



# Cleanroom<sup>®</sup> Suitable Materials

**CNES**  
**Laboratories & Expertise Dpt**  
**Report No. CN 1702-878**

**PA2241 FR**  
**Outgassing VOC (23°C/90°C):**  
**ISO-ACC<sub>m</sub> Class < -9.6 / tested**

## FLOORING & COATING

### Outgassing Behavior (VOC)

### Qualification Certificate

We hereby certify that the material stated above, provided by

**CNES - Laboratories & Expertise Dpt**  
Toulouse, France

has been awarded the Fraunhofer IPA CSM Certificate of Qualification with the report number CN 1702-878.

The outgassing behavior PA2241 FR (color: white) at the stated temperatures was investigated according to VDI 2083-17. Based on the outgassing rates determined for the specific surfaces, the following material classification was made for the corresponding contaminant group:

Test temperature	Contaminant group	Specific emission rate [g/m <sup>2</sup> s]	ISO-ACC <sub>m</sub> Class (x)
23 °C	VOC	< 2.8 x 10 <sup>-10</sup>	-9.6
90 °C	Amines	not detectable	--
	Organophosphates	not detectable	--
	Siloxanes	not detectable	--
	Phthalates	1.0 x 10 <sup>-9</sup>	--

Detailed information regarding specific product data such as manufacturing date, color, and serial number as well as test environment and parameters can be obtained from the CSM test report issued by the Fraunhofer-Gesellschaft.

Stuttgart, March 8, 2017

on behalf of   
Frank Bürger, Project manager Fraunhofer IPA

The validity of this certificate applies only to the mentioned product in this particular condition for a duration of 5 years.

Further information:

[www.tested-device.com](http://www.tested-device.com).

Please visit [www.ipa-csm.com](http://www.ipa-csm.com).