# Test Report

# FIRE TERMINATOR INTERNATIONAL PTE LTD

PROJECT NUMBER:

4788215869.1.1



TEST LOCATION:

UL India Private Limited
Site: UL - Jain Fire Laboratory,
Jain University Global Campus,
Jakkasandra,
Kanakapura Taluk-562112,
Ramanagara District,
Karnataka, India

UL OFFICE:

UL India Private Limited,
Kalyani Platina – Block I,
3rd Floor, No.24,
EPIP Zone, Phase II,
Whitefield, Bangalore,
Karnataka-560066,
India.

Test DISCIPLINE: FOAM CONCENTRATE

## General details

| | | | |
|---|---|---|---|
| **Customer / Applicant** | FIRE TERMINATOR INTERNATIONAL PTE LTD | | |
| **Manufacturer** | FIRE TERMINATOR INTERNATIONAL PTE LTD<br>BLOCK 3015, UBI ROAD 1, #04-266<br>408704, Singapore | | |
| **Program** | Verification Service Inspection | | |
| **Test Lab Location** | UL-JFL | **Refer to Cover page for the UL address** | |
| **Item Under Test** | Foam Concentrate | | |
| **Model** | FT SLAM/FT JN1010 (AFFF) | | |
| **Number of Samples** | 30 liters in 1 Can | | |
| **ULJFL Sample Identification** | 171130135.1 | **Refer Summary of Test results for multiple samples** | |
| **Manufacturer Serial Number (if any)** | 7102113 | | |
| **Condition of Samples on receipt** | Good | | |
| **Date of Receipt** | 30 November 2017 | | |
| **Applicable Standard** | ICAO Doc 9137-AN/898 Airport Services Manual, Part 1-Rescue and Firefighting, Fourth Edition, 2015 | | |
| **Date of Testing (Start date)** | 5 December 2017 | **End Date** | 6 December 2017 |
| **General ambient condition** | **Temperature in °C** | | 25 ± 5°C |
| | **Relative humidity in %** | | Not Applicable |
| **Date of Reporting** | 21 December 2017 | | |
| **Test In-charge** | Manjunath Anandan | | |

# Fill in the rows with information or add hyphen (-)

| | |
|---|---|
| Syed Salahuddin<br>Associate Project Engineer | Jesu Prakash<br>Senior Project Engineer |
| **Witnessed by** | **Reviewed by** |

# TEST CONDITIONS AND TEST RESULTS

## PHYSICAL PROPERTIES

The physical properties measured under a controlled lab condition.
Customer declared Minimum Storage Temperature is 35$^0$F (1.7$^0$C)

Results:

| Parameter | Results (as observed) |
|---|---|
| pH | 9.88 @ 25 $^0$C |
| Specific Gravity | 1.125 |
| Sedimentation | 0.26 % |
| Viscosity | 5.86 mm sq./sec |
| Surface tension | 4.5 mN/M |

## PERFORMANCE PROPERTIES

Expansion and Drainage Time

Test Conditions: Ambient Temperature: 28 $^0$C,
Premix Temperature: 26 $^0$C

Expansion: 7.65
Drain Time: 2 minutes 02 seconds

Fire Test according to ICAO requirements, Level B

| Designation | Unit | Values |
|---|---|---|
| Fire Test Date | yy-mm-dd | 2017-12-05 |
| Concentrate | % | 6 |
| Type of Water | | Fresh Water |
| Foam Nozzle (UNI86) | lpm | 11.40 |
| Fire Tray | m$^2$ | 4.5 |
| Application Rate | Lpm/m$^2$ | 2.5 |
| Ambient Temperature | $^0$C | 29 |
| Fuel Temperature | $^0$C | 29 |
| Water Temperature | $^0$C | 29 |
| Foam Solution Temperature | $^0$C | 26 |
| Wind Speed | m/s | 1.3 |
| Fire Test | Unit | Results |
| Type of Fuel | | Kerosene |
| Preburn Time | Seconds | 60 |
| Start Foam Solution | min:sec | 00:00 |
| 90% control | min:sec | 00:37 |
| 99% control | min:sec | 00:49 |
| Extinguishment | min:sec | 00:56 |
| Stop Foam Application | min:sec | 02:00 |
| Burnback | Unit | Results |
| Waiting Period | min:sec | 02:00 |
| Start Burnback | min:sec | 00:00 |
| Burnback, >25% of area | min:sec | >15 mins |

**Requirements for extinguishing time and Burnback time as per ICAO**

Time to Extinction: ≤ 1 minute

Time to Burnback: ≥ 5 minutes for 25% of the surface

**Comments to the fire test results**

After 15 minutes, it was decided to stop the Burnback test and extinguish the Burnback tray.

The time to complete extinguishment was 56 seconds and the time to Burnback was > 15 minutes.

"Results meet the ICAO, Level B Requirements"

******End of Report******