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CLASS A FIRE TEST - WOOD CRIB TEST (CONT):

NFPA 18, Sec 5.3.4.1
2006 Edition
UL 711, Sec. 7.2

Test Number: 2 0.4% premix concentraion

Net Mass Of Crib (lbs)	147
Calculation: 55% of Crib Mass (lbs)	80.85
Moisture Content (%)	10.7

Event	Time (min:sec)	Observations
Start of Test	00:00	-
Burnout of heptane charge	3:00	-
Application of extinguisher (55% of Crib Mass)	6:42	-
Fire under control or extinguished	0:15 after	-
End of effective discharge	0:35	Coals: [-x] Yes [ ] No Glowing Combustion: [ ] Increasing [x] Decreasing
Re-ignition Time	-	-
End of Test (15 minute max)	15:00	Crib completely extinguished with no chance for reignition.

Results: [X] Acceptable
[ ] Not Acceptable (see Notes)
[ ] No Test (see Notes)

Notes:

Test Performed: 2007-05-23

[X] Tests Conducted by	Michael Lesiak	Michael Lesiak
	Printed name	Signature

Tested by: _____ Date 2008-10-24
Printed Name Signature

CLASS A FIRE EXTINGUISHMENT TESTS - DEEP SEATED FIRE TEST — NFPA 18-2006, 5.3.4.2

PRODUCT SPECIFICATIONS	
Wetting Agent Designation:	Novacool UEF Wetting Agent
Manufacturer's recommended concentration(s):	[x] 0.4% [ ] to be determined by test.

EQUIPMENT, SETUP, AND CONSUMABLE DETAILS			
CYLINDRICAL BASKET		ROD	
Perforated sheet steel? [1]	[x] Yes [ ] No	Steel?	[x] Yes [ ] No
Diameter, mm	114	Diameter, mm	35.1
Height, mm	178	Length, mm	34.5
Dimensions Acceptable? [1]	[ ] Yes [ ] No	Dimensions Acceptable?	[x] Yes [ ] No
Ginned cotton conditioned at 70 ±5°F (21 ±2.8°C) and 50 ±10% relative humidity for at least 24 hours prior to test?			[x] Yes [ ] No

[1] Cylinder of Style 1/2 16F or 1/2 13F expanded and flattened steel sheet complying with dimensions of ASTM F1267. Cylinder bottom (grid) at least 350 mm × 350 mm of Style 3/4 9F expanded & flattened steel sheet complying with dimensions of ASTM F1267. Grid supports cross sectional dimension not greater than 40 mm & located at each corner perpendicular to grid.

DATA WITH WATER AS TEST LIQUID						
Deep Seated Fire Test No.	Test Liquid Quantity, cc	Weight of Cotton for bottom half of basket, g	Weight of Cotton for top half of basket, g	Rod Temperature, °C	Volume of Runoff, mL	Time Duration [2]
1	250	50	50	1100	215.2	[x] Yes [ ] No
2	250	50	50	1100	193.9	[x] Yes [ ] No
3	250	50	50	1100	222.7	[x] Yes [ ] No

[2] Runoff Measured Within 15 minutes following test liquid application?

Notes:

Test Date: 2008-10-24

Tested by: _____ Date 2008-10-24
Printed Name Signature

CLASS A FIRE EXTINGUISHMENT TESTS - DEEP SEATED FIRE TEST (CONT'D)

NFPA 18-2006, 5.3.4.2

VERIFICATION OF SOLUTION CONCENTRATION ([ ] See Penetration Test No.(s): _____)

Deep Seated Fire Test No(s).	Concentrate Quantity, mL	Water Quantity, mL	Solution Quantity, mL	Premix Concentration, %
4-6	4	996	1000	0.4

Note: One premix solution batch may be prepared for a test series.

DATA WITH SOLUTION AS TEST LIQUID

Deep Seated Fire Test No.	Concentration, %	Test Liquid Quantity, cc	Cotton Weight, g		Rod Temperature, °C	Fire Extinguished	Volume of Runoff, mL	Time Duration [2]	Less Runoff than Water
			for bottom half of cylinder	for top half of cylinder					
4	0.4	250	50	50	1100	[x] Yes [ ] No	43	[x] Yes [ ] No	[x] Yes [ ] No
5	0.4	250	50	50	1100	[x] Yes [ ] No	88.7	[x] Yes [ ] No	[x] Yes [ ] No
6	0.4	250	50	50	1100	[x] Yes [ ] No	83	[x] Yes [ ] No	[x] Yes [ ] No

[2] Runoff Measured Within 15 minutes following test liquid application?

Notes:

Results: [x] Acceptable [ ] Unacceptable

Test Date 2008-10-24

Form Issued: 2008-07-30
Form Revised: 2008-08-28

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CLASS B FIRE EXTINGUISHMENT TEST

NFPA 18, Sec 5.3.5, 2006 Edition
UL 711, Sec. 8.2

TEST NUMBER: 5

Product	Novacool U.E.F	Lot No.	06-335
Premix Concentration (%):		0.5	
Test Fuel:		Commercial Grade Heptane	
Test Application Density (gpm/ft^2):		10/17.36 (0.576)	
Nozzle Flow Rate (gpm):		10	
Pan Dimensions (L x W x H) (inches):		50 X 50 X 12	
Freeboard (inches):		6	
Water Depth (inches):		4	
Fuel Depth (inches):		2	
Premix Temperature (°F):		70	
Air Temperature (°F):		70	
Water Temperature (°F):		70	
Fuel Temperature (°F):		70	
Inlet Pressure (psig)	[X] Tanktop [ ] Nozzle	61 psi	
Location	[X] Indoors [ ] Outdoors	Building 3	
Agent Solution Application Time (minutes)		5:00	

Event	Time, min:s	Observations
Preburn:	1:00	-
Agent Solution On:	0:00	-
Extinguishment:	1:25	-
Agent Solution Off:	1:25	-
Test Over:	1:25	Fire completely extinguished

Results: [X] Acceptable
[] Not Acceptable (see Notes)
[] No Test (see Notes)

Notes:

Project No.	07NK08150	File	EX15157	Page	18
LABORATORY DATA PACKAGE				Date	2007-05-22 Through 2007-05-23

OK

Test Performed on May 22, 2007 using aspirated nozzle supplied by customer, modified from Class B fire test no. 1 to give larger bore diameter, 1/16 in. larger.

[X] Tests Conducted by	Michael Lesiak	
	Printed name	Signature

END OF DATASHEET PACKAGE. THIS PAGE INTENTIONALLY LEFT BLANK

Form Issued: 2006-09-28
Form Revised: 2006-09-28