KTH Bioteknologi

Safety rules concerning working in the lab at the School of Biotechnology, AlbaNova (floor 3 and house 10)

You are obliged to know about and follow the safety rules!

General Notes

Prevent accidents by

A carefully study the safety rules.

B considering the potential risks associated with all experiments and chemicals. Read the SAFETY INFORMATION for all chemicals marked with any of the following symbols:

Explanations for the symbols can be found above the mailboxes.

Safety information is found at https://secure.port.se/alphaquest/app_kth (click ”produktregister” without login and search for the chemical.)

C keeping your workspaceCLEAN and TIDY.

D using the appropriate safety equipment such as lab coat, goggles, gloves and pipette filler when needed.

E always reporting accidents or incidents to your tutor/manager so that future accidents can be avoided.

F avoid eating and drinking in the lab.

Reduce the consequences from an accident by

A knowing where first aid kits, emergency showers, fire extinguishers, fire blankets and main electrical switches are placed.

B knowing how to contact ambulance and fire fighters.

C knowing the basics about taking care of an injured person.

D not ignoring small accidents, which may have severe consequences if not treated properly.

Safety equipment

In the lab you can find first aid kits, emergency showers, eye showers, fire extinguishers and fire blankets. In the lab you will also find main electrical switches and main switches for gas. Make sure that you know how these works so you are able to switch off the power or turn off the gas in case of emergency.

If a serious accident occurs

Ambulance or fire fighters can be contacted by calling **00 112** and demanding "**Ambulance**" or " **Fire fighters**". Our address is Roslagslagsvägen 30D (level 3) or Roslagstullsbacken 15 (house 10). Send someone to the given address to show the way to the accident/injured person. Do not forget to also call KTH internal emergency number to inform about the accident.

If the fire alarm goes of, our **rendezvous point** is the bus station outside the main entrance on floor 5.

General rules for taking care of a severely injured person.

In case of severe accident the person involved may turn into chock. The symptoms are paleness, sweating, weak breathe and fast heart rate. This condition may be life threatening.

1. It is of outmost importance that you keep yourself calm. It calms the injured person and prevents panic to be spread at the department.
2. Make sure the person can breathe properly. Clear the airways if blocked. If the person is unconscious, place him/her on the side to avoid choking. If not breathing, start mouth-to- mouth resuscitation.
3. Stop major bleedings, if needed with pressure bandages and the injury elevated.
4. Place the injured person lying on the side and keep the head low to enable circulation of blood in the brain.
5. Keep the injured person warm but avoid over heating. Treat him/her carefully and make sure the ventilation is good.
6. Do not give anything to drink since it might cause trouble for an potential operation. Moisten lips if wanted.
7. Be prepared to inform emergency personnel about the accident.

Eye injuries

Splashes from acid, bases and most other chemicals can be removed by rinsing with vast amounts of water for at least 15 minutes. All eye injuries should be examined by a doctor.

Poisoning

In case of poisoning always call 00 112 and ask for Giftcentralen
NB: If BASES, ACIDS or PETROLEUM products are swallowed, do NOT induce vomiting!
For BASES and ACIDS, dilute by drinking vast amounts of water. If PETROLEUM products are swallowed, quickly bring the person to hospital.

If poisoned by gas, quickly bring the person into fresh air. If the injured person suffers from

respiratory arrest, proceed with first aid (artificial respiration) and quickly bring the person to hospital. If irritants are inhaled, avoid physical exercise to eliminate formation of lung edema.

Electrical injuries

1. Cut the power off! If this is not possible, assist the victim by releasing him/her with an isolated tool, a dry wooden handle, a dry lab coat or similar. A PERSON IN CONTACT WITH CURRENT IS NORMALLY PARALYZED AND NOT ABLE TO MOVE!
2. Start first aid immediately if needed. Call for help from emergency personnel and look after the person until they arrive. There might be a risk of heart failure up to 15 minutes after electric injury.
3. Burns are treated as described below.

Burns and corrosive injuries

In case of fire in clothes or hair, put out the fire using emergency shower or fire blanket. Use vast amounts of water to cool down the burn as soon as possible for at least 15 minutes

Less serious injuries can be disinfected and handled with bandage/plaster. Do not puncture any blisters due to the risk of infection.

Serious burns (charred skin or if the total exposed area is bigger than the pal of your hand) should always be treated in a hospital. Hospital care is always needed in case of burning clothes.

Corrosive injuries caused by strong acids or bases are treated by VAST AMOUNTS of water.

Other things

If you are uncertain about any of the steps in your experiment you should ask your supervisor/manager.

For safety reasons you should not work alone in the lab.

Do not place flasks close to an edge of the lab bench as they easily could fall down.

If you are handing over a flask with something potentially harmful, you should make sure that the flask is properly closed and that the receiving person has a good grip of the bottle.

When using a centrifuge, it is important to load the rotor evenly. Tighten the lid properly, since this will ensure that the rotor is correctly placed.

Make sure to keep your workspace tidy and clean. Wipe off water and spilled chemicals. Be careful with INFLAMMABLE gases and SOLVENTS. Do not throw harmful solvents in the sink but pour them into advised bottles.

If there is a risk of splashes or splinters do use goggles. Mouth pipetting is forbidden.

When diluting an acid, **put the acid in the water** while stirring, never the opposite. Always use goggles.

Glass waste is put in dedicated containers marked “glasavfall”.

There are many kinds of hazardous waste. These are put in dedicated containers. Find out which kind of waste you have and act thereafter. Biological waste is considered as hazardous waste according to our rules, i.e. agar plates should be wrapped with parafilm before they are put in dedicated containers.

If you are to work in the freezer rooms, always tell a colleague where you are and when you are expected to be finished.

Common ”safe” microorganisms can cause illness for someone who is sensitive or has reduced immune system. Therefore be careful in all aspects also when working with ”safe” microorganisms.

Be careful when using the autoclave. Do not open it while there is a high pressure in the chamber. Even when the pressure is normal hot steam can cause injuries.

Agreement for following the safety rules*

I have read and understood the content of the safety document above and agree upon it.

Name **Date**

Signature

*After signing the agreement hand in this pages to the HR coordinator of the Divisions