

**N°0077022-S****Performance Test Report****Product:** SOFORD PPSD**Subject of Request:** Performance Test Report**Specifications:** FORD – STD N° ES-XU5T-14A099-AA

§	TESTS	REQUIREMENTS	RESULTS	Pass	Failed
	1 - Heat Ageing	No tubing crack or deformation	No tubing crack or deformation	X	
	2 - Flammability	100 mm/min (max)	54 mm/min	X	
	3- Fluid resistance	No tubing crack or deformation	No tubing crack or deformation	X	

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	<b>LABORATORY TEST REPORT</b>	<b>AQ/OG-DEL/049/F</b> Annex to the procedure AQ/PO-DEL/231-37
<b>N°0077022-S</b>	<b>Performance Test Report</b>	

### **1 - Heat Ageing**

<u>Test condition :</u> <ul style="list-style-type: none"> <li>- Aging 30 samples of 380mm in air oven for 3000H at 100±3°C</li> <li>- Check the behaviour of 5 samples at 500, 1000, 1500, 2000, 2500 and 3000 hours.</li> <li>- Wrap the tubing around a mandrel (diameter = 4X the inside diameter tubing)</li> <li>- Rotate the tubing at 1 turn per 10 seconds</li> </ul>	
<u>Requirement :</u>  No tubing crack or deformation.	

Equipment - Hot Chamber - AGIN026

### **Results :**

Time	500h	1000h	1500h	2000h	2500h	3000h
Result	No crack	No crack	No crack	No crack	No crack	No crack

**N°0077022-S**
**Performance Test Report**
**2 - Flammability**
Test condition :

This test has been done according to ISO 3795 / SAE J369 specification for horizontal flammability.

- This test was performed on 5 samples of 300mm length.

Requirement :

Burning speed 100 mm/min (max



Equipment - PERF289

**Results :**

	1	2	3	4	5	AVERAGE
Burn Time (sec.)	235	227	212	220	221	-
Burn Length (mm)	200	200	200	200	200	-
Speed (mm/min.)	51	53	57	55	54	<b>54</b>

N°0077022-S

**Performance Test Report**
**3 - Fluid resistance**
Test condition :

- Tubes: 380mm
- Spray the test specimen until the tube surface is thoroughly soaked
- Remove and allow it to drain vertically for 20 minutes
- Bend the specimen about a 40mm diameter mandrel
- Maintain the specimen bent about the mandrel and inspect after 24H, 48H and 72H

Requirement :

No tubing crack or deformation.



Equipment - Hot Chamber

**Results :**

Test fluid		Temp	Pass or Fail
Name	Reference fluid		
ENGINE COOLANT	ASTM D471, service fluid 104	90±3°C	Pass
BRAKE FLUID	SAE RM-66-04	23±5°C	Pass
GASOLINE	ISO 1817, Liquid C	23±5°C	Pass
DIESEL FUEL	ASTM D471, Ref fuel F	23±5°C	Pass
METHANOL	ASTM D471, Ref fuel K	23±5°C	Pass
TRANSMISSION FLUID	CITGO #33123	90±3°C	Pass
POWER STEERING FLUID	ASTM D471, IRM 903	90±3°C	Pass
ENGINE OIL	ASTM D471, IRM 902	90±3°C	Pass
ENGINE CLEANER	Gunk	23±5°C	Pass
BATTERY ACID	H2SO4 (s.g. 1.260 +/-0.005)	23±5°C	Pass
WINDSHIELD WASHER FLUID	C9AZ-19550-A	23±5°C	Pass

**Conclusion:** After testing done, the product complies with the requirements of the standard.