



TREMCO CPG MALAYSIA
Report No. TR 2210-1354

Cleanroom[®] Suitable Materials

Flowshield ESD CR Conductive
Outgassing VOC / SVOC
ISO-ACC_m Class -5.9 / -9.1

FLOORING & COATING

Single product
Outgassing Behavior
VOC/SVOC

Qualification Certificate

We hereby certify that the material stated above, provided by

TREMCO CPG MALAYSIA SDN BHD
Kuala Lumpur, Malaysia

has been awarded the Fraunhofer IPA CSM Certificate of Qualification with the report number TR 2210-1354.

The outgassing behavior of Flowshield ESD CR Conductive (color: charcoal) at the stated temperatures was investigated according to VDI 2083 Part 17 and ISO 14644-15. Based on the outgassing rates determined for the specific surfaces, the following material classification was made for the corresponding Contaminant Category:

Contaminant Category (x)	SER _a ¹⁾ 23 °C [g/m ² s]	SER _a ¹⁾ 90 °C [g/m ² s]	ISO-ACC _m Class (x) based on 23 °C
VOC	1.3 x 10 ⁻⁶	Due to overload of the analytical system no quantitative result can be reported	-5.9
SVOC	8.5 x 10 ⁻¹⁰		-9.1
Amines	1.1 x 10 ⁻⁷		--
Organophosphates	< 2.8 x 10 ⁻¹⁰		--
Siloxanes	< 2.8 x 10 ⁻¹⁰		--
Phthalates	< 2.8 x 10 ⁻¹⁰		--

¹⁾SER_a: Area-specific emission rate

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Stuttgart, March 3, 2023
Place, date of first document issued

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Place, current date

on behalf of 

This document only applies to the named product in its original state and is valid for a period of 5 years from the date the first document was issued. The document can be verified under www.tested-device.com.

Detailed information and parameters of the test environment can be found in the Fraunhofer IPA test report.