



SCHUNK GmbH & Co. KG
Report No. SC 0804-432

Cleanroom[®] Suitable Materials

PET-GL

Particle (vs. X8CrNiS18-9): ISO 4
TVOC (23°C/90°C): not tested

Robotics & Handling

DUPLICATE

Qualification Certificate

We hereby certify that the material stated below which was provided by

SCHUNK GmbH & Co. KG

Bahnhofstr. 106 - 134
D-74348 Lauffen/Necka

has been awarded the Fraunhofer IPA CSM Certificate of Qualification with the report number SC 0804-432.

The tests performed in accordance with CSM procedures included particle emission during the application of frictional stress and determination of the ESD value (surface resistance).

Material (Mat.)	PET-GL	
Particle	Ball-on-disc test; Normal force 20 N Mat. vs. X8CrNiS18-9	ISO Class 4 (see ISO 14644-1)
Outgassing at 23 °C / 73 °F	not tested	-
Outgassing at 90 °C / 194 °F	not tested	-
ESD	Surface resistance	2.0 x 10 ¹³ Ohm

Detailed information regarding the test environment and parameters used can be obtained from the CSM Test report number SC 0804-432 issued by the Fraunhofer-Gesellschaft.

The validity of this certificate is indefinite. For more information, visit our website at www.ipa-csm.com.

Stuttgart, Germany, November 11th 2008

i. A.

Signature project manager



Fraunhofer
Institut
Produktionstechnik und
Automatisierung