

TABLE III-B—LIMIT NUMBERS FOR REDUCED INSPECTION

Number of sample units from last 10 lots inspected within 6 months	Acceptable quality level				
	0.25	1.5	2.5	6.5	10.0
320–499	(*)	1	4	14	24
500–799	(*)	3	7	25	40
800–1,249	0	7	14	42	68
1,250–1,999	0	13	24	69	110
2,000–3,149	2	22	40	115	181
3,150–4,999	4	38	67	186	293
5,000–7,999	7	63	110	302	472
8,000–12,499	14	105	181	491	765
12,500–19,999	24	169	290	777	1207

* Denotes that the number of sample units from the last 10 inspection lots is not sufficient for reduced inspection for this AQL. In this instance more than 10 inspection lots may be used for the calculations if; the inspection lots used are the most recent ones in sequence within the last 6 months, they have all been on normal inspection, and none has been rejected on original inspection.

[78 FR 57038, Sept. 17, 2013]

§ 42.112 Defects of containers: Tables IV, V, VI, VII, VIII, IX, and X.

TABLE IV—METAL CONTAINERS
[Rigid and semi-rigid]

Defects	Categories		
	Critical	Major	Minor
Type or size of container or component parts not as specified	None permitted		
Closure incomplete, not located correctly or not sealed, crimped, or fitted properly:			
(a) Heat processed primary container	1		
(b) Non-heat processed primary container		101	
(c) Other than primary container			201
Dirty, stained, or smeared container			202
Key opening metal containers (when required):			
(a) Key missing		102	
(b) Key does not fit tab		103	
(c) Tab of opening band insufficient to provide accessibility to key ..		104	
(d) Improper scoring (band would not be removed in one continuous strip)		105	
Metal pop-top:			
(a) Missing or broken pull tab		106	
(b) Missing or incomplete score line (not conforming to a relevant product specification)		107	
Flexible pop-top:			
(a) Poor seal (wrinkle, entrapped matter, etc.)		108	
(b) Short pull tab (not conforming to a relevant product specification)			203
(c) Missing pull tab		109	
(d) Torn pull tab			204
Open top with plastic overcap (when required):			
(a) Plastic overcap missing		110	
(b) Plastic overcap warped (making opening or reapplication difficult)		111	
Outside tinplate or coating (when required):			
(a) Missing or incomplete			205
(b) Blistered, flaked, sagged, or wrinkled			206
(c) Scratched or scored			207
(d) Fine cracks			208
Rust (rust stain confined to the top or bottom double seam or rust that can be removed with a soft cloth is not scored a defect):			
(a) Rust stain			209
(b) Pitted rust		112	
Wet cans (excluding refrigerated containers)			210
Dent:			
(a) Materially affecting appearance but not usability			211
(b) Materially affecting usability		113	
Buckle:			
(a) Not involving end seam			212
(b) Extending into the end seam		114	

TABLE IV—METAL CONTAINERS—Continued
[Rigid and semi-rigid]

Defects	Categories		
	Critical	Major	Minor
Collapsed container		115	213
Paneled side materially affecting appearance but not usability			
Solder missing when required		116	
Cable cut exposing seam		117	
Improper side seam		118	
Swell, springer, or flipper (not applicable to gas or pressure packed product nor frozen products)	2		
Leaker or blown container	3		
Frozen products only:			
(a) Bulging ends 3/16-inch to 1/4-inch beyond lip			214
(b) Bulging ends more than 1/4-inch beyond lip		119	
Metal drums: leaking filling seal (bung) swell ¹	4	120	

¹ Defect classification depends on the severity of the defect.

TABLE V—COMPOSITE CONTAINERS
[Fiberboard body with metal lids or metal bottoms, plastic or foil top with cap]

Defects	Categories		
	Critical	Major	Minor
Type or size of container or component parts not as specified	None permitted		
Closure incomplete, not located correctly or not sealed, crimped, or fitted properly	1		201
Dirty, stained, or smeared container			
Easy open closure:			
(a) Pull tab:			
1. Missing or broken pull tab		101	
2. Missing or incomplete score line		102	
(b) Membrane top:			
1. Poor seal (wrinkle, entrapped matter, etc.)		103	
2. Short pull tab		104	
3. Missing pull tab		105	
4. Torn pull tab		106	
(c) Open top with plastic overcap (when required):			
1. Plastic overcap missing		107	
2. Plastic overcap warped (making opening or reapplication difficult)		108	
Outside tinplate or coating on ends (when required):			
(a) Missing or incomplete			202
(b) Blistered, flaked, sagged, or wrinkled			203
(c) Scratched or scored			204
(d) Fine cracks			205
Collapsed container		109	
Paneled side materially affecting appearance but not usability			206
Leaker	2		
Wet or damp:			
(a) Materially affecting appearance but not usability			207
(b) Materially affecting usability		110	
Crushed or torn area:			
(a) Materially affecting appearance but not usability			208
(b) Materially affecting usability		111	

TABLE VI—GLASS CONTAINERS
[Bottles, Jars]

Defects	Categories		
	Critical	Major	Minor
Type or size of container or component parts not as specified	None permitted		
Closure not sealed, crimped, or fitted properly:			
(a) Heat processed	1		
(b) Non-heat processed		101	
Dirty, stained, or smeared container			201
Chip in glass			202

TABLE VI—GLASS CONTAINERS—Continued
[Bottles, Jars]

Defects	Categories		
	Critical	Major	Minor
Stone (unmelted material) in glass			203
Pits in surface of glass			204
Sagging surface			205
Bead (bubble within glass):			
(a) 1/8-inch to 1/16-inch in diameter			206
(b) Exceeding 1/8-inch in diameter		102	
Checked		103	
Thin spot in glass		104	
Blister (structural defect)		105	
Bird swing (glass appendage inside container)	2		
Broken or leaking container	3		
Cap (nonheat processed):			
(a) Cross-threaded			207
(b) Loose but not leaking			208
(c) Pitted rust		106	
Cap (heat processed):			
(a) Cross-threaded or loose	4		
(b) Pitted rust		107	
Sealing tape or cello band (when required):			
(a) Improperly placed			209
(b) Not covering juncture of cap and glass		108	
(c) Ends overlap by less than 1/2-inch		109	
(d) Loose or deteriorating		110	
Missing or torn outer safety seal			111
Inner safety seal—missing, torn, poor seal			112

TABLE VII—PLASTIC CONTAINERS
[Rigid and Semi-Rigid, Bottles, Jars, Tubs, Trays, Pails, etc.]

Defects	Categories		
	Critical	Major	Minor
Type or size of container or component parts not as specified	None permitted		
Closure not sealed, crimped, or fitted properly:			
(a) Heat processed	1		
(b) Non-heat processed		101	
Dirty, stained, or smeared container			201
Chip in plastic			202
Un-melted gels in plastic			203
Pits in surface of plastic			204
Sagging surface			205
Air bubble within plastic:			
(a) 1/8-inch to 1/16-inch in diameter			206
(b) Exceeding 1/8-inch in diameter		102	
Checked		103	
Thin spot in plastic		104	
Blister (structural defect)		105	
Broken or leaking container	2		
Cap (non-heat processed):			
(a) Cross-threaded			207
(b) Loose but not leaking			208
Cap (heat processed), cross-threaded or loose	3		
Security seals:			
(a) Closure ring missing		106	
(b) Missing or torn outer safety seal		107	
(c) Inner safety seal—missing, torn, or poor seal		108	
(d) Sealing tape or cello band (when required):			
1. Improperly placed			209
2. Not covering juncture of cap and plastic		109	
3. Ends overlap by less than 1/2-inch		110	
4. Loose or deteriorating		111	

TABLE VIII—RIGID AND SEMI-RIGID CONTAINERS—CORRUGATED OR SOLID FIBERBOARD, CHIPBOARD, WOOD, PAPERBOARD ASEPTIC CARTONS, POLYMERIC TRAYS, ETC.
[Excluding metal, glass, and plastic]

Defects	Categories		
	Critical	Major	Minor
Type or size of container or component parts not as specified	None permitted		
Component part missing		101	
Closure not sealed, crimped, or fitted properly:			
(a) Primary container	1		
(b) Other than primary container			201
Dirty, stained, or smeared container			202
Wet or damp (excluding ice packs):			
(a) Materially affecting appearance but not usability			203
(b) Materially affecting usability		102	
Moldy area	2		
Crushed or torn area:			
(a) Materially affecting appearance but not usability			204
(b) Materially affecting usability		103	
Separation of lamination (corrugated fiberboard):			
(a) Materially affecting appearance but not usability			205
(b) Materially affecting usability		104	
Product sifting or leaking		105	
Nails or staples (when required):			
(a) Not as required, insufficient number or improperly positioned			206
(b) Nails or staples protruding		106	
Glue or adhesive (when required); not holding properly, not covering area specified, or not covering sufficient area to hold properly:			
(a) Primary container		107	
(b) Other than primary container			207
Flap:			
(a) Projects beyond edge of container more than 1/4-inch			208
(b) Does not meet properly, allowing space of more than 1/4-inch			209
Sealing tape or strapping (when required):			
(a) Missing		108	
(b) Improperly placed or applied			210
Missing component (straw, etc.)			211
Paperboard Aseptic Cartons:			
(a) Missing re-sealable cap or tab		109	
(b) Inner or outer safety seal—missing, torn, poor seal	3		
Thermostabilized polymeric trays:			
Tray body:			
(a) Swollen container	4		
(b) Tear, crack, hole, abrasion through more than one layer of multi-layer laminate for the tray	5		
(c) Presence of delamination in multi-layered laminate			212
(d) Presence of any permanent deformation, such that deformed area is discolored or roughened in texture			213
Lid material:			
(a) Closure seal not continuous along tray flange surface	6		
(b) Foldover wrinkle in seal area extends into the closure seal such that the closure seal is reduced to less than 1/8-inch	7		
(c) Any impression or design on the seal surfaces which conceals or impairs visual detection of seal defects		110	
(d) Areas of “wave-like” striations or wrinkles along the seal area that spans the entire width of seal			214
(e) Abrasion of lid material:			
1. Within 1/16-inch of food product edge of seal such that barrier layer is exposed	8		
2. Greater than 1/16-inch from food product edge of seal that barrier layer is exposed			215
(f) Presence of entrapped matter within 1/16-inch of the food product edge of seal or entrapped moisture or vapor with 1/16-inch of the food product edge of seal that results in less than 1/16-inch of defect free seal width at the outside edge	9		
(g) Presence of any seal defect or anomaly (for example, entrapped moisture, gases, etc.) within 1/16-inch of food product edge of seal		111	
(h) Closure seal width less than 1/8-inch			216

TABLE IX—FLEXIBLE CONTAINERS
[Plastic, Cellophane, Paper, Textile, Laminated Multi-Layer Pouch, Bag, etc.]

Defects	Categories		
	Critical	Major	Minor
Type or size of container or component parts not as specified	None permitted		
Closure not sealed, crimped, stitched, or fitted properly:			
(a) Heat processed primary container	1		
(b) Non-heat processed primary container		101	
(c) Other than primary container			201
Dirty, stained, or smeared container			202
Unmelted gels in plastic			203
Torn or cut container or abrasion (non-leaker):			
(a) Materially affecting appearance but not usability			204
(b) Materially affecting usability		102	
Moldy area	2		
Individual packages sticking together or to shipping case (tear when separated)		103	
Not fully covering product		104	
Wet or damp (excluding ice packs):			
(a) Materially affecting appearance but not usability			205
(b) Materially affecting usability		105	
Over wrap (when required):			
(a) Missing		106	
(b) Loose, not sealed, or closed			206
(c) Improperly applied			207
Sealing tape, strapping, or adhesives (when required):			
(a) Missing		107	
(b) Improperly placed, applied, torn, or wrinkled			208
Tape over bottom and top closures (when required):			
(a) Not covering stitching		108	
(b) Torn (exposing stitching)		109	
(c) Wrinkled (exposing stitching)		110	
(d) Not adhering to bag:			
1. Exposing stitching		111	
2. Not exposing stitching			209
(e) Improper placement			210
Product sifting or leaking:			
(a) Non-heat processed		112	
(b) Heat processed	3		
Flexible pop-top:			
(a) Poor seal (wrinkle, entrapped matter, etc.) reducing intact seal to less than 1/16-inch	4		
(b) Short pull tab (materially affecting usability)			212
(c) Missing pull tab		113	
(d) Torn pull tab (materially affecting usability)			213
Missing component (straw, etc.)			214
Two part container (poly lined box or bag in box):			
(a) Outer case torn			215
(b) Poly liner:			
1. Missing	5		
2. Improper closure		114	
Missing "zip lock" (re-sealable containers)			216
Loss of vacuum (in vacuum-packed)		115	
Pre-formed containers:			
(a) Dented or crushed area			217
(b) Deformed container			218
Missing re-sealable cap		116	
Inner or outer safety seal—missing, torn, poor seal	6		
Air bubble in plastic		117	
Thermostabilized products (includes but not limited to tubes, pouches, etc.):			
Foldover wrinkle in seal area (thermostabilized pouches):			
(a) Extends through all plies across seal area or reduces seal less than 1/16-inch	7		
(b) Does not extend through all plies and effective seal is 1/16-inch or greater			219
Incomplete seal (thermostabilized pouches)	8		
Non-bonding seal (thermostabilized pouches)	9		
Laminate separation in body of pouch or in seal within 1/16-inch of food product edge:			
(a) If food contact layer is exposed	10		
(b) If food contact surface is exposed after manipulation or laminate separation expands after manipulation		118	

TABLE IX—FLEXIBLE CONTAINERS—Continued
[Plastic, Cellophane, Paper, Textile, Laminated Multi-Layer Pouch, Bag, etc.]

Defects	Categories		
	Critical	Major	Minor
(c) If lamination separation is limited to isolated spots that do not propagate with manipulation or is outer ply separation in seal within 1/16-inch of food product edge of seal			220
Flex cracks (cracks in foil layer only)			221
Swollen container	11		
Blister (in seal) reducing intact seal to less than 1/16-inch	12		
Compressed seal (overheated to bubble or expose inner layer) reducing intact seal to less than 1/16-inch	13		
Stringy seal (excessive plastic threads showing at edge of seal area)			222
Contaminated seal (entrapped matter) reducing intact seal to less than 1/16-inch	14		
Seal creep (product in pouch "creeping" into seal) reducing intact seal to less than 1/16 inch	15		
Misaligned or crooked seal reducing intact seal to less than 1/16-inch	16		
Seal formed greater than 1-inch from edge of pouch (unclosed edge flaps) ..			223
Waffling (embossing on surface from retort racks; not scorable unless severe)			224
Poor or missing tear notch (when required)			225

TABLE X—UNITIZING
[Plastic or other type of casing/unitizing]

Defects	Categories	
	Major	Minor
Not specified method	101	
Missing tray (when required)	102	
Missing shrink wrap (when required)	103	
Loose or improperly applied wrap		201
Torn or mutilated		202
Off-center wrap (does not overlap both ends)		203

[78 FR 57041, Sept. 17, 2013]

§ 42.113 Defects of label, marking, or code.

TABLE XI—LABEL, MARKING, OR CODE

Defects	Categories	
	Major	Minor
Not specified method	101	
Missing (when required)	102	
Loose or improperly applied		201
Torn or mutilated		202
Torn or scratched, obliterating any markings on the label	103	
Text illegible or incomplete		203
Incorrect	104	
In wrong location		204

[78 FR 57046, Sept. 17, 2013]

§ 42.114 Procedures for evaluating interior container defects.

(a) Sections 42.101–42.136 provide procedures for determining lot conformance with the U.S. Standards for Condition of Food Containers. This determination is based on the examination of the external characteristics of the food containers.

(b) As an option, if a user of the inspection service requests to have the interior characteristics of containers examined, and apply these results in the determination of lot acceptability, the defects listed in Table XII may be used.

(c) The determination of lot acceptability based on internal container defects shall be independent of the determination of lot acceptability for U.S. Standards for Condition of Food Containers. A user of the inspection service may choose to require inspection for internal can defects as well as inspection for U.S. Standards for Condition of Food Containers.

(d) If a user of the inspection service requests an examination for internal container defects in addition to an official USDA/USDC inspection for product quality and/or U.S. grade, the containers opened by the official inspection service for inspection of product quality and/or U.S. grade will be used for examination of interior container defects. The minimum sample size for evaluation of interior container defects