



WORK INSTRUCTION FOR HYDROFLUORIC ACID (hydrogen fluoride or other fluorinated acids)

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Work instruction
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- H300 Fatal if swallowed
- H310 Fatal in contact with skin
- H314 Causes severe skin burns and eye damage
- H330 Fatal if inhaled

USE

- Read safety data sheet before the chemical is used.
- Working with hydrofluoric acid should never be done alone and should always take place during normal working hours.
- Working with hydrofluoric acid with concentration > 1% **should** take place in a fume cupboard.
- Before hydrofluoric acid is used, have calcium gluconate gel and calcium tablets available in preparedness.
- The laboratory shall have an emergency shower.
- Pregnant women **should not** work with concentrated solutions (> 1%). See also separate work instruction for pregnant and breastfeeding women.

SAFETY EQUIPMENT

- When working with such chemicals, lab coat, plastic apron, safety goggles, face shield, boots and Barrier gloves must be used. An overview of the most common chemicals and glove type can be found [here](#).
- First aid kit.

STORAGE

- Chemicals that are in regular use must be [stored](#) in approved chemical cupboards in the laboratory. Chemicals that are not in daily use must be clearly marked in accordance with the [labelling regulations](#) (NO only) and kept in lockable storage rooms designed for the type of chemical in question. It should be noted that some chemicals cannot be stored [together](#).

WASTE

- Follow the [waste routines](#) at UiB
- Hydrofluoric acid waste with concentrations > 1% is delivered as dangerous waste in waste group 7131, pure inorganic acids.
- Waste less than one percent can be neutralized in a solution of $\text{CaCO}_3 + \text{NaOH}$

GENEREAL

Hydrofluoric acid (hydrogen fluoride) is among other things used to casting, as an accelerator, as a cleaning agent and for the treatment of metal surfaces. Other fluorinated acids are also used for this purpose. This applies for chemicals such as; Ammonium hydrogen fluoride (toxic and corrosive), Potassium hydrogen fluoride (toxic and corrosive), natriumhydrogenfluorid (toxic and corrosive).