



NATIONAL TRANSPORTATION SAFETY BOARD
Investigative Hearing

Norfolk Southern Railway general merchandise freight train 32N
derailment with subsequent hazardous material release and fires,
in East Palestine, Ohio, on February 3, 2023

GROUP	F
EXHIBIT	
12	

Agency / Organization

Arkema

Title

**UTLX 205907 Tank Car Loading Information
and Bill of Lading, January 26, 2023**

Car Number: UTLX 205907

Pressure Break

	<u>Eq</u>	<u>Q</u>	<u>Size</u>	<u>Rating</u>	<u>Pin</u>	<u>PSI</u>	<u>Manufacturer</u>	<u>Model</u>	<u>Number</u>	<u>Material</u>	<u>Serial</u>	<u>Number</u>	<u>Type</u>
Siphon Pipe	Y		3.000							Stainless St			
Sample Fitting Lin	N												
Thermowell	N												
Air Connection	N												
Vacuum Relief	Y		2.500				MC KENZIE VA	509981-01		Stainless St	332301		
Manway Cover	Y	1	20.000				UTC			Carbon Steel			Hinged and
Manway Lift Assist	Y						UTC						Ez-Lift
Safety Fitting 1	Y			75.00			MC KENZIE VA	085381-20		Stainless St	167091		Valve
Outlet Sump	Y												Pressed
Outlet Saddle	Y												
Outlet Valve	Y		4.000				UTC	UFPFR-2236TM		Carbon Steel	NA		Ball
Outlet Closure	Y		2.000				UTC			Carbon Steel			PLUG AND
Auxiliary Valve	N												

** END OF REPORT **

Compartment: 1 Shell Capacity(US Gal.):30220 Tare(lb.):66300 Max. Weight on Rail(lb.):263000
 Operating Stencil:111A100W1 Length Over Couplers:59ft.4in. Extreme Width:10ft.8in. Extreme Height:15ft.6in.

Inches	US Gallons
0.0	0
0.25	18
0.5	37
0.75	57
1.0	79
1.25	101
1.5	125
1.75	150
2.0	176
2.25	203
2.5	231
2.75	259
3.0	289
3.25	319
3.5	350
3.75	382
4.0	415
4.25	449
4.5	483
4.75	517
5.0	553
5.25	589
5.5	626
5.75	664
6.0	702
6.25	740
6.5	780
6.75	820
7.0	860
7.25	901
7.5	943
7.75	985
8.0	1028
8.25	1071
8.5	1115
8.75	1159
9.0	1204
9.25	1250
9.5	1295
9.75	1342
10.0	1389
10.25	1436
10.5	1484
10.75	1532
11.0	1581
11.25	1630
11.5	1679
11.75	1729
12.0	1780
12.25	1831
12.5	1882
12.75	1934
13.0	1986
13.25	2038
13.5	2091
13.75	2144
14.0	2198
14.25	2252
14.5	2307
14.75	2361

Inches	US Gallons
15.0	2417
15.25	2472
15.5	2528
15.75	2584
16.0	2641
16.25	2698
16.5	2756
16.75	2813
17.0	2871
17.25	2930
17.5	2988
17.75	3047
18.0	3107
18.25	3166
18.5	3226
18.75	3287
19.0	3347
19.25	3408
19.5	3470
19.75	3531
20.0	3593
20.25	3655
20.5	3718
20.75	3780
21.0	3843
21.25	3907
21.5	3970
21.75	4034
22.0	4098
22.25	4162
22.5	4227
22.75	4292
23.0	4357
23.25	4423
23.5	4488
23.75	4554
24.0	4621
24.25	4687
24.5	4754
24.75	4821
25.0	4888
25.25	4955
25.5	5023
25.75	5091
26.0	5159
26.25	5227
26.5	5296
26.75	5365
27.0	5434
27.25	5503
27.5	5573
27.75	5642
28.0	5712
28.25	5782
28.5	5853
28.75	5923
29.0	5994
29.25	6065
29.5	6136
29.75	6207

Inches	US Gallons
30.0	6279
30.25	6351
30.5	6423
30.75	6495
31.0	6567
31.25	6639
31.5	6712
31.75	6785
32.0	6858
32.25	6931
32.5	7004
32.75	7078
33.0	7152
33.25	7226
33.5	7300
33.75	7374
34.0	7448
34.25	7523
34.5	7597
34.75	7672
35.0	7747
35.25	7822
35.5	7898
35.75	7973
36.0	8049
36.25	8124
36.5	8200
36.75	8276
37.0	8352
37.25	8429
37.5	8505
37.75	8582
38.0	8658
38.25	8735
38.5	8812
38.75	8889
39.0	8966
39.25	9044
39.5	9121
39.75	9199
40.0	9276
40.25	9354
40.5	9432
40.75	9510
41.0	9588
41.25	9666
41.5	9745
41.75	9823
42.0	9902
42.25	9980
42.5	10059
42.75	10138
43.0	10217
43.25	10296
43.5	10375
43.75	10454
44.0	10534
44.25	10613
44.5	10693
44.75	10772

Inches	US Gallons
45.0	10852
45.25	10932
45.5	11012
45.75	11091
46.0	11171
46.25	11251
46.5	11332
46.75	11412
47.0	11492
47.25	11572
47.5	11653
47.75	11733
48.0	11814
48.25	11894
48.5	11975
48.75	12056
49.0	12137
49.25	12217
49.5	12298
49.75	12379
50.0	12460
50.25	12541
50.5	12622
50.75	12704
51.0	12785
51.25	12866
51.5	12947
51.75	13029
52.0	13110
52.25	13191
52.5	13273
52.75	13354
53.0	13436
53.25	13517
53.5	13599
53.75	13680
54.0	13762
54.25	13843
54.5	13925
54.75	14007
55.0	14088
55.25	14170
55.5	14252
55.75	14334
56.0	14415
56.25	14497
56.5	14579
56.75	14661
57.0	14742
57.25	14824
57.5	14906
57.75	14988
58.0	15070
58.25	15151
58.5	15233
58.75	15315
59.0	15397
59.25	15478
59.5	15560
59.75	15642

Disclaimer: Tables are for general information only and not intended for commercial use.

Compartment: 1 Shell Capacity(US Gal.):30220 Tare(lb.):66300 Max. Weight on Rail(lb.):263000
 Operating Stencil:111A100W1 Length Over Couplers:59ft.4in. Extreme Width:10ft.8in. Extreme Height:15ft.6in.

Inches	US Gallons	Inches	US Gallons	Inches	US Gallons	Inches	US Gallons
60.0	15724	75.0	20549	90.0	24974	105.0	28545
60.25	15805	75.25	20627	90.25	25042	105.25	28592
60.5	15887	75.5	20705	90.5	25109	105.5	28641
60.75	15969	75.75	20783	90.75	25177	105.75	28689
61.0	16051	76.0	20861	91.0	25244	106.0	28736
61.25	16132	76.25	20938	91.25	25311	106.25	28783
61.5	16214	76.5	21016	91.5	25378	106.5	28829
61.75	16296	76.75	21093	91.75	25445	106.75	28875
62.0	16377	77.0	21170	92.0	25511	107.0	28920
62.25	16459	77.25	21248	92.25	25577	107.25	28964
62.5	16540	77.5	21325	92.5	25643	107.5	29009
62.75	16622	77.75	21402	92.75	25709	107.75	29053
63.0	16703	78.0	21478	93.0	25773	108.0	29095
63.25	16785	78.25	21555	93.25	25839	108.25	29137
63.5	16866	78.5	21631	93.5	25904	108.5	29179
63.75	16948	78.75	21708	93.75	25969	108.75	29221
64.0	17029	79.0	21784	94.0	26033	109.0	29263
64.25	17110	79.25	21860	94.25	26097	109.25	29303
64.5	17192	79.5	21936	94.5	26161	109.5	29342
64.75	17273	79.75	22012	94.75	26224	109.75	29382
65.0	17354	80.0	22087	95.0	26287	110.0	29421
65.25	17435	80.25	22163	95.25	26350	110.25	29458
65.5	17516	80.5	22238	95.5	26413	110.5	29496
65.75	17597	80.75	22314	95.75	26475	110.75	29533
66.0	17678	81.0	22389	96.0	26537	111.0	29569
66.25	17759	81.25	22464	96.25	26599	111.25	29605
66.5	17840	81.5	22538	96.5	26660	111.5	29639
66.75	17921	81.75	22613	96.75	26721	111.75	29673
67.0	18002	82.0	22687	97.0	26782	112.0	29707
67.25	18083	82.25	22762	97.25	26843	112.25	29738
67.5	18163	82.5	22836	97.5	26903	112.5	29770
67.75	18244	82.75	22910	97.75	26963	112.75	29802
68.0	18325	83.0	22984	98.0	27022	113.0	29833
68.25	18405	83.25	23057	98.25	27081	113.25	29862
68.5	18486	83.5	23131	98.5	27140	113.5	29891
68.75	18566	83.75	23204	98.75	27199	113.75	29919
69.0	18646	84.0	23277	99.0	27257	114.0	29945
69.25	18727	84.25	23350	99.25	27315	114.25	29971
69.5	18807	84.5	23423	99.5	27373	114.5	29996
69.75	18887	84.75	23495	99.75	27430	114.75	30020
70.0	18967	85.0	23568	100.0	27487	115.0	30043
70.25	19047	85.25	23640	100.25	27543	115.25	30064
70.5	19127	85.5	23712	100.5	27599	115.5	30085
70.75	19206	85.75	23784	100.75	27655	115.75	30105
71.0	19286	86.0	23855	101.0	27711	116.0	30122
71.25	19366	86.25	23927	101.25	27766	116.25	30138
71.5	19445	86.5	23998	101.5	27821	116.5	30152
71.75	19525	86.75	24069	101.75	27874	116.75	30165
72.0	19604	87.0	24140	102.0	27929	117.0	30176
72.25	19683	87.25	24210	102.25	27981	117.25	30185
72.5	19763	87.5	24281	102.5	28036	117.5	30192
72.75	19842	87.75	24351	102.75	28088	117.75	30198
73.0	19921	88.0	24421	103.0	28140	118.0	30202
73.25	20000	88.25	24491	103.25	28193	118.25	30206
73.5	20078	88.5	24561	103.5	28244	118.5	30208
73.75	20157	88.75	24630	103.75	28294	118.75	30208
74.0	20236	89.0	24699	104.0	28345	119.0	30209
74.25	20314	89.25	24768	104.25	28396	119.25	30209
74.5	20393	89.5	24837	104.5	28446		
74.75	20471	89.75	24905	104.75	28496		

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Inches	US Gallons
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STRAIGHT BILL OF LADING - SHORT FORM - ORIGINAL - Non Negotiable

Date: 01/26/2023

Bill of Lading No: 6000081224

Page 1 of 1



IF THE SHIPMENT MOVES BETWEEN TWO PORTS BY A CARRIER BY WATER, THE LAW REQUIRES THAT THE BILL OF LADING SHALL STATE WHETHER IT IS A CARRIER'S OR SHIPPER'S WEIGHT. NOTE - WHERE THE RATE IS DEPENDENT ON VALUE, SHIPPERS ARE REQUIRED TO STATE SPECIFICALLY IN WRITING THE AGREED OR DECLARED VALUE OF THE PROPERTY.

SHIPPING POINT:

9502 B BAYPORT BLVD
PASADENA, TX 77507-1498

PREPAID / COLLECT

PREPAID

F.O.B./ FREIGHT

fob delivered

CONSIGNEE TO (address of consignee - For purpose of notification only)

ARKEMA INC
C/O NS TBT FACILITY
291 S KEIM ST
POTTSTOWN PA 19464

Subject to Section 7 of conditions of applicable bill of lading, if this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement. The carrier shall not make delivery of this shipment without payment of freight and all other lawful charges.

Arkema Inc.

(Signature of consignor)
THE FIBRE BOXES USED FOR THIS SHIPMENT CONFORM TO THE SPECIFICATIONS SET FORTH IN THE BOX MAKER'S CERTIFICATE THEREON, AND ALL OTHER REQUIREMENTS OF UNIFORM FREIGHT CLASSIFICATIONS.

RECEIVED, subject to the classifications and tariffs in effect on the date of issue of the Bill of Lading, the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said carrier (the word carrier being understood throughout this contact as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual places of delivery at said destination, if on its route, otherwise to deliver to another carrier on route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all terms and conditions of the Uniform Domestic Straight Bill of Lading set forth (1) in the Uniform Freight Classification in effect on the date hereof, if this is a rail or rail-water shipment or (2) in the applicable motor carrier classification or tariff if this is a motor carrier shipment. The shipper hereby certifies that he is familiar with all the terms and conditions of the said bill of lading set forth in the classification or tariff which governs the transportation of the shipment, and the said terms and conditions are hereby agreed to by the shipper for himself and his assigns.

ROUTING NSRR NORFOLK SOUTHERN CORP

PRO #, Railcar or Vehicle ID:

TARE

GROSS

NET

Subject to verification by the respective weighing and inspection bureau according to agreement per Arkema Inc.

UTLX205907

194,300.000 LB

194,300.000 LB

ITEM	HM	NO. PACKAGE	DESCRIPTION	WEIGHT (Subject to Correction)	MATERIAL
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Delivery: 82981301 Customer PO:
Order: 4300066529

10 X 1 RC

UN 2348
BUTYL ACRYLATE, STABILIZED
3 PGIII
4912215
BUTYL ACRYLATE 10-20 PPM MEHQ
RAIL CAR

194,300.000 LB

53603

PPE REQUIREMENTS:
SEE ARKEMA'S MSDS FOR PPE REQUIREMENTS NEEDED FOR SAFE HANDLING OF PRODUCT
IF THIS CUSTOMER REQUIRES ANY ADDITIONAL PPE IT WILL BE LISTED BELOW

Seal Numbers:

1017792,1017797-98

* * * END OF BILL OF LADING * * * TOTAL PAGES: 1

NOEEI30.36

ERAP 2-1008-087 : 1-800-567-7455

FOR CHEMICAL EMERGENCY - SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT - CALL CHEMTREC TOLL FREE 800-424-9300 DAY OR NIGHT. OUTSIDE THE CONTINENTAL U.S.A. CALL COLLECT 703-527-3887

DISCHARGES OF HAZARDOUS SUBSTANCES IDENTIFIED BY "RQ" OR OF MATERIALS IDENTIFIED AS "MARINE POLLUTANTS" MUST BE REPORTED TO THE U.S. COAST GUARD NATIONAL RESPONSE CENTER AT 800-424-8802

For Prepaid Freight Bills send Original Freight Bills with copy of B/L(s) to:

ARKEMA INC. c/o Cegedim SY Portal
PO Box 210007
Dallas, TX 75211

This is to certify that the above-named materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

The released value of the within described property is hereby specifically stated by the shipper to be not exceeding the restricted or limited valuation and to the terms and conditions as stated in the tariff classification which results in the lowest transportation charges on the shipment.

SHIPPER ARKEMA INC

AGENT, Per.

DATE

Arkema 000006

Ship From:
CLEAR LAKE PLANT

Pick List

Page 1 of 1
01/26/2023 12:20:14

Ship-To: 88271
ARKEMA INC
C/O NS TBT FACILITY
291 S KEIM ST
POTTSTOWN PA 19464

Delivery Number:

0082981301



Order Number: 4300066529
Order Date: 01/23/2023
Total Gross Weight: 180,000 LB
Delivery Date: 02/12/2023
Terms of Delivery: PPD fob delivered
Goods Issue Date: 01/28/2023
Loading Date: 01/28/2023 @ 00:00:00

Order Created By:

Route/Carrier: RAIL - RAIL 15 DAYS TRANSIT

URX 205907

Item	Material/Description	Loading Group
10	53603 BUTYL ACRYLATE 10-20 PPM MEHQ RAIL CAR	DEFAULT

<u>Order Quantity</u> 180,000.000 LB	<u>Packages Ordered</u> 180,000 LB	<u>Packages to Pick</u> 180,000 LB	<u>SLOC</u> 0001
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*****End Of Order*****

Order complete & checked for accuracy by: _____

Signature:

Rail Car Inspection Sheet

02/6/23

Template: SS-0662 TANK CAR INPSECTION - CLAKE

Car ID: UTLX 205907

Inspection Date: 01/26/23 08:20

Arrv. Date Time: 01/20/23 16:35

Inspection Required	Result	Comments	Inspector ID	Inspect Date
<input type="checkbox"/> DUE DATES	H			
<input checked="" type="checkbox"/> TANK QUALIFICATION	2026		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> THICKNESS TEST	2026		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> SERVICE EQUIPMENT	2026		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> PRD VALVE TEST	2026		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> LINING DUE DATE	n/a		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> 88. B2 INSPECTION	2026		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> STUB SILL INSPECTION	2026		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> TANK TEST	2026		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> HEATER COILS (INTERIOR ONLY)	n/a		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> VALVE MAINTENANCE DATES (INCLUDING GASKETS)	2026		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> BOV REBUILD DATE (IF DIFFERENT FROM VALVE MAINT. DATE)	2026		clkdp5	01/26/23 08:35
<input type="checkbox"/> PRE INSPECTION	H			
<input checked="" type="checkbox"/> INTERIOR CONDITION: REFERS TO CHECKING FOR DEBRIS OR FOREIGN OBJECTS INSIDE THE TANK.	GOOD		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> STENCILS, PAINT, & CHEMTREC PHONE NUMBER - LEGIBLE AND IN ENGLISH	YES		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> SHELF COUPLERS ARE PRESENT ON CAR WITH NO CRACKS OR BROKEN KNUCKLE PINS AND COUPLER RELEASE HANDLE IS PRESENT, NOT BENT OR BROKEN AND OPERATING PROPERLY. F COUPLER ONLY - REQUIRES A KNUCKLE PIN COTTER KEY. E COUPLER - INSPECT DRAFT GEAR KEY FOR RETAINER	YES		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> BRAKE SHOES - NONE MISSING OR BROKEN AND A MINIMUM 1/2" THICK. ALL TANK CAR B END (BRAKE END) PADS ARE AGAINST WHEELS WHEN HANDBRAKE IS SET.	TRUE		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> BRAKE CHAIN, BELL CRANK & GUIDE BRACKET - BRAKE CHAINS NOT BROKEN. BELL CRANK DOES NOT BOTTOM OUT AGAINST BRACKET. CHAIN SUPPORTED BY A SPRING & NOT RUBBING ON AXLE. NO SLACK IN CHAINS WHEN BRAKE IS SET	TRUE		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> AIR BRAKE SUPPORT ATTACHMENTS - BRACKETS NOT BROKEN OR BENT. BRACKETS WELDED TO A PAD NOT DIRECTLY TO THE TANK	TRUE		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> WHEELS, BEARINGS & SPRINGS: WHEELS AND BEARINGS - NONE CRACKED, BROKEN OR SHOWING SIGNS OF OVERHEATING. SPRINGS - NONE MISSING OR BROKEN.	TRUE		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> DRAGGING EQUIPMENT: NO UNSECURED HANGING EQUIPMENT UNDER TANK CAR	TRUE		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> TANK SHELL & HEADS: NO ABRASION, CORROSION, CRACKS, DENTS, DISTORTION, OR CRACKS IN WELDS.	TRUE		clkdp5	01/26/23 14:36
<input checked="" type="checkbox"/> LADDERS, HANDHOLDS, HANDRAILS: SECURE, NO DAMAGE & ATTACHED WITH APPROVED AAR FASTENERS.	TRUE		clkdp5	01/26/23 08:35

Rail Car Inspection Sheet

02/6/23

Template: SS-0662 TANK CAR INPSECTION - CLAKE

Car ID: UTLX 205907

Inspection Date: 01/26/23 08:20

Arrv. Date Time: 01/20/23 16:35

Inspection Required	Result	Comments	Inspector ID	Inspect Date
Y END PLATFORMS, OPERATING PLATFORMS, & WALKWAYS: MOUNTING BRACKETS SECURE, NO DAMAGE, AND NO SPLICING OF RUNNING BOARDS ON END PLATFORMS. ALL NUTS & BOLTS MUST BE APPROVED AAR FASTENERS AND NONE MISSING DAMAGED OR LOOSE.	TRUE		clkdp5	01/26/23 08:35
Y BOTTOM OUTLET VALVE ASSEMBLY: TANK CAR HAS BOTTOM OUTLET PROTECTION (SKIDS).	PASS		clkdp5	01/26/23 08:35
Y BOTTOM OUTLET VALVE, GASKETS & PACKING NUT - LEAK FREE WITH THE HANDLE LOCKED AND PINNED IN THE CLOSED POSITION. ALL NUTS AND BOLTS ARE PRESENT AND TIGHT. VALVE STEM PACKING IS TIGHT AND SHOWS NO SIGNS OF LEAKAGE.	TRUE		clkdp5	01/26/23 08:35
Y BELLY CAP IS NOT CRACKED, THREADS IN GOOD CONDITION, GASKET SEALING SURFACE IS FREE OF CORROSION & HAS A GOOD SEALING SURFACE.	TRUE		clkdp5	01/26/23 08:35
Y BELLY CAP NOZZLE - ALL NUTS, BOLTS PRESENT & WRENCH TIGHT. GASKET IS NOT BULGING OUT OF FLANGE AND SHOWS NO SIGNS OF LEAKAGE. THREADS ARE IN GOOD CONDITION.	TRUE		clkdp5	01/26/23 08:35
Y NOZZLE GASKET SEALING SURFACE MUST BE FREE OF CORROSION AND FREE OF DENTS AND SHARP BURRS THAT COULD POSSIBLY DAMAGE THE GASKET.	TRUE		clkdp5	01/26/23 08:35
Y BELLY CAP GASKET SHALL BE INSPECTED AND CHANGED AS NECESSARY TO ENSURE A LEAK FREE PACKAGE.	TRUE		clkdp5	01/26/23 08:35
Y 2" SECONDARY VALVE, IF EQUIPPED, MUST BE ATTACHED TO BELLY CAP WITH A 2"X CLOSED HEAVY WALL SS NIPPLE. THE VALVE HANDLE MUST NOT EXCEED 6". VALVE STEM PACKING IS TIGHT AND SHOWS NO SIGNS OF LEAKAGE	TRUE		clkdp5	01/26/23 08:35
Y PLUG THREADS ARE IN GOOD CONDITION. THE BELLY CAP AND PLUG MUST BE ATTACHED TO THE TANK CAR WITH CHAINS.	TRUE		clkdp5	01/26/23 08:35
Y HEATER COILS:EXT - INSPECT HEATER COIL CONNECTION NIPPLES AND THREADS FOR WORKING CONDITION (NO CAPS REQUIRED).	N/A		clkdp5	01/26/23 08:35
Y HEARTER COILS: INT - INSPECT HEATER COIL CONNECTION NIPPLES AND THREADS FOR WORKING CONDITION. INSPECT CAPS, CAP THREADS IN WORKING CONDITION. CAPS MUST BE ATTACHED TO CAR WITH CHAINS. INSPECT CHAIN AND CHAIN ATTACHMENT.	N/A		clkdp5	01/26/23 08:35
Y SEAL PIN AND CHAIN ATTACHED. HINGE NOT BROKEN AND IN WORKING CONDITION, HINGE PIN PRESENT AND NOT BROKEN. COVER HANDLE IS PRESENT AND NOT BROKEN. COVER STOP IS PRESENT AND NOT BROKEN. COVER HAS NO CRACKS OR DAMAGE.	YES		clkdp5	01/26/23 08:35
Y VALVE HANDLES PRESENT AND PROPERLY ATTACHED WITH HANDLE IN PROPER POSITION. PLUGS AND VALVE FLANGES ARE ATTACHED TO ASSEMBLY FLANGE PLATE WITH CHAINS. PLUG TREADS IN GOOD WORKING CONDITION.	YES		clkdp5	01/26/23 08:35

Rail Car Inspection Sheet

02/6/23

Template: SS-0662 TANK CAR INPSECTION - CLAKE

Car ID: UTLX 205907

Inspection Date: 01/26/23 08:20

Arrv. Date Time: 01/20/23 16:35

Inspection Required	Result	Comments	Inspector ID	Inspect Date
<input checked="" type="checkbox"/> PLUG TREADS IN GOOD WORKING CONDITION. VALVES SHOW NO SIGNS OF LEAKAGE. ALL NUTS AND BOLTS ARE PRESENT AND WRENCH TIGHT WITH AT LEAST 2 THREADS SHOWING ABOVE NUT. GASKETS ARE NOT MISSING, BULGING OR CRACKED.	YES		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> SAFETY VALVE: ALL NUTS AND BOLTS PRESENT AND WRENCH TIGHT. NOTE: IF SAFETY VALVE EQUIPMENT IS CHANGED FOLLOWING LEAK TEST, FORM MUST REFLECT THIS NEW TEST DATES.	YES		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> ? SAFETY VENT: VISUALLY INSPECT RUPTURE DISC FOR DAMAGE AND TO ENSURE THAT DISC IS NOT RUPTURED. (NO TEST DATE REQUIRED FOR SAFETY VENT)	TRUE		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> ? CLEAN OUT PORTS (35M CARS ONLY): INSPECT EYEBOLT LUGS, HINGE AND HINGE PIN NOT BROKEN, CHAIN AND ATTACHMENT TO CAR IF NOT HINGED. SAFETY.EYEBOLT OPERATION, ALL NUTS AND BOLTS IN WORKING CONDITION TO ENSURE LEAK FREE PACKAGE.	TRUE		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> GASKET AND SEALING SURFACE IN GOOD WORKING CONDITION. NUTS AND BOLTS ARE WRENCH TIGHT.	TRUE		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> MANWAY AND MANWAY NOZZLE: MANWAY HINGE AND HINGE PIN MUST BE PRESENT AND IN GOOD WORKING CONDITION. INSPECT EYEBOLT ATTACHMENT WELDS (EARS/LUGS ON NOZZLE) FOR CRACKS AND DEFECTS. CHECK EYEBOLTS FOR GALLING AND HEX NUTS	TRUE		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> ENSURE 2 SAFETY EYEBOLTS ARE PRESENT AND PROPERLY OPERATE.MUST BE ABLE TO PLACE SEAL THRU AT LEAST ONE EYEBOLT. MANWAY COVER STOP MUST BE PRESENT AND WORKING.	TRUE		clkdp5	01/26/23 08:35
<input checked="" type="checkbox"/> MANWAY COVER, MANWAY NOZZLE SEALING SURFACE, AND MANWAY GASKET, MUST BE INSPECTED AND CHANGED AS NECESSARY TO ENSURE A LEAK FREE PACKAGE.	TRUE		clkdp5	01/26/23 08:35
<input type="checkbox"/> POST INSPECTION	H			
<input checked="" type="checkbox"/> MANWAY SECUREMENT: MANWAY IS CLOSED AND SECURED USING 125 LBS OF TORQUE.	YES		clkdp5	01/26/23 14:36
<input checked="" type="checkbox"/> LEAK TEST: REFER TO TANK CAR LEAK TEST PROCEDURE.	PASS		clkdp5	01/26/23 14:36
<input checked="" type="checkbox"/> BOTTOM SECUREMENT - VALVE HANDLE IS PINNED IN THE CLOSED POSITION AND SEALED.PACKING NUT IS TIGHT AND SHOWS NO SIGNS OF LEAKAGE.BELLY CAP HAS GASKET IN PLACE AND IS WRENCH TIGHT WITH SUITABLE TOOL.	TRUE		clkdp5	01/26/23 14:36
<input checked="" type="checkbox"/> TEFLON TAPE APPLIED TO SECONDARY VALVE NIPPLE, NIPPLE AND VALVE ARE ATTACHED TO BELLY CAP WRENCH TIGHT	TRUE		clkdp5	01/26/23 14:36
<input checked="" type="checkbox"/> SECONDARY VALVE PACKING IS TIGHT AND LEAK FREE AND VALVE HANDLE IS IN THE CLOSED POSITION.PLUG IS TEFLON TAPED AND SECURED TO BELLY CAP OR SECONDARY VALVE,WRENCH TIGHT. INTERNAL HEATER COILS,WHEN PRESENT ON LOADED CAR,ARE LEAK FREE WITH CAPS OR PLUGS TIGH	TRUE		clkdp5	01/26/23 14:36

Rail Car Inspection Sheet

02/6/23

Template: SS-0662 TANK CAR INPSECTION - CLAKE

Car ID: UTLX 205907

Inspection Date: 01/26/23 08:20

Arrv. Date Time: 01/20/23 16:35

Inspection Required	Result	Comments	Inspector ID	Inspect Date
<input checked="" type="checkbox"/> . INTERNAL HEATER COILS ON RESIDUE CARS WILL HAVE CAPS OR PLUGS SECURELY APPLIED. CAPS OR PLUGS NOT REQUIRED ON CARS EQUIPPED WITH EXTERNAL HEATER COILS	N/A		clkdp5	01/26/23 14:36
<input checked="" type="checkbox"/> CAR MUST BE STENCILED EXTERIOR COILED CAPS NOT REQUIRED ON EACH SIDE OF TANK.	N/A		clkdp5	01/26/23 14:36
<input checked="" type="checkbox"/> TOP SECUREMENT: INSURE ALL VALVES ARE CLOSED, ALL FLANGES AND OR PLUGS (WITH TEFLON TAPE APPLIED) ARE INSTALLED AND ARE SECURED WRENCH TIGHT. CLOSE THE MULTIPLE HOUSING COVER AND SECURE CLOSED WITH PIN AND SEAL. APPLY SEALS TO EYEBOLT OF MANWAY.	TRUE		clkdp5	01/26/23 14:36
<input checked="" type="checkbox"/> PLACARDS: THE CORRECT PLACARD OR PLACARDS ARE PLACED ON ALL FOUR SIDES OF CAR.	YES		clkdp5	01/26/23 14:36

TANK CAR CDL INFO FORM

CLEAR LAKE PLANT

Date: 1-26-2023	Material Handler Outside: (Print Name) Dylan Perlmutter	
PRODUCT	BA-15	
LOADING STATION (SPOT)	4-1	
TANK CAR ID (NUMBER)	UTLX 205907	
O2 CONTENT OF TANK CAR BEFORE LOADING	6.1%	
TANK CAR SHELL CAPACITY	30220	
HEEL MEASUREMENT and GALLONS	1206	
LOAD LIMIT on Tank Car	196700	
DESIRED LOAD LIMIT per CUSTOMER	263K	
Measurement for proper fittings completed	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
Vent Valve Fitting Used	SW	
MICRO MOTION METER RESET	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
3/4" CIRCULATION VALVE <u>CLOSED</u>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	
Loading Station Indicator Reading – Gallons	25,782	
Loading Station Indicator Reading - Pounds	194,430	
3/4" CIRCULATION VALVE <u>OPEN</u>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	
Material Handler Outside Verification Signature	DU	
Material Handler Console (PRINT NAME) OSCAR KEPER		
LOAD LIMIT Entered on Computer	196700	
SET POINT – Load using gallons or pounds	28891 / 193805	
Set Point Gallons 200 lbs has the load limit - load or 90% of shell cap - heel	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
Level Probe Tested and Functioning Properly	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
Ground Indication Functioning Properly	YES NO <input checked="" type="checkbox"/> BYPASS	
Verify 3/4" CIRCULATION VALVE <u>CLOSED</u>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	
Set Point Gallons (Computer)	28891	
Set Point Pounds (Computer)	193805	
Total Gallons Loaded (Computer)	25719	
Total Pounds Loaded (Computer)	193846	
Total Net Pounds (Scale Ticket)	194300	
3/4" CIRCULATION VALVE <u>OPEN</u>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	
Material Handler Console Verification Signature	[REDACTED]	

NOTE: THE INFORMATION AND SIGN OFF IN THESE AREAS MUST BE COMPLETED BEFORE LOADING BEGINS See back for CRUIE Fieldbook
Arkema 000012

DOT HAZMAT TRAINING

Brown & Root @ Celanese CLK

Hazmat Employee Training Record and Certification

Name of Employee	Training and Completion Dates (mm/yr)					
	General Awareness	Function Specific	Safety Training	Security Awareness	Transportation Security / In-depth	Emergency Plan (Comm./ Area Specific)
BONILLA DENNIS	6/28/22	6/28/22	6/3/22	6/28/22	6/30/22	7/29/22
BONILLA JULIO	6/28/22	6/28/22	7/21/21	6/28/22	6/30/22	7/29/22
SANDLES MARCUS	6/28/22	6/28/22	7/15/21	6/28/22	6/30/22	7/29/22
SANDLES TONY	6/28/22	6/28/22	10/23/20	6/28/22	6/30/22	7/29/22
ANTHONY RUSSO	12/9/22	12/9/22	12/9/22	12/9/22	12/9/22	12/9/22
OVERSTREET ALEX	11/18/22	11/18/22	11/18/22	11/18/22	11/18/22	11/18/22
GUERRERO RANDY	6/28/22	6/28/22	4/4/22	6/28/22	6/30/22	7/29/22
PUENTE JIMMY	11/23/22	11/23/22	11/23/22	11/23/22	11/23/22	11/23/22
LOPEZ , OSCAR	6/28/22	6/28/22	10/15/22	6/28/22	6/30/22	7/29/22
HATHCOCK MICHAEL	6/28/22	6/28/22	7/30/21	6/28/22	6/30/22	7/29/22
GRISHAM DUSTIN	6/28/22	6/28/22	4/1/22	6/28/22	6/30/22	7/29/22
LOCHRIDGE COREY	6/28/22	6/28/22	6/1/22	6/28/22	6/30/22	7/29/22
McGAHEY DONOVAN	6/28/22	6/28/22	6/10/22	6/28/22	6/30/22	7/29/22
POPE JONATHAN	6/28/22	6/28/22	3/13/20	6/28/22	6/30/22	7/29/22
PALMER DYLAN	6/28/22	6/28/22	4/1/22	6/28/22	6/30/22	7/29/22
SANCHEZ DAMIAN	6/28/22	6/28/22	7/15/21	6/28/22	6/30/22	7/29/22
RITCH CHRIS	6/28/22	6/28/22	4/11/22	6/28/22	6/30/22	7/29/22
VEGA CESAR	6/28/22	6/28/22	11/19/21	6/28/22	6/30/22	7/29/22
BRANDON LOZANO	9/9/22	9/9/22	9/9/22	9/9/22	9/9/22	9/9/22

Location of Training Materials

Celanese 9502 Bayport Blv Pasadena Tx 77507

I certify that the above employees have been trained and tested per 49 CFR part 172 Subpart H

Subject Matter Expert Signature

Sergio Garza

Randy Guerrero

Session	Criteria for each session
General Awareness	(General Awareness - Literature) 1. Hazmat Employee, Classes/Divisions, Marking/Labeling, Placarding, Erg Book (every year)
Function Specific	Special Permits /Exemption Training (every year)
Safety Training	1.Entry Level Progression (Requalification every 3 yrs.) 2.Blue Book
Security Awareness	Security Awareness - Plant (every year)
depth	Transportation Security Training and In - Depth (every year)
CLK Emerg Plan Review	SWP 11-01-01 06 Emerg. Plan Communication, Area Specific (every year)

THIS DOCUMENT IS TO CERTIFY THAT THESE HAZMAT EMPLOYEES HAVE RECEIVED HAZARDOUS MATERIALS TRANSPORTATION TRAINING AND HAVE BEEN TESTED IN ACCORDANCE WITH 49CFR 172.700-172.704.

Arkema 000013

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
PIPELINE AND HAZARDOUS MATERIALS SAFETY ADMINISTRATION



HAZARDOUS MATERIALS
CERTIFICATE OF REGISTRATION
FOR REGISTRATION YEAR(S) 2022-2023

Registrant: ARKEMA, INC.
ATTN: Christina M Kurtz
900 FIRST AVENUE
KING OF PRUSSIA, PA 19406-1308

This certifies that the registrant is registered with the U.S. Department of Transportation as required by 49 CFR Part 107, Subpart G.

This certificate is issued under the authority of 49 U.S.C. 5108. It is unlawful to alter or falsify this document.

Reg. No: 061622550189E Effective: July 1, 2022 Expires: June 30, 2023

HM Company ID: 9009

Record Keeping Requirements for the Registration Program

The following must be maintained at the principal place of business for a period of three years from the date of issuance of this Certificate of Registration:

- (1) A copy of the registration statement filed with PHMSA; and
- (2) This Certificate of Registration

Each person subject to the registration requirement must furnish that person's Certificate of Registration (or a copy) and all other records and information pertaining to the information contained in the registration statement to an authorized representative or special agent of the U. S. Department of Transportation upon request.

Each motor carrier (private or for-hire) and each vessel operator subject to the registration requirement must keep a copy of the current Certificate of Registration or another document bearing the registration number identified as the "U.S. DOT Hazmat Reg. No." in each truck and truck tractor or vessel (trailers and semi-trailers not included) used to transport hazardous materials subject to the registration requirement. The Certificate of Registration or document bearing the registration number must be made available, upon request, to enforcement personnel.

For information, contact the Hazardous Materials Registration Manager, PHH-52, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC 20590, telephone (202) 366-4109.