

Portable tanks		Bulk tank vehicles—cargo tank motor vehicles (CTMV) and tank cars	
Code	What failed	Code	What failed
110	Cover	115	Discharge Valve or Coupling
119	Frangible Disc	116	Excess Flow Valve
120	Fusible Pressure Relief Device or Element	117	Fill Hole
121	Gasket	118	Flange
122	Gauging Device	119	Frangible Disc
125	Hose	120	Fusible Pressure Relief Device or Element
127	Inlet (Loading) Valve	121	Gasket
131	Lifting Lug	122	Gauging Device
132	Liner	123	Heater Coil
135	Loading or Unloading Lines	124	High Level Sensor
137	Manway or Dome Cover	125	Hose
140	Outer Frame	126	Hose Adaptor or Coupling
141	Piping or Fittings	127	Inlet (Loading) Valve
143	Pressure Relief Valve or Device—Non-Reclosing	131	Lifting Lug
144	Pressure Relief Valve or Device—Reclosing	132	Liner
152	Threaded Connection	133	Liquid Line
153	Vacuum Relief Valve	134	Liquid Valve
161	Weld or Seam	135	Loading or Unloading Lines
		136	Locking Bar
Code	How Failed	137	Manway or Dome Cover
301	Abraded	138	Mounting Studs
302	Bent	139	O-Ring or Seals
303	Burst or Ruptured	141	Piping or Fittings
304	Cracked	142	Piping Shear Section
305	Crushed	143	Pressure Relief Valve or Device—Non-Reclosing
306	Failed to Operate	144	Pressure Relief Valve or Device—Reclosing
307	Gouged or Cut	145	Remote Control Device
308	Leaked	146	Sample Line
309	Punctured	147	Stub Sill (Tank Car)
310	Ripped or Torn	148	Sump
312	Torn Off or Damaged	149	Tank Head
313	Vented	150	Tank Shell
		151	Thermometer Well
Code	Cause(s) of Failure	152	Threaded Connection
501	Abrasion	153	Vacuum Relief Valve
502	Broken Component or Device	154	Valve Body
503	Commodity Self-ignition	155	Valve Seat
504	Commodity Polymerization	156	Valve Spring
505	Conveyer or Material Handling Equipment Mishap	157	Valve Stem
506	Corrosion—Exterior	158	Vapor Valve
507	Corrosion—Interior	159	Vent
508	Defective Component or Device	160	Washout
509	Derailment	161	Weld or Seam
510	Deterioration or Aging		
511	Dropped	Code	How Failed
512	Fire, Temperature, or Heat	301	Abraded
514	Freezing	302	Bent
515	Human Error	303	Burst or Ruptured
517	Improper Preparation for Transportation	304	Cracked
520	Inadequate Maintenance	305	Crushed
521	Inadequate Preparation for Transportation	306	Failed to Operate
522	Inadequate Procedures	307	Gouged or Cut
523	Inadequate Training	308	Leaked
524	Incompatible Product	309	Punctured
525	Incorrectly Sized Component or Device	310	Ripped or Torn
526	Loose Closure, Component, or Device	311	Structural
527	Misaligned Material, Component, or Device	312	Torn Off or Damaged
528	Missing Component or Device	313	Vented
529	Overfilled		
530	Overpressurized	Code	Cause(s) of Failure
531	Rollover Accident	501	Abrasion
536	Vandalism	502	Broken Component or Device
537	Vehicular Crash or Accident Damage	503	Commodity Self-ignition
		504	Commodity Polymerization
		505	Conveyer or Material Handling Equipment Mishap
		506	Corrosion—Exterior
		507	Corrosion—Interior
		508	Defective Component or Device
		509	Derailment
		510	Deterioration or Aging
		511	Dropped
		512	Fire, Temperature, or Heat