

Flame, Smoke, Toxicity and Heat Release/Combustion Testing Amphenol Silicones 9-9302 (insert) and 9-9302-1 (grommet)

Summary of Intertek Test Reports dated March 2015 Rev:N/A;
101998884MID-001, 101998884MID-002, 10198884MID-003, 101998884MID-004, 102059462MID-001,
102059462MID-002, 102059462MID-003, 102059462MID-004,

Flammability (*Surface Flammability of Materials Using a Radiant Heat Energy Source*) -

- Per ASTM E 162-2013 – Radiant Index Performance criteria $I_s \leq 35$
Radiant Panel Index; 9-9302=6.33, 9-9302-1=9.92.
- Per NFPA 130(2010) - Radiant Index Performance criteria ≤ 25
Radiant Panel Index; 9-9302=5, 9-9302-1=10.

Smoke Density (*Smoke Optical Density of Smoke Generated by Solid Material*) –

- Per ASTM E 662-13d – Performance criteria/Results;
Flaming mode-
Ds(1.5) ≤ 100 /9-9302=21.0, 9-9302-1=10.0
Ds(4.0) ≤ 200 /9-9302=65.3, 9-9302-1=30.0
Dm ≤ 300 /9-9302=72.7, 9-9302-1=65.0
Non-Flaming mode-
Ds(1.5) ≤ 100 /9-9302=1.0, 9-9302-1=0.3
Ds(4.0) ≤ 200 /9-9302=19.3, 9-9302-1=11.3
Dm ≤ 300 /9-9302=53.0, 9-9302-1=59.0
- Per NFPA 130(2010) – Performance criteria/Results;
Ds(4.0) < 100 /9-9302=65.3, 9-9302-1=29.7

Heat Release Rate (*Standard Test Method for Heat and Visible Smoke Release Rates for Materials and Products Using an Oxygen Consumption Calorimeter*) -

- Per ASTM E1354-14@ 50 kW/m²– Performance criteria/results;
Avg HRR (180)/9-9302=105.49, 9-9302-1=87.69
Peak HRR/9-9302=157.62, 9-9302-1=113.86
Effective heat of combustion MJ/kg (BTU unit)/9-9302=36.50, 9-9302-1=65.38
- Per NFPA 130(2010) – Performance criteria/Results;
Heat release Average;
<100 kW/m² (180)/9-9302=105.49, 9-9302-1=87.69
Smoke Extinction Average;
<500 m²/kg/9-9302= -12.65, 9-9302-1= -21.10

Note: No specification requirement for sample thickness which, per test lab, directly affects results.

Amphenol Corporation

Amphenol Industrial Operations

40-60 Delaware Avenue
Sidney, NY 13838
USA

Tel: +1 607 563 5011

Toxic Gas Generation (*Test Method for Toxic Gas Generation by Materials on combustion*) -

- Per BSS 7239 – Performance criteria/results;

CO (PPM)/9-9302=59.2, 9-9302-1=26.85

HCL (PPM)/9-9302=none detected, 9-9302-1=none detected

HCN (PPM)/9-9302=none detected, 9-9302-1=none detected

HBr (PPM)/9-9302=none detected, 9-9302-1=none detected

HF (PPM)/9-9302=none detected, 9-9302-1=none detected

NO (PPM)/9-9302=none detected, 9-9302-1=none detected

NO2 (PPM)/9-9302=none detected, 9-9302-1=none detected

SO2 (PPM)/9-9302=none detected, 9-9302-1=none detected

Amphenol
Industrial Products Group

www.amphenol-industrial.com