

date:

25.11.2008

Safety Instructions for the use of Gloves



Skin Hygiene

• Standard procedure for working

- before: washing hands with antibacterial soap and disinfect with 70 % EtOH for 30 s
- after: disinfect with 70 % EtOH for 30 s, wash hands with antibacterial soap, put hand cream

Use of Gloves



• Protection of the skin against:

- dangerous reagents or biological material
- radiation (UV), dirt
- injuries, burns, frostbites with special gloves

• When

- During the work when exist a mentioned risk for the hands

• How

- 1) **Inform** yourself about the **resistance** of the gloves against the reagents (see below)
- 2) **Revise** the gloves **visually** for holes before the use. Throw away rotten gloves
- 3) Use gloves only with clean and dry hands
- 4) Do not reuse disposable gloves
- 5) **Do not interchange** gloves between persons
- 6) Change contaminated gloves
- 7) **Do not touch anything outside** of the experiment (e.g. equipment, doors, tap, telephone, keyboard) in order to avoid a distribution of a possible contamination
- 8) **Do not use glove for a long time**. This can damage the skin
- 9) **Remove** disposable gloves in **inside-out** style

• Store

- Store gloves only in their original container, protected against direct sun light and heat

Compatibility

- Usually **disposable gloves** are **not very resistant** against reagents. Exist the risk that:
 - reagents can permeate at molecular level
 - the gloves deplete due to a direct contact to the reagents

See also "<http://ptcl.chem.ox.ac.uk/MSDS/glovesbychemical.html>"

- **Latex** gloves are **not recommended** due to their allergenic potential
- **PVC** gloves are generally not resistant against reagents

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+: resistant > 60 min 0: 10 - 60 min resistant -: not resistant < 10 min ?: not recommended
The permeation times are valid for protective and not for disposable gloves
therefore they intended only as a guide and should not be used for the general selection of gloves

Reagent	Nitrile	Latex	Neoprene	PVC
Acetic acid (glacial)	-	0	0	-
Acetic acid (10 %)	+	+	+	?
HCl (32 %)	+	+	+	0
Perchloric acid	+	+	+	?
Trichloroacetic acid			0	
NaOH (saturated)	+	+	+	?
KOH (saturated)	+	+	+	?
Hydrogen peroxyde	+	+	-	?
Sodium hypochlorite (12 %)	+	+	+	?
Methanol	0	-	0	+
Ethanol	+	0	0	+
Isopropanol	+	0	+	?
Ethylenglycol	+	+	+	
Formaldehyde (37 %)	+	0	+	?
Glutar(di)aldehyde	+	?	+	?
Dimethylformamid (DMF)	-	+	-	?
Dimethylsulfoxyd (DMSO)	-	+	0	?
Phenol, 85 % in water	0	0	+	?
Ethidium bromide	+	?	-	?
Immersion oil	+	?	?	+
Acrylamide	0	?	0	0
TEMED				
β-Mercaptoethanol				
Acetona	-	-	-	-
Acetonitrile	-	-	0	+
Diethylether	0	-	-	-
Ethylacetate	0	-	0	-
Hexane	+	-	-	+
Benzene	-	-	-	-
Chloroform	-	-	-	-