

SUBJECT 12

Re: Sheet Steel Containers

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Proponent: Carrier members present at the Classification Panel meeting on October 2, 2007

Present Classification Provisions

Item	Description	Class
52750	CONTAINERS, SHEET STEEL, GROUP: Articles consist of Containers, sheet iron or steel, set up, with or without their equipment of bails, handles, covers, bungs or nozzles, see Note, item 52752, as described in items subject to this grouping.	
52752	NOTE—The term ‘liquid capacity’ refers to that known as rated (marked) capacity.	
52755	Barrels, Drums or Kegs , NOI, shipping, see Note, item 52838; Boxes , NOI; Cans , shop (Shop Kegs or Shop Drums); Cans , NOI, including Jacketed Cans , see Note, item 52834; Drums, Kegs or Pails , white lead or putty; Pails (Buckets) , NOI, not enameled;	
52760	Liquid capacity not exceeding 1 gill, in boxes, crates or drums	70
52770	Liquid capacity exceeding one gill but not exceeding one gallon, see Note, item 52772:	
Sub 1	Not nested, in boxes, crates or drums	92.5
Sub 2	Nested, in packages	77.5
52772	NOTE—Also applies when one or both ends are made of aluminum.	
52780	Liquid capacity exceeding 1 gallon but not exceeding 5 gallons, in packages:	
Sub 1	Not nested	200
Sub 2	Nested	85
52790	Liquid capacity exceeding 5 gallons but not exceeding 15 gallons:	
Sub 1	Sides made wholly of 19 gauge or thicker sheet:	
Sub 2	Not nested	200
Sub 3	Nested	92.5
Sub 4	Sides made wholly or partly of 20 gauge or thinner sheet, in packages:	
Sub 5	Not nested	200
Sub 6	Nested	100
52800	Liquid capacity exceeding 15 gallons:	
Sub 1	Sides made wholly of 16 gauge or thicker sheet	92.5
Sub 2	Sides in thinnest part not thinner than 19 nor thicker than 17 gauge:	
Sub 3	Not nested	125
Sub 4	Nested, in packages	92.5
Sub 5	Sides made wholly or partly of 20 gauge or thinner sheet:	
Sub 6	Not nested	200
Sub 7	Nested, in packages	125

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Present Classification Provisions — Concluded

Item	Description	Class
	CONTAINERS, SHEET STEEL, GROUP: subject to item 52750	
52820	Cans , cream or milk shipping.....	100
52830	Cans , ice cream:	
Sub 1	Not nested, in boxes, crates or drums; loose or in packages when shipments weigh 20,000 pounds or more	100
Sub 2	Nested, in boxes, crates or drums; loose or in packages when shipments weigh 24,000 pounds or more	85
52834	NOTE—On shipments weighing 10,000 pounds or more, provisions will also apply on extra can keys, caps, covers or ends, not exceeding 33 ¹ / ₃ percent of the weight on which charges are assessed, when same are shipped with cans, provided the shipper specifies the weight of the extra keys, caps, covers or ends separately on the bill of lading.	
52838	NOTE—Also applies when barrels, drums or kegs are equipped with plastic inserts or liners.	
52850	Containers , carbonated beverage, steel, see Notes, items 52852 and 52853, in boxes:	
Sub 1	Liquid capacity not less than 2 nor more than 5 gallons.....	85
Sub 2	Liquid capacity exceeding 5 gallons but not exceeding 10 gallons	110
52852	NOTE—Applies only on containers for carbonated beverages under pressure.	
52853	NOTE—Bottoms or tops may be coated or banded with rubber or plastic.	

Proposed Classification Provisions

Item	Description	Class
	CARRIERS, SHIPPING, GROUP: subject to item 40770	
⇒A-NEW	Cans , cream or milk shipping, sheet steel	100
52750	CONTAINERS, SHEET STEEL, GROUP: ⇒Cancel; no further application.	
52752	NOTE—⇒Cancel; no further application.	
52755	Barrels, Drums or Kegs , NOI, shipping, etc.	⇒Cancel; see item E-NEW
52760	Liquid capacity not exceeding 1 gill, etc.....	⇒Cancel; see item E-NEW
52770	Liquid capacity exceeding one gill, etc.	⇒Cancel; see item E-NEW
52772	NOTE—⇒Cancel; see item G-NEW.	
52780	Liquid capacity exceeding 1 gallon, etc.	⇒Cancel; see item E-NEW
52790	Liquid capacity exceeding 5 gallons, etc.....	⇒Cancel; see item E-NEW
52800	Liquid capacity exceeding 15 gallons, etc.	⇒Cancel; see item E-NEW
52820	Cans , cream or milk shipping.....	⇒Cancel; see item A-NEW

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Proposed Classification Provisions — Concluded

Item	Description	Class
	CONTAINERS, SHEET STEEL, GROUP: subject to item 52750	
52830	Cans , ice cream, etc.	⇒Cancel; see item E-NEW
52834	NOTE—⇒Cancel; believed to be obsolete.	
52838	NOTE—⇒Cancel; see item F-NEW.	
52850	Containers , carbonated beverage, steel, etc.	⇒Cancel; see item B-NEW
52852	NOTE—⇒Cancel; see item C-NEW.	
52853	NOTE—⇒Cancel; see item D-NEW.	
	SHEET STEEL ARTICLES GROUP: subject to item 174300	
⇒B-NEW	Containers , carbonated beverage, see Notes, items C-NEW and D-NEW, in boxes:	
Sub 1	Liquid capacity exceeding 5 gallons but not exceeding 10 gallons	110
Sub 2	Liquid capacity not less than 2 nor more than 5 gallons	85
⇒C-NEW	NOTE—Applies only on containers for carbonated beverages under pressure.	
⇒D-NEW	NOTE—Also applies when bottoms or tops are coated or banded with plastic or rubber.	
⇒E-NEW	Containers, viz.:	
	Barrels, Drums or Kegs , NOI, shipping, see Note, item F-NEW;	
	Boxes , NOI;	
	Cans , NOI, see Note, item G-NEW;	
	Pails or Buckets , NOI;	
	In packages, see Note, item H-NEW, subject to Items 170 and 171 and having a density in pounds per cubic foot of:	
Sub 1	Less than 1	400
Sub 2	1 but less than 2	300
Sub 3	2 but less than 4	250
Sub 4	4 but less than 6	150
Sub 5	6 but less than 8	125
Sub 6	8 but less than 10	100
Sub 7	10 but less than 12	92.5
Sub 8	12 but less than 15	85
Sub 9	15 but less than 22.5	70
Sub 10	22.5 but less than 30	65
Sub 11	30 or greater	60
⇒F-NEW	NOTE—Also applies when containers are equipped with plastic inserts or liners.	
⇒G-NEW	NOTE—Also applies when one or both ends are made of aluminum.	
⇒H-NEW	NOTE—Barrels, drums or kegs having a rated (marked) capacity of 35 gallons or greater may be shipped loose.	

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Analysis

This proposal was docketed by carrier members present at the Classification Panel meeting on October 2, 2007. It would remove the Containers, Sheet Steel, Group in its entirety by canceling the provisions of items 52755, 52760, 52770, 52780, 52790, 52800 and 52830 with reference to a new item under the Sheet Steel Articles Group, using the "viz." format. The new item would have classes predicated on a full-density scale ranging from less than 1 pcf at class 400 to 30 pcf or greater at class 60. The proposal would also cancel item 52820 with reference to a new item under the Carriers, Shipping, Group, with no change to the applicable class. It would also cancel item 52850 with reference to a new item under the Sheet Steel Articles Group with no change to the applicable classes.

Background of Project

At the Classification Panel meeting on February 7, 2005, the members present considered a Commodity Report on multiple items under the Sheet Steel Containers Group. The report indicated that a number of interpretation inquiries had been received over the years on the provisions of items 52755, 52760, 52770, 52780, 52790 and 52800, which apply on Shipping Barrels, Drums or Kegs, NOI; Boxes, NOI; Shop Cans (Shop Kegs or Shop Drums); Cans, NOI, including Jacketed Cans; Drums, Kegs or Pails, white lead or putty; and Pails (Buckets), NOI, not enameled. These items provide classes predicated on liquid capacity, gauge of metal, and whether or not the involved container is shipped nested. The report stated that many interpretation questions had been received as to the applicable classification provisions for sheet steel containers intended for dry products and on containers where the gauge is not readily apparent.

Further, the report contained information on more than 100 shipment information forms from member carriers over the past ten years showing that shipments of the involved containers have consistently had densities lower than the minimum average densities associated with their currently assigned classes.

For these reasons, the members present at the Panel meeting instituted a research project on sheet steel containers.

A report on Research Project 999 was presented to the members present at the Classification Panel meeting on November 7, 2006. Mr. Rankin representing the Reusable Industrial Packaging Association (RIPA) and Mr. McQuaid representing the Steel Shipping Container Institute were present for the discussion on this matter. Mr. Rankin requested that the Panel allow the industry more time to gather additional data on its commodities. In response to his request, the members present directed the staff to work with the industry and report back to a future Panel with provisions consistent with classification policies.

Another report on Research Project 999 was presented at the October 2, 2007 Classification Panel meeting. Mr. Rankin, who had provided information prior to the meeting, was present for the discussion on this matter. On behalf of RIPA, he requested that instead of assigning classes predicated on density for sheet steel drums, the Panel consider docketing a proposal that would continue to assign classes predicated on marked thickness of the steel. Alternatively, if the Panel opted not to maintain classes predicated on steel thickness, he

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suggested that a class 150 should be assigned to new and reconditioned tight head drums, and a class 125 be assigned to new and reconditioned open head drums. As the information of record showed a wide density range regardless of drum thickness and whether the drum was tight head or open head, the Panel opted to docket this proposal.

Background of Provisions

The provisions for the involved sheet steel containers were adopted from the rails in 1936 and have remained substantially unchanged to the present.

As indicated, the current provisions assign classes predicated on liquid capacity, gauge of metal and form of shipment. Many sheet steel containers are used to hold dry products and the gauge of metal can be difficult to discern.

The photo on the right shows cans of freeze-dried food. The photos below show 16-gauge drums and a 20-gauge drum.



16-gauge drums



20-gauge drum

Also, the provisions employ archaic terminology. For example, the term "gill," which appears in items 52760 and 52770, is an imperial unit of volume for liquid measure, equal to one-quarter of a pint or five fluid ounces, traditionally used in selling alcoholic drinks. In southern England one gill is called a noggin, but in northern England the large noggin is used, which is two gills¹.

It should be further noted that similar products to the sheet steel containers that are listed in the Sheet Steel Containers Group are listed either under the Carriers, Shipping, Group or the Sheet Steel Articles Group. For example, non-enameled pails are provided for in item 52755 under the Sheet Steel Containers Group; whereas enameled pails are listed in item 174860 under the Sheet Steel Articles Group. Cream or milk shipping cans per item 52820 are classified under the Sheet Steel Containers Group; whereas a variety of other types of shipping containers are provided for under the Carriers, Shipping, Group.

¹Tiscali UK Information at:

<http://www.tiscali.co.uk/reference/encyclopaedia/hutchinson/m0019438.html> (July 17, 2006)

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Transportation Characteristics of Sheet Steel Containers

Density: When grouped according to current item and subprovision (where applicable), the following density ranges and averages emerge:

<i>ITEM</i>	<i>SUB</i>	<i>DESCRIPTION</i>	<i>DENSITY MINIMUM (pcf)</i>	<i>DENSITY MAXIMUM (pcf)</i>	<i>DENSITY AVERAGE (pcf)</i>
52760		Liquid capacity not exceeding 1 gill	4.25	58.17	11.13
52770	1	Liquid capacity exceeding one gill but not exceeding one gallon, not nested	1.76	35.87	7.06
52770	2	Liquid capacity exceeding one gill but not exceeding one gallon, nested	3.02	61.80	7.20
52770	Sub unknown		2.13	7.26	4.88
52780	1	Liquid capacity exceeding 1 gallon but not exceeding 5 gallons, not nested	1.31	22.63	5.53
52780	2	Liquid capacity exceeding 1 gallon but not exceeding 5 gallons, nested	2.33	24.75	6.51
52780	Sub unknown		3.36	6.68	4.94
52790	2	Liquid capacity exceeding 5 gallons but not exceeding 15 gallons, sides made wholly of 19 gauge or thicker sheet, not nested	2.22	16.76	5.39
52790	3	Liquid capacity exceeding 5 gallons but not exceeding 15 gallons, sides made wholly of 19 gauge or thicker sheet, nested	2.63	27.90	7.58
52790	5	Liquid capacity exceeding 5 gallons but not exceeding 15 gallons, sides made wholly or partly of 20 gauge or thinner sheet, not nested	2.94	12.11	6.26
52790	6	Liquid capacity exceeding 5 gallons but not exceeding 15 gallons, sides made wholly or partly of 20 gauge or thinner sheet, nested	3.56	8.00	6.57
52790	Sub unknown		One figure		4.45
52800	1	Liquid capacity exceeding 15 gallons, sides made wholly of 16 gauge or thicker sheet	2.00	58.53	6.45
52800	3	Liquid capacity exceeding 15 gallons, sides in thinnest part not thinner than 19 nor thicker than 17 gauge, not nested	1.43	32.58	4.91
52800	4	Liquid capacity exceeding 15 gallons, sides in thinnest part not thinner than 19 nor thicker than 17 gauge, nested	2.44	21.61	6.12

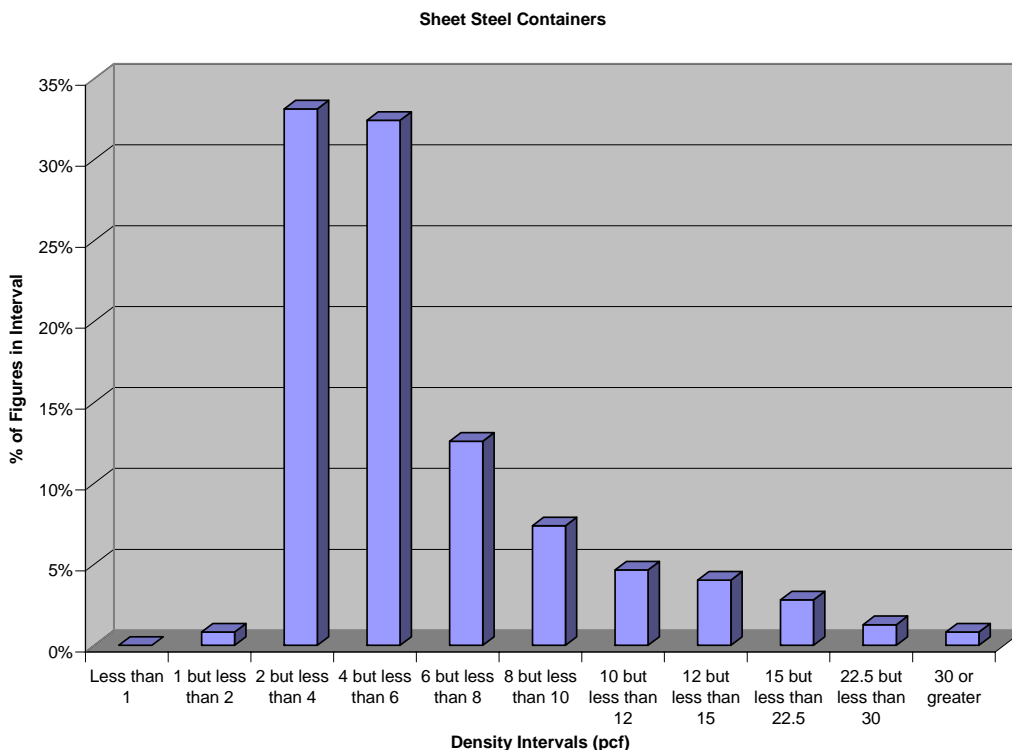
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ITEM	SUB	DESCRIPTION	DENSITY MINIMUM (pcf)	DENSITY MAXIMUM (pcf)	DENSITY AVERAGE (pcf)
52800	6	Liquid capacity exceeding 15 gallons, sides made wholly or partly of 20 gauge or thinner sheet, not nested	1.17	22.47	5.99
52800	7	Liquid capacity exceeding 15 gallons, sides made wholly or partly of 20 gauge or thinner sheet, nested	3.68	19.29	8.16
52800	Sub unknown		2.82	16.45	5.36

As can be seen, regardless of size and gauge of the container, these commodities have wide and overlapping density ranges.

Sheet steel containers have an overall density range from 1.17 to 61.80 pcf and an overall average or mean density of 6.38 pcf. The median density is 4.74 pcf and the mode is 3.75 pcf. This indicates that the simple average density may not be reflective of the majority of densities of sheet steel containers moving in less-than-truckload equipment and that most known densities are lower than the simple average.

The frequency distribution chart below shows that sheet steel containers have a broad density range. While there is a clustering of density figures in the 2 but less than 6 pcf density range, the figures are distributed throughout the density range.



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Stowability and Handling: Depending on the size of the container, sheet steel containers may be shipped in boxes, on lift truck skids or pallets, or loose. When shipped loose, sheet steel containers may be dented by freight with which stowed, but they are not known to pose any unusual or significant stowing or handling problems.

Liability: Sheet steel containers are not likely to damage other freight. When shipped loose, sheet steel containers may be dented by freight with which stowed, but there is no evidence of a claim problem. They are not unusually susceptible to theft. The value per pound ranges from \$0.39 to \$51.07 and averages \$19.18. The remaining liability traits would not impact significantly on an evaluation of these commodities.

Relationship to CCSB Policies and Guidelines

Sheet steel containers per items 52755, 52760, 52770, 52780, 52790 and 52800 have densities that are either too high or too low for their current classes, according to CCSB density guidelines. This is demonstrated in the table below, which shows the current item, subprovision (where applicable), average density, guideline class and current class.

ITEM	SUB	AVG DENSITY (pcf)	GUIDELINE CLASS	CURRENT CLASS
52760		11.13	92.5	70
52770	1	7.06	125	92.5
52770	2	7.20	125	77.5
52780	1	5.53	175	200
52780	2	6.51	150	85
52790	2	5.39	175	200
52790	3	7.58	125	92.5
52790	5	6.26	150	200
52790	6	6.57	150	100
52800	1	6.45	150	92.5
52800	3	4.91	200	125
52800	4	6.12	150	92.5
52800	6	5.99	175	200
52800	7	8.16	110	125

While the involved containers have an overall simple average density of 6.38 pcf, they have a median density of 4.74 pcf and a density mode of 3.75 pcf, indicating that the simple average density may not be reflective of the majority of densities of sheet steel containers. Further, they have an overall density range from 1.17 to 61.80 pcf, with the densities distributed throughout the full density array. CCSB density policy is to assign density-based classes to commodities exhibiting a wide density range, particularly where there are no unusual or significant stowability, handling or liability characteristics, as is the case with sheet steel containers. Establishing extended full-scale density-based classes for sheet steel containers, as proposed, would be consistent with CCSB policy and NCC precedent.

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CCSB policy with respect to clarification, simplification and uniformity calls for adding commonly used terminology to item descriptions to identify commodities and replacing outdated terminology in item descriptions with current terminology. It also calls for listing items under appropriate generic headings. The Containers, Sheet Steel, Group includes items that are similar to those listed either under the Carriers, Shipping, Group or the Sheet Steel Articles Group. Removing the Containers, Sheet Steel, Group in its entirety by canceling the provisions of items 52755, 52760, 52770, 52780, 52790 and 52800 with reference to a new item under the Sheet Steel Articles Group, using the "viz." format, with current terminology and extended full-scale density classes; canceling item 52820 with reference to a new item under the Carriers, Shipping, Group, with no change to the applicable class; and canceling item 52850 with reference to a new item under the Sheet Steel Articles Group with no change to the applicable classes, as proposed, would be consistent with CCSB policy.

This proposal would cancel item 52830, sheet steel ice cream cans, with reference to the proposed new full-scale, density-based item for sheet steel containers. The intent of the proposal, however, was to cancel the provisions of item 52830 with reference to a new item under the Sheet Steel Articles Group with no change in class, but without packaging exceptions contingent on weight. Such a modification would be consistent with CCSB clarification, simplification and uniformity policy and NCC precedent. It would also be within the scope of this proposal.