



# QA

## Cleanroom usage

### *Internal Procedure*

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*Prepared by:*

<i>Name</i>	<i>Company</i>	<i>Date</i>
Gilles Feusier	SIU	01.01.24
Udriot Mathieu	eSpace	05.11.24

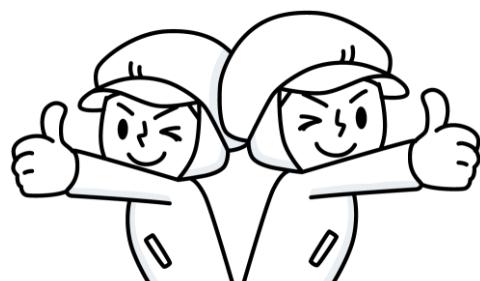
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*Checked/Approved/Signed by:*

<i>Name</i>	<i>Company</i>	<i>Date</i>
Gilles Feusier	SIU	01.01.24



## 1 Edition List

Issue/Rev.	Date	Chapter	Modifications
1/0	18.12.2024	-	Initial edition
1/1	01.01.2024	Document	Swiss Space Center changed to Space Innovation
2/0	05.11.2024	Document	Translation to English

## 2 Table of Content

1	Edition List	2
2	Table of Content	2
3	Introduction	2
4	Definition	2
4.1	<i>Acronyms and Abbreviations</i>	2
5	Description	3
5.1	<i>Rules and behaviour in the cleanroom</i>	3
5.2	<i>Entering the cleanroom</i>	3
5.3	<i>Exiting the cleanroom</i>	4
5.4	<i>Change of cleanroom clothing</i>	4
5.5	<i>Material entry</i>	4

## 3 Introduction

This procedure describes the rules for use and **behaviour** in the cleanroom. All cleanroom users must respect them.

## 4 Definition

### 4.1 Acronyms and Abbreviations

ECSS: European Coordination for Space Standardization

EPFL: Ecole Polytechnique Fédérale de Lausanne (Swiss Federal Institute of Technology)

IPA: Isopropyl alcohol

MPP: Materials Parts and Processes

N/A: Not Applicable

TBC: To Be Confirmed

TBD: To Be Defined

## 5 Description

### 5.1 Rules and behaviour in the cleanroom

1. Each person authorized to work in a cleanroom is trained and qualified.
2. Only the equipment necessary for the work can be brought into the cleanroom.
3. In particular, it is prohibited to bring: food, drinks, chewing gum, cigarettes, portable music players, cardboard, newspapers, etc.
4. The use of makeup products, powder, gel, nail polish, etc., is also prohibited.
5. Any visitor (employee/student) who must enter occasionally must be accompanied by a qualified person.
6. Visits should be limited to a maximum of two. It is best to show the cleanroom from the outside through the glass wall.
7. The qualified person accompanying the visitor(s) must ensure that the procedures in force are respected throughout the duration of the visit.
8. Any person affected by their health (dermatological, viral, intestinal, respiratory illness, flu, etc.) is required to notify the person responsible.
9. Entry and exit from the cleanroom are only authorized via the sas.
10. It is necessary to avoid having incoming people in the sas at the same time as outgoing people.
11. A maximum of 4 people can work simultaneously in the cleanroom.
12. You must move slowly and avoid unnecessary movement.
13. Dirty gloves, following a handling or process error, must be changed.
14. Cleanroom clothing should be changed as soon as it becomes punctured, torn or stained.
15. Any anomaly, stoppage or breakdown observed in the ventilation system or other equipment related to the cleanroom must be reported to the person in charge.

### 5.2 Entering the cleanroom

#### Before entering the sas

1. Leave all 'useless = bulky' clothing (sweater, jacket, etc.) outside the sas.
2. Wearing woolen clothing is prohibited.
3. Wearing socks is mandatory.

#### In the sas

1. Put on the charlotte. Hair and ears must be covered completely.
2. Put on the cleanroom suit. Contact of the upper parts of the suit, sleeves, cuffs, collar, or hood, with the ground must be avoided.

3. Put on blue overshoes.
4. Check the sticky mat. If it is dirty, replace the sheet with the next one.
5. Put on the gloves without touching the exterior surface, then disinfect them before entering the cleanroom.
6. Walk at least 2 steps on the sticky mat.

### **5.3 Exiting the cleanroom**

Do not remove your gloves, they must be kept on during the entire undressing phase!

1. Remove the suit and put it away (unless reusable suit).
2. Avoid letting the upper parts of the reusable suit, sleeves, cuffs, collar or hood, touch the ground.
3. Remove the cap and overshoes then throw them in the trash.
4. Remove gloves and throw them in the trash.

### **5.4 Change of cleanroom clothing**

Suits : **1 x per month**, but must be changed in case of holes, tears or stains.

Gloves : **1 x per entry**, but change if they are dirty, holed or torn.

Charlotte : **1 x per entry**, but change if it is dirty, holed or torn.

### **5.5 Material entry**

1. All material to be entered into the cleanroom must be clean and must be introduced through the material entry airlock (if necessary, use the ultrasonic bath and IPA).
2. For components/instruments that are delivered clean in double packaging, the external packaging (bag) is removed and the material with its internal packaging (clean) is entered into the material airlock.
3. The other components/instruments, in an unknown or unclean state, are cleaned (for example use the ultrasonic bath and IPA according to the appropriate procedure).