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## Safety Instruction for S1 Laboratories



### 1. Area of Validity

The laboratory regulations are to be made known in all areas, placed out for viewing and handed out to all new employees before they start their employment activities. The employees confirm by signature that they have received and read a copy of the laboratory regulations, that they have been instructed and that they will adhere to the regulations.

### 2. Responsible People and Important Contacts

Company Doctor: Dr. Riccabona                      0664/5210561  
Emergency Doctor/ Emergency Rescue: 144  
Fire Brigade:    122  
Poison Control Centre:                                01/406 43 43

### 3. Genetic Work

In laboratories for which these laboratory regulations are valid, only genetic work at safety level 1 is carried out: the genetic work includes, in addition to the production, also the use, multiplication, storage, destruction or disposal of genetically modified organisms. If organisms are in risk group 1 this means that, when correctly handled in accordance with this job control statement, no hazard is to be expected for the environment or for people with healthy immune systems.

### 4. Protective Measures, Rules of Conduct and Hygiene Measures:

#### a. Access Regulations:

Only people who have demonstrably been instructed about the hazards and necessary project-specific safety measures, before starting their activity and then at yearly intervals, workplace-specifically and based upon the job control statement may work in the laboratory.

Visitors may only enter the laboratories after agreement with the laboratory management and in the presence of instructed employees.

#### b. Working Regulations:

Before starting work, each laboratory employee is to be informed about the location and function of disinfectants, hygiene plan, body showers and eye douches, first-aid facilities, fire-extinguishing equipment and about escape and rescue routes.

All laboratory rooms are to be kept tidy and clean. Only the devices and materials that are actually required should be on the work tables. The stocks are to be stored in the rooms or cupboards provided for them, and must not obstruct the escape route (corridor). When dealing with hazardous substances (chemicals, flammable liquids, pressurised gases, etc.) the protective measures for these are to be taken.

The safety data sheets must be set out in every laboratory where they can be viewed.

The doors of the laboratories must be kept closed. Windows can be temporarily opened for ventilation purposes.

Pipetting aids are to be used. Pipetting with the mouth is strictly forbidden.

The use of the desk workplaces in the laboratories is restricted to the logging of the experiments. Neither laboratory activities nor office activities beyond logging may be carried out at the desk workplaces.

#### Hygiene Measures (see hygiene plan in each laboratory)

Foodstuffs, drink, tobacco or cosmetics must not be kept within the laboratories.

In the laboratories, it is not permitted to eat, drink, smoke or snort anything.

All work surfaces are to be cleaned and disinfected after the completion of work.

After the completion of work, hands must be washed with soap.

In the laboratories, gowns / tunics and lab shoes (sturdy and closed at the front) are to be worn.

### **5. Conduct in the Event of Danger**

- Keep calm and refrain from acting hastily!
- Warn people who are in danger, if necessary request that they leave the rooms!
- End endangered or hazardous experiments, if necessary switch off gas, electricity and water!
- The Laboratory Director is to be informed in the event of all emergencies!

#### 5.1 Fire

In the event of smaller fires, the fire is to be extinguished by means of the fire-extinguishing equipment to be found in the rooms. Otherwise, the valid emergency plans are to be adhered to.

- **Fire Brigade: 122**

#### 5.2 First Aid

a) Injuries:

- If possible, wounds are to be disinfected and bound during provision of first aid.
- Injuries are to be reported to the Laboratory Director straight away.
- In the event of the influence of harmful substances, or suspicion of this, a doctor is to be informed. **Company Doctor Dr. Riccabona Tel.: 0664/5210561**
- If, due to the "spillage of chemicals", a risk of contamination arises for you or other employees, **get HELP !**
- Leave the laboratory, close all doors and call help if the following occurs:
- In the event of fire or the possibility of a fire - dial **122**

- Severe injuries or dangerous chemical pollution – dial

### **122 and 144**

- In the event of an uncontrollable situation – call **122 and 72200**
- If unknown chemicals are involved - call **122 and 72200**.

## **6. Correct Disposal:**

Syringes, canulas, blades, needles, lancets, scalpels etc. should only be used if absolutely necessary. For disposal, they are to be gathered in piercing-resistant, autoclavable containers and autoclaved.

All durables (pipets, reaction vessels, etc.), that have come into contact with human material (serum, urine, blood, etc.), are to be gathered in separate waste containers and autoclaved before disposal.

Keep liquid waste separate from solid waste.

## **7. Other Regulations**

### **7a. Ethidium Bromide and Propidium Iodide:**

Carcinogenic Effect of Ethidium Bromide/ Propidium Iodide

Carcinogenicity:

In the testing of harmful working materials, ethidium bromide / propidium iodide have been categorised as working materials suspected of causing cancer (carcinogenic). Any contact with them whatsoever is therefore to be absolutely avoided.

Work exclusively with gloves:

When handling ethidium bromide / propidium iodide the use of nitrile gloves is absolutely required, because the substances can be absorbed via the skin.

### **7b. Damage to Eyes and Skin Due to UV Light**

Face protection:

In order to make e.g. ethidium bromide-coloured DNA/RNA visible, the gel is exposed to UV light. UV light can, in high doses, cause damage to eyes and skin. For this reason, the illuminator must only be switched on when appropriate face protection (UV protection) is worn.

### **7c. Working with Biological Substances:**

Before you begin working with biological substances, make sure you are familiar with the health hazards related to them!

All activities should be carried out in such a way that the formation of aerosols can be prevented as far as possible.

After completion of the work and before leaving the work rooms, hands must be thoroughly washed, and if necessary disinfected and greased.

Workplaces should always be clean and orderly. Only the devices and materials that are necessary should be kept on the work tables. Refill materials must be stored in suitable places and/or in cupboards.

### **7d. Liquid Nitrogen:**

Skin contact with liquid nitrogen can lead to cold burns and frostbite. Especially the eyes can be damaged even by small splashes of liquid nitrogen. When dealing with liquid nitrogen, one should therefore wear personal protective equipment consisting of the following parts:

- Clothing that covers the arms and legs completely,
- closed shoes,
- face protection,
- cold protection gloves.

Danger of Suffocation: If the oxygen content of the air falls due to mixing with nitrogen, one can become unconscious without warning when the oxygen level drops below 10% volume.

Sufficient ventilation should therefore always be ensured in rooms in which work is carried out with liquid nitrogen.

7e.Pregnancy:

Immediately after becoming aware that they are pregnant, female employees are to inform the employer and Laboratory Director of the pregnancy. The employee is also to notify the employer and Laboratory Director of a premature end of the pregnancy.

You can find special information on maternity protection for work in the laboratory at:

[https://www.i-med.ac.at/stst\\_sicherheit/docs/Information-fuer-schwangere-MitarbeiterInnen.pdf](https://www.i-med.ac.at/stst_sicherheit/docs/Information-fuer-schwangere-MitarbeiterInnen.pdf)

**8. Obligatory Adherence to Rules:**

Adherence to the rules of conduct set out here is obligatory. Non-adherence can, after two verbal warnings and a single written warning, result in dismissal from employment and in special cases to a charge with the Health and Safety Executive.

I hereby confirm that the above points have been explained to me and that I have understood them. I furthermore confirm that a copy of these instructions has been handed out to me.

\_\_\_\_\_  
Place and Date

\_\_\_\_\_  
Employee's First Name and Surname

\_\_\_\_\_  
Employee's Signature