

## **Translation of original document**

### **CSTB Test report AC98-140**

Marne-la-Vallée, France, February 17, 1999

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### **Purpose**

Determine the coefficient of acoustical absorption  $\alpha_s$  of a coating.

### **Reference texts**

The measurements are performed in accordance with the norm NF EN 20354 completed by the norm NF EN ISO 11654 for the expression of the value  $\alpha_w$

### **Test samples**

Date of reception at the Test department: October 6, 1998

Origin: ASONA

Implementation: CSTB

### **Recapitulative list of tests**

Celbar Isocel, thickness = 30 mm + Sonaspray FC, thickness = 8 mm

Sonaspay K-13 Standard, thickness 25 mm

**Date: November 19, 1998**

**Manufacturer, Inquirer: ASONA**

**Designation: Celbar Isocel + Sonaspray FC**

**Chief characteristics:**

Measurements in mm: 3300 x 3600

Thickness in mm: 30 + 8

Surface mass (coating + support) in kg/m<sup>2</sup>: 12.4

**Results**

<u>f (Hz)</u>	<u><math>\alpha_1</math></u>
100	0.10
125	0.17
160	0.28
200	0.39
250	0.56
315	0.77
400	0.87
500	0.95
630	0.97
800	0.98
1000	0.95
1250	0.93
1600	0.92
2000	0.89
2500	0.88
3150	0.87
4000	0.86
5000	0.84

$$\alpha_w = 0.85$$

**Date: November 20, 1998**

**Manufacturer, Inquirer: ASONA**

**Designation: Sonaspray K-13 Standard**

**Chief characteristics:**

Measurements in mm: 3300 x 3600

Thickness in mm: 25

Surface mass (coating + support) in kg/m<sup>2</sup>: 12.0

**Results**

<u>f (Hz)</u>	<u><math>\alpha_1</math></u>
100	0.05
125	0.11
160	0.16
200	0.22
250	0.33
315	0.56
400	0.70
500	0.82
630	0.92
800	0.93
1000	0.93
1250	0.94
1600	0.93
2000	0.91
2500	0.93
3150	0.93
4000	0.93
5000	0.89

$$\alpha_w = 0.65 \text{ (MH)}$$