | 7.5P 4.5/10 | 15.57 | .3068 | .2145 |
| Reddish gray | 10.0P 4.5/8 | 15.57 | .3280 | .2391 |
| Gray ² | 10.0P 4.5/6.5 | 15.57 | .3254 | .2519 |
| Vivid | 10.0P 4.5/12 | 15.57 | .3333 | .2101 |
| Light | 10.0P 5.0/10 | 19.77 | .3308 | .2328 |
| Dark | 10.0P 4.0/10 | 12.00 | .3306 | .2162 |

¹ Maximum chroma is not limited.

² For the colors green and purple, the minimum saturation (chroma) limits for porcelain enamel on metal are lower than for most other surface coatings. Therefore, the minimum chroma limits of these two colors as displayed on the Charts for comparison to porcelain enamel on metal is low, as shown for green (grayish B) and purple (gray).

NOTE: CIE=Commission Internationale de L'Eclairage.

TABLE 2—SPECIFICATIONS FOR COLOR TOLERANCE CHARTS FOR USE WITH LABELS AND PLACARDS SURFACED WITH INK

| Color/series | Munsell notation | CIE data for source C | | |
|------------------------------|------------------------|-----------------------|-------|-------|
| | | Y | x | y |
| Red: | | | | |
| Central series: | | | | |
| Central color | 6.8R 4.47/12.8 | 15.34 | .5510 | .3286 |
| Grayish | 7.2R 4.72/12.2 | 17.37 | .5368 | .3348 |
| Purple | 6.4R 4.49/12.7 | 15.52 | .5442 | .3258 |
| Purple and vivid | 6.1R 4.33/13.1 | 14.25 | .5529 | .3209 |
| Vivid | 6.7R 4.29/13.2 | 13.99 | .5617 | .3253 |
| Orange | 7.3R 4.47/12.8 | 15.34 | .5572 | .3331 |
| Orange and grayish | 7.65R 4.70/12.4 | 17.20 | .5438 | .3382 |
| Light series: | | | | |
| Light | 7.0R 4.72/13.2 | 17.32 | .5511 | .3322 |
| Light and orange | 7.4R 4.96/12.6 | 19.38 | .5365 | .3382 |
| Light and purple | 6.6R 4.79/12.9 | 17.94 | .5397 | .3289 |
| Dark series: | | | | |
| Dark A | 6.7R 4.19/12.5 | 13.30 | .5566 | .3265 |
| Dark B | 7.0R 4.25/12.35 | 13.72 | .5522 | .3294 |
| Dark and purple | 7.5R 4.23/12.4 | 13.58 | .5577 | .3329 |
| Orange: | | | | |
| Central series: | | | | |
| Central color | 5.0YR 6.10/12.15 | 31.27 | .5193 | .4117 |
| Yellow and grayish A | 5.8YR 6.22/11.7 | 32.69 | .5114 | .4155 |
| Yellow and grayish B | 6.1YR 6.26/11.85 | 33.20 | .5109 | .4190 |
| Vivid | 5.1YR 6.07/12.3 | 30.86 | .5226 | .4134 |
| Red and vivid A | 3.9YR 5.87/12.75 | 28.53 | .5318 | .4038 |
| Red and vivid B | 3.6YR 5.91/12.6 | 29.05 | .5291 | .4021 |
| Grayish | 4.9YR 6.10/11.9 | 31.22 | .5170 | .4089 |
| Light series: | | | | |
| Light and vivid A | 5.8YR 6.78/12.7 | 39.94 | .5120 | .4177 |
| Light and yellow | 6.0YR 6.80/12.8 | 40.20 | .5135 | .4198 |
| Light and vivid B | 4.9YR 6.60/12.9 | 37.47 | .5216 | .4126 |
| Dark series: | | | | |
| Dark and yellow | 5.8YR 5.98/11.0 | 29.87 | .5052 | .4132 |
| Dark A | 5.1YR 5.80/11.1 | 27.80 | .5127 | .4094 |
| Dark B | 5.0YR 5.80/11.0 | 27.67 | .5109 | .4068 |
| Yellow: | | | | |
| Central series: | | | | |
| Central color | 4.3Y 7.87/10.3 | 56.81 | .4445 | .4589 |
| Vivid A | 4.5Y 7.82/10.8 | 55.92 | .4503 | .4658 |
| Vivid B | 3.3Y 7.72/11.35 | 54.24 | .4612 | .4624 |
| Vivid and orange | 3.2Y 7.72/10.8 | 54.25 | .4576 | .4572 |
| Grayish A | 4.1Y 7.95/9.7 | 58.18 | .4380 | .4516 |
| Grayish B | 5.1Y 8.06/9.05 | 60.12 | .4272 | .4508 |
| Green-yellow | 5.2Y 7.97/9.9 | 58.53 | .4356 | .4605 |
| Light series: | | | | |
| Light | 5.4Y 8.59/10.5 | 70.19 | .4351 | .4628 |
| Light and green-yellow | 5.4Y 8.56/11.2 | 69.59 | .4414 | .4692 |
| Light and vivid | 4.4Y 8.45/11.4 | 67.42 | .4490 | .4662 |
| Dark series: | | | | |
| Dark and green-yellow | 4.4Y 7.57/9.7 | 51.82 | .4423 | .4562 |
| Dark and orange A | 3.4Y 7.39/10.4 | 48.86 | .4584 | .4590 |
| Dark and orange B | 3.5Y 7.41/10.0 | 49.20 | .4517 | .4544 |
| Green: | | | | |
| Central series: | | | | |
| Central color | 9.75G 4.26/7.75 | 13.80 | .2214 | .3791 |
| Grayish | 10G 4.46/7.5 | 15.25 | .2263 | .3742 |
| Blue A | 1.4BG 4.20/7.4 | 13.36 | .2151 | .3625 |
| Blue B | 1.0BG 4.09/7.75 | 12.60 | .2109 | .3685 |
| Vivid | 8.4G 4.09/8.05 | 12.59 | .2183 | .3954 |
| Vivid green-yellow | 7.0G 4.23/8.0 | 13.54 | .2292 | .4045 |
| Green-yellow | 7.85G 4.46/7.7 | 15.23 | .2313 | .3914 |
| Light series: | | | | |
| Light and vivid | 9.5G 4.45/8.8 | 15.21 | .2141 | .3863 |
| Light and blue | 0.2BG 4.31/8.8 | 14.12 | .2069 | .3814 |
| Light and green-yellow | 8.3G 4.29/9.05 | 14.01 | .2119 | .4006 |
| Dark series: | | | | |
| Dark and green-yellow | 7.1G 4.08/7.1 | 12.55 | .2354 | .3972 |
| Dark and grayish | 9.5G 4.11/6.9 | 12.70 | .2282 | .3764 |
| Dark | 8.5G 3.97/7.2 | 11.78 | .2269 | .3874 |

TABLE 2—SPECIFICATIONS FOR COLOR TOLERANCE CHARTS FOR USE WITH LABELS AND PLACARDS SURFACED WITH INK—Continued

| Color/series | Munsell notation | CIE data for source C | | |
|---------------------------|------------------------|-----------------------|-------|-------|
| | | Y | x | y |
| Blue: | | | | |
| Central series: | | | | |
| Central color | 3.5PB 3.94/9.7 | 11.58 | .1885 | .1911 |
| Green and grayish A | 2.0PB 4.35/8.7 | 14.41 | .1962 | .2099 |
| Green and grayish B | 1.7PB 4.22/9.0 | 13.50 | .1898 | .2053 |
| Vivid | 2.9PB 3.81/9.7 | 10.78 | .1814 | .1852 |
| Purple and vivid A | 4.7PB 3.53/10.0 | 9.15 | .1817 | .1727 |
| Purple and vivid B | 5.0PB 3.71/9.9 | 10.20 | .1888 | .1788 |
| Grayish | 3.75PB 4.03/9.1 | 12.17 | .1943 | .1961 |
| Light series: | | | | |
| Light and green A | 1.7PB 4.32/9.2 | 14.22 | .1904 | .2056 |
| Light and green B | 1.5PB 4.11/9.6 | 12.72 | .1815 | .1971 |
| Light and vivid | 3.2PB 3.95/10.05 | 11.70 | .1831 | .1868 |
| Dark series: | | | | |
| Dark and grayish | 3.9PB 4.01/8.7 | 12.04 | .1982 | .1992 |
| Dark and purple A | 4.8PB 3.67/9.3 | 9.95 | .1918 | .1831 |
| Dark and purple B | 5.2PB 3.80/9.05 | 10.76 | .1985 | .1885 |
| Purple: | | | | |
| Central series: | | | | |
| Central color | 9.5P 4.71/11.3 | 17.25 | .3274 | .2165 |
| Red | 1.0RP 5.31/10.8 | 22.70 | .3404 | .2354 |
| Red and vivid A | 1.4RP 5.00/11.9 | 19.78 | .3500 | .2274 |
| Red and vivid B | 0.2RP 4.39/12.5 | 14.70 | .3365 | .2059 |
| Vivid | 8.0P 4.04/12.0 | 12.23 | .3098 | .1916 |
| Blue | 7.0P 4.39/10.8 | 14.71 | .3007 | .2037 |
| Grayish | 8.8P 5.00/10.3 | 19.73 | .3191 | .2251 |
| Light series: | | | | |
| Light and red A | 0.85RP 5.56/11.1 | 25.18 | .3387 | .2356 |
| Light and red B | 1.1RP 5.27/12.3 | 22.27 | .3460 | .2276 |
| Light and vivid | 9.2P 4.94/11.95 | 19.24 | .3247 | .2163 |
| Dark series: | | | | |
| Dark and grayish | 9.6P 4.70/10.9 | 17.19 | .3283 | .2204 |
| Dark and vivid | 8.4P 4.05/11.6 | 12.35 | .3144 | .1970 |
| Dark and blue | 7.5P 4.32/10.5 | 14.19 | .3059 | .2078 |

TABLE 3—SPECIFICATION FOR COLORS FOR USE WITH LABELS PRINTED ON PACKAGINGS SURFACES

| CIE data for source C | Red | Orange | Yellow | Green | Blue | Purple |
|-----------------------|------|--------|--------|-------|------|--------|
| x | .424 | .460 | .417 | .228 | .200 | .377 |
| y | .306 | .370 | .392 | .354 | .175 | .205 |
| x | .571 | .543 | .490 | .310 | .255 | .377 |
| y | .306 | .400 | .442 | .354 | .250 | .284 |
| x | .424 | .445 | .390 | .228 | .177 | .342 |
| y | .350 | .395 | .430 | .403 | .194 | .205 |
| x | .571 | .504 | .440 | .310 | .230 | .342 |
| y | .350 | .430 | .492 | .403 | .267 | .284 |
| Y (high) | 23.0 | 41.6 | 72.6 | 20.6 | 15.9 | 21.2 |
| Y (low) | 7.7 | 19.5 | 29.1 | 7.4 | 6.5 | 8.2 |

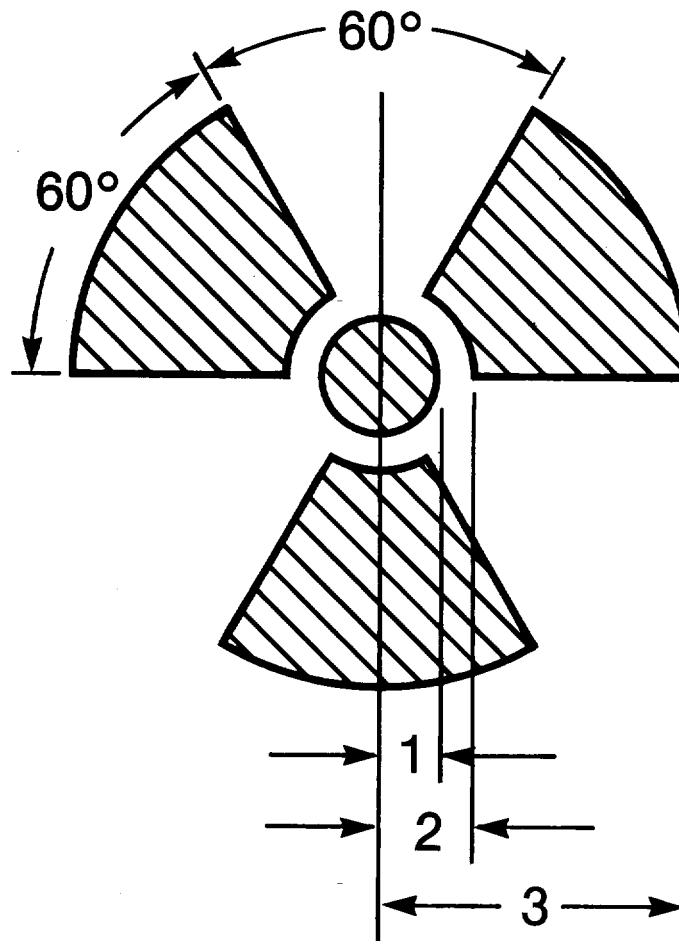
[Amdt. 172-50, 44 FR 9757, Feb. 15, 1979; Amdt. 172-50, 44 FR 10984, Feb. 26, 1979, as amended by Amdt. 172-50, 44 FR 22467, Apr. 16, 1979; 50 FR 45731, Nov. 1, 1985; Amdt. 172-127, 59 FR 49133, Sept. 26, 1994]

APPENDIX B TO PART 172—TREFOIL SYMBOL

1. Except as provided in paragraph 2 of this appendix, the trefoil symbol required for RADIOACTIVE labels and placards and required to be marked on certain packages of Class 7

materials must conform to the design and size requirements of this appendix.

2. RADIOACTIVE labels and placards that were printed prior to April 1, 1996, in conformance with the requirements of this subchapter in effect on March 30, 1996, may continue to be used.

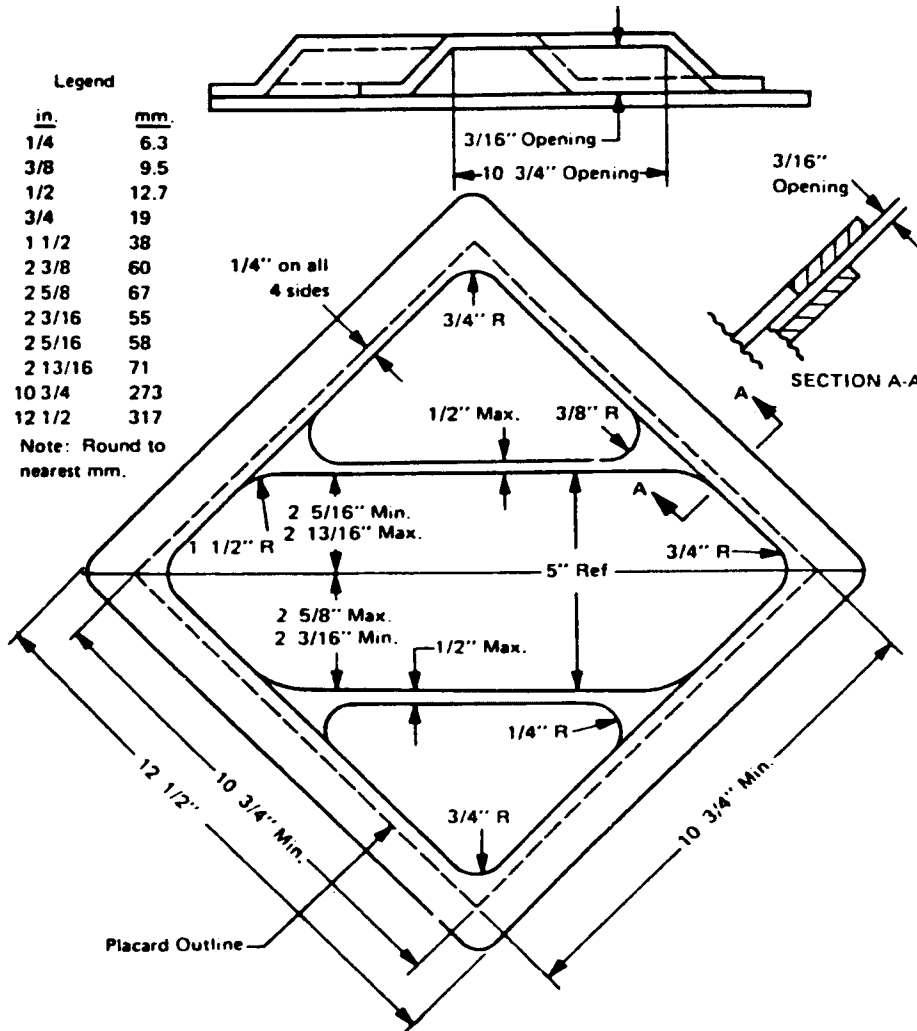


1=Radius of Circle—
Minimum dimensions
4 mm (0.16 inch) for markings and labels
12.5 mm (0.5 inch) for placards
2=1½ Radii

3=5 radii for markings and labels
4½ radii for placards.

[60 FR 50306, Sept. 28, 1995, as amended by
172-143, 61 FR 20750, May 8, 1996]

APPENDIX C TO PART 172—DIMENSIONAL SPECIFICATIONS FOR RECOMMENDED PLACARD HOLDER



PART 173—SHIPPERS—GENERAL REQUIREMENTS FOR SHIPMENTS AND PACKAGINGS

Subpart A—General

- Sec.
- 173.1 Purpose and scope.
- 173.2 Hazardous materials classes and index to hazard class definitions.

- 173.2a Classification of a material having more than one hazard.
- 173.3 Packaging and exceptions.
- 173.4 Small quantity exceptions.
- 173.5 Agricultural operations.
- 173.5a Oilfield service vehicles and mechanical displacement meter provers.
- 173.6 Materials of trade exceptions.
- 173.7 Government operations and materials.
- 173.8 Exceptions for non-specification packagings used in intrastate transportation.