

KIT SYNCHROTRON CHEMISTRY LABORATORY (2.1.3)

Before you start

- A more helpful, detailed version of this Instruction can be found as pdf („user_chem_lab(2.1.3)_guidelines.pdf “) under the KIT Synchrotron download area.

You are advised to download it as the web resource is updated regularly.

- KIT Synchrotron download area

http://www.ibpt.kit.edu/user_experiments

Before you start

- **Rules and Regulations** together with the **Application form** to access the Chemistry Laboratory (2.1.3) are available in the download area

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- **Rules and Regulations** together with the **Application form** to access the Chemistry Laboratory (2.1.3) are available in the download area

- The **Application form** must be filled in before you start using the chemistry laboratory.

KIT Synchrotron	ANNA project no.:	Date of submission:
	Institute:	
	Project leader:	
Karlsruhe Institute of Technology, KIT Synchrotron, User Coordination Office, Hermann-von-Helmholtz-Platz 1, D-76344 Eggenstein-Leopoldshafen, Germany, Phone +49 721 608-26188, Fax +49 721 608-26789, E-Mail: useroffice@ibpt.kit.edu		

Please use only the white fields for completing the following forms. It is recommended not to switch off the document protection mode. If troubles occur switch it off, but don't switch it on again. Text will then be deleted irreversibly. Please return the signed form by E-Mail. For further information on the topics of this form, please check the guidelines under IBPT Download Webpage (http://www.ibpt.kit.edu/user_experiments).

Application for use of the Chemistry Laboratory (2.1.3)	
BEAMLINE and Dates	

List of all substances to be used at the experiment and their properties	Quantity (mass, ppm, mol, number)	physical form	type of hazard	Information concerning safety	
				CAS-No (if known)	PEL-No ¹⁾ / TLV-No ²⁾ (if known)
or	size	<input type="checkbox"/> solid <input type="checkbox"/> powder <input type="checkbox"/> liquid <input type="checkbox"/> gas <input type="checkbox"/> aerosol <input type="checkbox"/> solution <input type="checkbox"/> emulsion <input type="checkbox"/> foam <input type="checkbox"/> other	<input type="checkbox"/> toxic <input type="checkbox"/> flammable <input type="checkbox"/> oxidizing <input type="checkbox"/> corrosive <input type="checkbox"/> irritant <input type="checkbox"/> other		

Enclosed: Information about dangerous substances and apparatus (e.g. copies of recommended safety precautions etc.). This declaration is ONLY valid for the chemistry laboratory and DOES NOT replace the "Declaration of Substances and Experimental Apparatus at KIT Synchrotron"

¹⁾ PEL: 8 h average permissible emission limit; ²⁾ TLV: 8 h average threshold limit value

List of apparatus that will be used in the chemistry laboratory, items available at KIT Synchrotron <input type="checkbox"/> Fume Cupboard <input type="checkbox"/> Balance <input type="checkbox"/> Ultrasonic bath <input type="checkbox"/> Drying furnace, (furnace) <input type="checkbox"/> Exsiccator / desiccator	Short description of the planned activities, methods
Items not supplied by KIT Synchrotron 	

I enclose information about possible hazards of substances or apparatus, and about emergency procedures foreseen. This is a complete list of all substances, their properties and of all hazardous apparatus. I bind myself to follow the required safety procedures and to inform my co-workers. I hereby absolve KIT and the KIT Synchrotron for any damage or injury resulting from my failure to follow the safety procedures.

Date: _____ Signature of applicant: _____

PLEASE FILL IN THE LIST ON THE FOLLOWING PAGE OF THOSE WHO WISH TO USE THE CHEMISTRY LABORATORY (2.1.3)

Before you start

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KIT Synchrotron	ANNA project no.:	Date of submission:
	Institute:	
	Project leader:	
Karlsruhe Institute of Technology, KIT Synchrotron, User Coordination Office, Hermann-von-Helmholtz-Platz 1, D-76344 Eggenstein-Leopoldshafen, Germany, Phone +49 721 608-26188, Fax +49 721 608-26789, E-Mail: useroffice@ibpt.kit.edu		

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Application for use of the Chemistry Laboratory (2.1.3)	
BEAMLINE and Dates	

List of all substances to be used at the experiment and their properties	Quantity (mass, ppm, mol, number) or size	physical form	type of hazard	Information concerning safety	
				CAS-No (if known)	PEL-No ¹⁾ / TLV-No ²⁾ (if known)

Enclosed: Information about dangerous substances and apparatus (e.g. copies of recommended safety precautions etc.). This declaration is ONLY valid for the chemistry laboratory and DOES NOT replace the "Declaration of Substances and Experimental Apparatus at KIT Synchrotron"

¹⁾ PEL: 8 h average permissible emission limit; ²⁾ TLV: 8 h average threshold limit value

List of apparatus that will be used in the chemistry laboratory, items available at KIT Synchrotron	Short description of the planned activities, methods
<input type="checkbox"/> Fume Cupboard <input type="checkbox"/> Balance <input type="checkbox"/> Ultrasonic bath <input type="checkbox"/> Drying furnace, (furnace) <input type="checkbox"/> Exsiccator / desiccator	
Items not supplied by KIT Synchrotron	

I enclose information about possible hazards of substances or apparatus, and about emergency procedures foreseen. This is a complete list of all substances, their properties and of all hazardous apparatus. I bind myself to follow the required safety procedures and to inform my co-workers. I hereby absolve KIT and the KIT Synchrotron for any damage or injury resulting from my failure to follow the safety procedures.

Date: _____ Signature of applicant: _____

PLEASE FILL IN THE LIST ON THE FOLLOWING PAGE OF THOSE WHO WISH TO USE THE CHEMISTRY LABORATORY (2.1.3)

- The **Application form** must be filled in before you start using the chemistry laboratory.
- The form needs to be sent in advance of the experiment (**minimum** of 3 weeks).
- Do not hesitate to ask in the case of problems and or special requirements.
- The **applicant** is responsible for **safely working** in the Laboratory

Before you start

KIT Synchrotron	Address/project no.: _____ Institute: _____ Project leader: _____	Date of submission: _____
Karlsruhe Institute of Technology, KIT Synchrotron, User Coordination Office, Hermann-von-Helmholtz-Platz 1, D-76021 Eggenstein-Leopoldsdorf, Germany Phone +49 7241 808-20-00, Fax +49 7241 808-20-99 E-Mail usercoord@kit.edu		
<p>Please use only the white fields for completing the following forms. It is recommended not to switch off the document protection mode. If you make minor changes it is ok, but don't switch it on again. You will then be alerted immediately. Please return the signed form to G. Bubl. For further information on the topics of this form, please check the guidelines under SPT Download Website (http://www.kit.edu/user_coord_experiments/).</p>		
Application for use of the Chemistry Laboratory (2.1.3)		
BEAMLINE and Dates		
List of all substances to be used at the experiment and their properties	physical form	type of hazard
	information concerning safety	
Quantity <small>(mass conc., mol, number)</small>	CAS-No. <small>(if known)</small>	PEL, AL _{OT} ¹ <small>"T,V"-kg² <small>(if known)</small></small>
OF		
KID		
<p>Enclosed: Information about dangerous substances and appropriate safety regimes or recommended safety procedures etc.). This declaration is valid only for the chemistry laboratory and DOES NOT replace the Declaration of Substances and Experimental Apparatus in KIT Synchrotron!</p> <p>¹ PEL: T V average permissible emission limit; ² "T,V": kg average threshold limit value</p>		
List of apparatus that will be used in the chemistry laboratory. Items available at KIT Synchrotron	Short description of the planned activities, methods	
<input type="checkbox"/> Fume cupboard <input type="checkbox"/> Balance <input type="checkbox"/> Ultrasonic bath <input type="checkbox"/> Drying furnace, (furnace) <input type="checkbox"/> Evaporator / desiccator		
Items not supplied by KIT Synchrotron		
<p>Please provide information about possible hazards of substances or apparatus, and about emergency procedures foreseen. This is a complete list of all substances, their properties and of all hazardous apparatus. -Don't forget! to follow the required safety procedures and to inform my co-workers! Notify always KIF and the KIT Synchrotron for any damage or injury resulting from my failure to follow the safety procedures.</p>		
Date:	Signature of applicant:	
PLEASE FILL IN THE LIST ON THE FOLLOWING PAGE OF THOSE WHO WISH TO USE THE CHEMISTRY LABORATORY (2.1.3)		

User: Chem Lab Application (09/09/2015)

User Details

Beamline and Dates

Chemicals

Apparatus

**Special requirements,
procedures (e.g. waste)**

The Form Chemistry_Lab_Application(2.1.3).doc needs to be filled and returned before the experiment!

Before you start

[illegible]

The Form must be sent well in advance of the experiment (minimum of 3 weeks).

The **Applicant** is responsible for **Safely working** in the Laboratory

If special requirements, procedures, are needed this must be declared and discussed with the relevant people.

The Form Chemistry_Lab_Application(2.1.3).doc needs to be filled and returned before the experiment!

Before you start

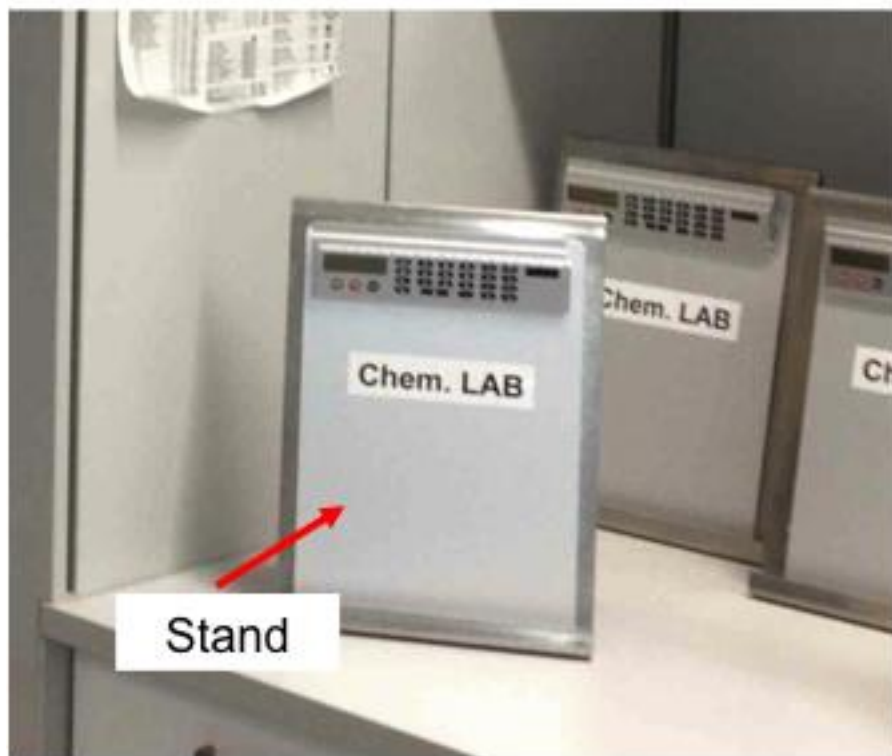
- Just before you start fill in the short **form** from the entrance door and display on the **stand** provided at your working area(s)

Form



Before you start

- The **form** provides Contact, Safety, and other relevant information for other people when you are not present



Form

Work Area Information Form- Chemistry Laboratory (2.1.3)	
Beamline	

User Information	
Name (tel. no.)	
Institute/Group Address	
ANNA project no.	Project Leader :
Additional contact information, tel. no.	

Dates/Time required in Laboratory			
Start		PLANNED	
		Finish	

Display this form along with any other relevant documentation at your Work Area. When finished please do not throw away but place in holder provided (back of chemistry Laboratory entrance door)

Before you start

Work Area Information Form- Chemistry Laboratory (2.1.3)	
Beamline	

Beamline/Room

User Information	
Name (tel. no.)	
Institute/Group Address	
ANNA project no.	Project Leader :
Additional contact information, tel. no.	

User

Address

Project Information

Contact Information
tel. no., email, etc.

Dates/Time required in Laboratory			
Start		PLANNED Finish	

Start Date

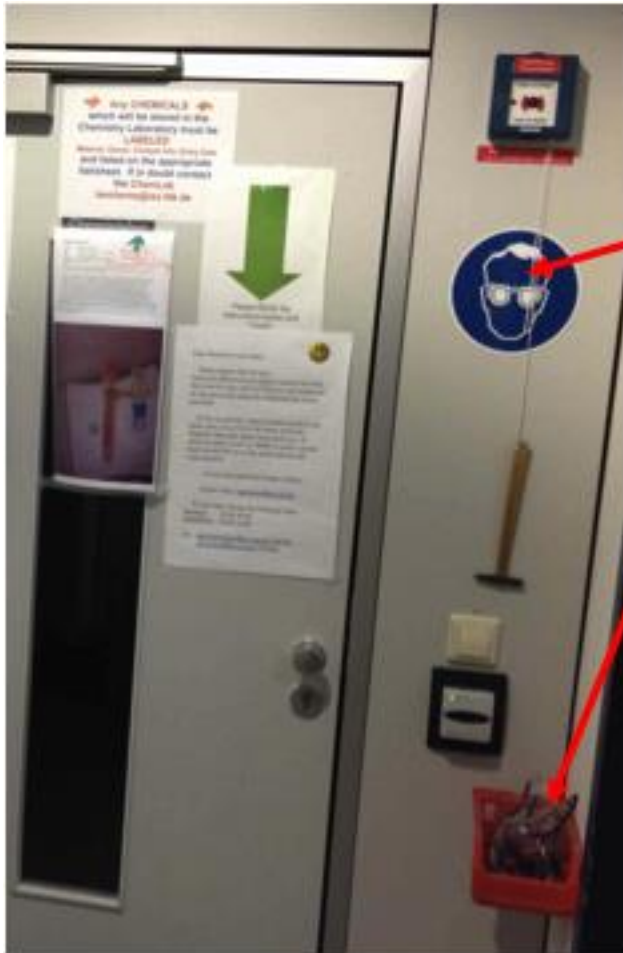
Planned Finish

Display this form along with any other relevant documentation at your Work Area. When finished please do not throw away but place in holder provided (back of chemistry Laboratory entrance door)

30- 1

The Form provides **Contact, Safety, Useful information**, for other people when you are not present at your working Area!

Safety Information



■ Wear Safety glasses

■ The **safety** of **yourself** and **others** has **priority** at all times

Safety Information



■ Body shower

■ The **safety** of **yourself** and **others** has **priority** at all times

Safety Information



- Body shower
- Emergency power-off

■ The **safety** of **yourself** and **others** has **priority** at all times

Safety Information



- Body shower
- Emergency power-off
- Fire extinguisher

■ The **safety** of **yourself** and **others** has **priority** at all times

Safety Information

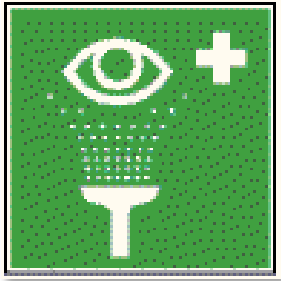


- Body shower
- Emergency power-off
- Fire extinguisher
- Laboratory coats

■ The **safety** of **yourself** and **others** has **priority** at all times

Safety Information

- Eye wash



- The **safety** of **yourself** and **others** has **priority** at all times

Safety Information

- First aid



- The **safety** of **yourself** and **others** has **priority** at all times

Safety Information



■ In the case of an Emergency inside the laboratory use the emergency switch outside.

■ The **safety** of **yourself** and **others** has **priority** at all times

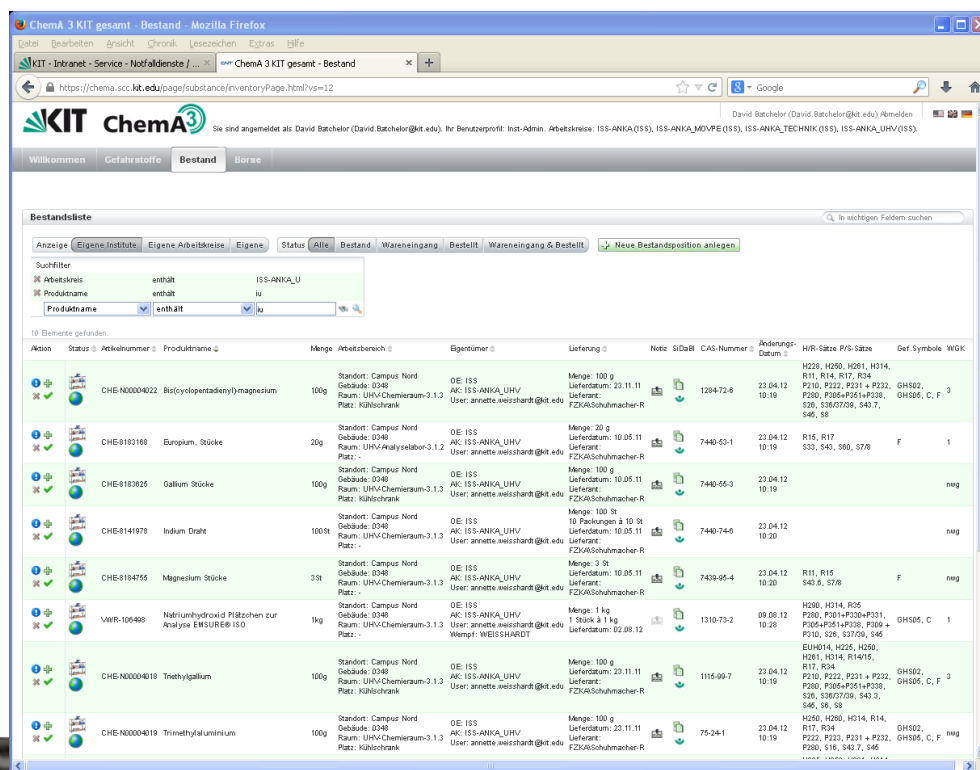
Safety Information

- **Fume cupboards** are principally for **Hazardous procedures**
- **Fume Cupboards** are not meant for the storage of chemicals.
- Close lid after use



Safety Information

- Access to the KIT chemical database and other material on the internet is available via a computer in the laboratory



ChemA 3 KIT gesamt - Bestand - Mozilla Firefox

https://chema.scc.kit.edu/pages/substance/inventoryPage.html?vs=12

David Batchelor (David.Batchelor@kit.edu) Abmelden

Sie sind angemeldet als David Batchelor (David.Batchelor@kit.edu). Ihr Benutzerprofil: Inst-Admin, Arbeitskreise: ISS-ANKA (ISS), ISS-ANKA_MOVE (ISS), ISS-ANKA_TECHNIK (ISS), ISS-ANKA_UHV (ISS).

Willkommen Gefahretoke Bestand Home

Bestandsliste

Anzeige: Eigene Institute Eigene Arbeitskreise Eigene Status: Alle Bestand Wareneingang Bestellt Wareneingang & Bestellt Neue Bestandsposition anlegen

Suchfilter

Arbeitskreis enthält ISS-ANKA_U

Produktname enthält lu

Produktname enthält lu

10 Beinträge gefunden.

Aktion	Status	Arbeitsnummer	Produktname	Menge	Arbeitsbereich	Eigentümer	Lieferung	Notiz	SiDaB	CAS-Nummer	Änderungs-Datum	HSE-Sätze	PIS-Sätze	Gef. Symbole	WGK
		CHE-N00004022	Bis(cyclopentadienyl)magnesium	100g	Standort: Campus Nord Gebäude: 0348 Raum: UHV-Chemieraum-3.1.3 Platz: KÜHLSCHRANK	OE: ISS AK: ISS-ANKA_UHV User: annette.weisshardt@kit.edu	Menge: 100 g Lieferdatum: 23.11.11 Lieferant: FZKA/Schulmacher-R	1284-72-6		23.04.12 10.10		H228, H252, H261, H314, R11, R14, R17, R24, P210, P222, P231 + P232, GH002, P280, P304+P340+P333, GH006, C, F, 3			
		CHE0183168	Europium, Stücke	20g	Standort: Campus Nord Gebäude: 0348 Raum: UHV-Analyselabor-3.1.2 Platz:	OE: ISS AK: ISS-ANKA_UHV User: annette.weisshardt@kit.edu	Menge: 20 g Lieferdatum: 10.05.11 Lieferant: FZKA/Schulmacher-R	7440-63-1		23.04.12 10.10		R15, R17, R24, S32, S40, S60, S78		F	1
		CHE0183825	Gallium, Stücke	100g	Standort: Campus Nord Gebäude: 0348 Raum: UHV-Chemieraum-3.1.3 Platz: KÜHLSCHRANK	OE: ISS AK: ISS-ANKA_UHV User: annette.weisshardt@kit.edu	Menge: 100 g Lieferdatum: 10.05.11 Lieferant: FZKA/Schulmacher-R	7440-65-3		23.04.12 10.10					neg
		CHE0141978	Indium, Draht	1000g	Standort: Campus Nord Gebäude: 0348 Raum: UHV-Chemieraum-3.1.3 Platz:	OE: ISS AK: ISS-ANKA_UHV User: annette.weisshardt@kit.edu	Menge: 100 g Lieferdatum: 10.05.11 Lieferant: FZKA/Schulmacher-R	7440-74-0		23.04.12 10.20					neg
		CHE0184755	Magnesium, Stücke	30g	Standort: Campus Nord Gebäude: 0348 Raum: UHV-Chemieraum-3.1.3 Platz:	OE: ISS AK: ISS-ANKA_UHV User: annette.weisshardt@kit.edu	Menge: 3 Stk Lieferdatum: 10.05.11 Lieferant: FZKA/Schulmacher-R	7439-85-4		23.04.12 10.20		R11, R15, S40, S, S78		F	neg
		VWR-109409	Natriumhydrid Pflöchen zur Analyse EMSURE® ISO	1kg	Standort: Campus Nord Gebäude: 0348 Raum: UHV-Chemieraum-3.1.3 Platz:	OE: ISS AK: ISS-ANKA_UHV User: annette.weisshardt@kit.edu Wempe: WEISSHARDT	Menge: 1 kg Lieferdatum: 02.08.12 Lieferant:	1310-73-2		09.08.12 10.20		H260, H214, R25, P200, P201+P202+P203, P204+P251+P252, P209 + P210, S26, S36/37/39, S40, S46, S53/59, S54, S55, S56/57/59, S40, S46, S5, S8		GH006, C, F	1
		CHE-N00004018	Triethylgallium	100g	Standort: Campus Nord Gebäude: 0348 Raum: UHV-Chemieraum-3.1.3 Platz: KÜHLSCHRANK	OE: ISS AK: ISS-ANKA_UHV User: annette.weisshardt@kit.edu	Menge: 100 g Lieferdatum: 23.11.11 Lieferant: FZKA/Schulmacher-R	1115-90-7		23.04.12 10.10		H260, H214, R25, P200, P201+P202+P203, P204+P251+P252, P209 + P210, S26, S36/37/39, S40, S46, S5, S8		GH002, GH006, C, F, 3	
		CHE-N00004019	Trimethylaluminium	100g	Standort: Campus Nord Gebäude: 0348 Raum: UHV-Chemieraum-3.1.3 Platz: KÜHLSCHRANK	OE: ISS AK: ISS-ANKA_UHV User: annette.weisshardt@kit.edu	Menge: 100 g Lieferdatum: 23.11.11 Lieferant: FZKA/Schulmacher-R	75-24-1		23.04.12 10.10		H260, H252, H261, H314, R11, R14, R17, R24, P210, P222, P231 + P232, GH002, P280, S16, S40, S46, S47, S49		GH002, GH006, C, F	neg

KIT chemical data-
base access
ChemA

**The Information is essential
for Safety services locating
chemicals in an emergency**

ChemA Entries

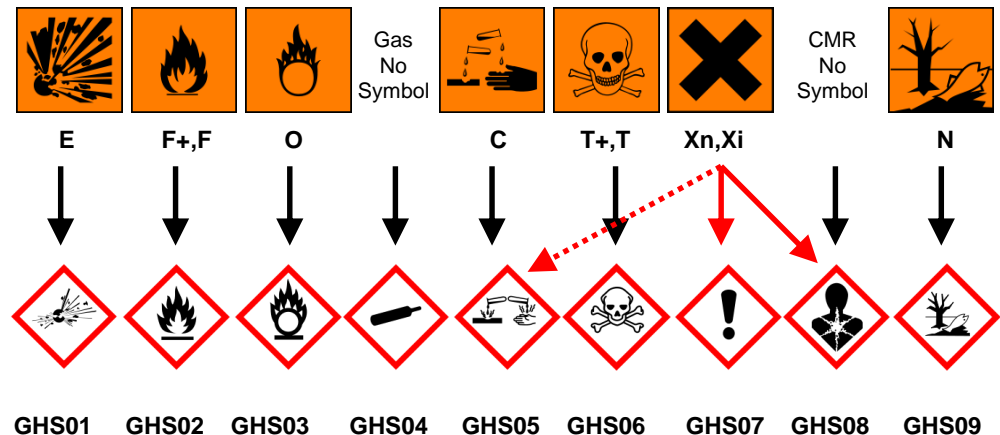
For **KIT Internal Users** it is essential that when ordering **Hazardous Chemicals** in **SAP** the boxes for **ChemA** and **room number** etc are entered correctly !

Storage and Waste





- All chemicals must be **labeled** with **substance, owner, entry date** and **contact information**
- **Blank Labels** and **Stickers** can be found in the cupboard

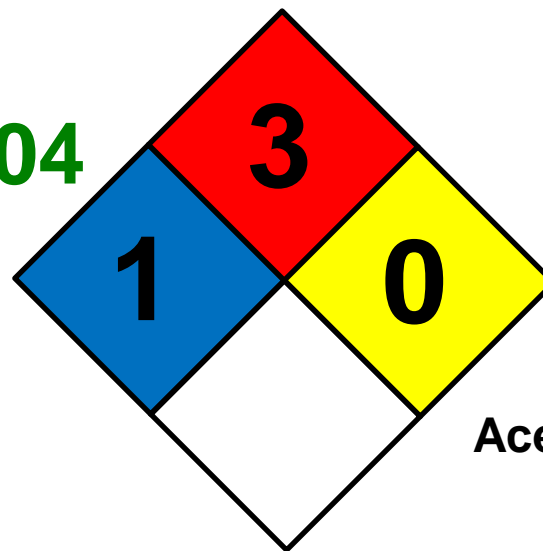
Hazard Symbols Old and New Harmonised System



Storage and Waste

Symbol	Special Notice
OX	Oxidizer, allows chemicals to burn without an air supply
W	Reacts with water in an unusual or dangerous manner
SA	Simple asphyxiant gas. Specifically limited to the gases: nitrogen, helium,
COR ACID,ALK	Corrosive; strong acid or base (e.g. sulfuric acid, potassium hydroxide)
BIO or 	Biological hazard
POI	Poisonous
RA,RAD or 	Radioactive
CRYO	Cryogenic hazard

NFPA 704



Acetone

Hazard Scale	Health	Flammability	Reactivity
0	Poses no health hazard, no precautions necessary.	Will not burn under typical fire conditions.	Stable
1	Exposure can cause irritation with only minor residual injury.	Considerable preheating before ignition and combustion can occur.	Normally stable, but can become unstable at elevated temperatures and pressures.
2	Intense or continued could cause temporary incapacitation or possible residual injury.	Moderately heating or relatively high ambient temperature before ignition can occur.	Violent chemical change at high temperature and pressure, may react violently with water.
3	Short exposure could cause serious, temporary, or moderate residual injury.	Can be ignited under almost all ambient temperature conditions.	Capable of shock detonation or explosive decomposition with high temperature
4	Very short exposure could cause death or major residual injury.	Rapidly vaporises under ambient conditions and burns readily .	Easily capable of detonation or explosive decomposition under ambient conditions.

- All chemicals must be **labeled** with **substance, owner, entry date** and **contact information**

Storage and Waste

- Standard chemicals are provided and can be found in the designated cupboards



- All chemicals must be **labeled** with **substance, owner, entry date** and **contact information**

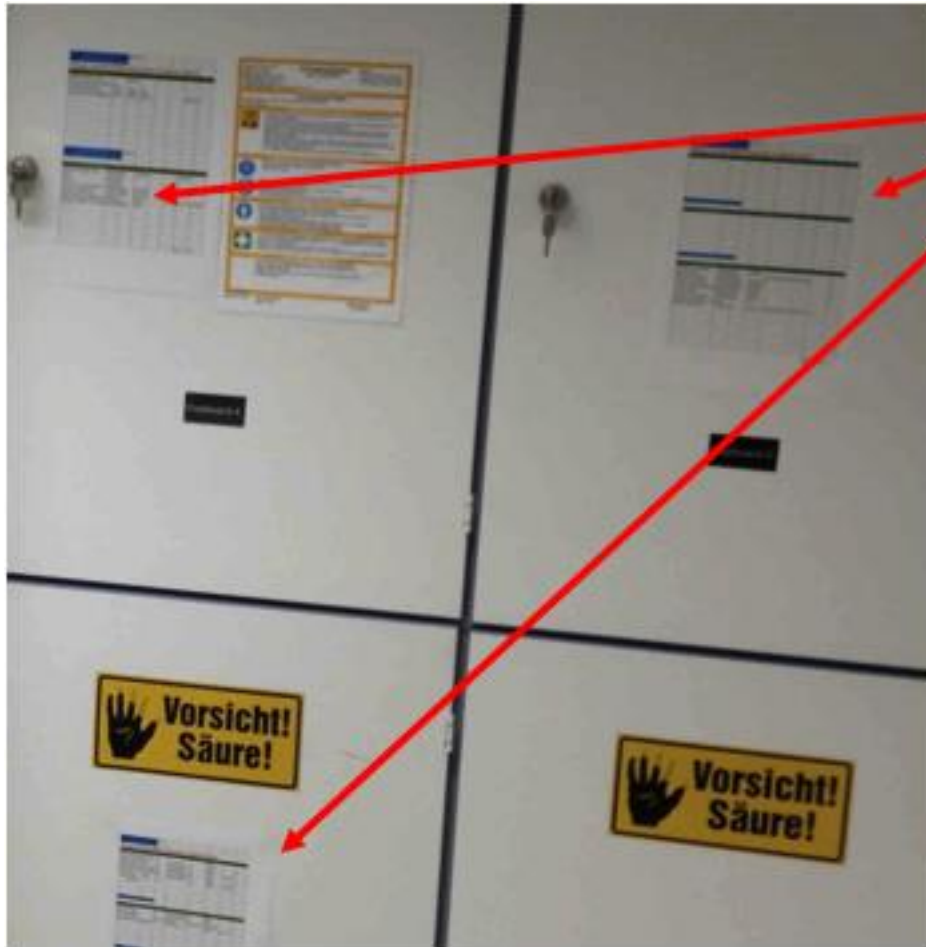
Storage and Waste



- In addition to the main storage provided in the Chemistry Laboratory additional storage for chemicals, e.g. Solvents, is provided in the Hall.
- Clear instructions, rules, are provided on the front of the cupboards. In case of doubt then contact the responsible Laboratory personnel.

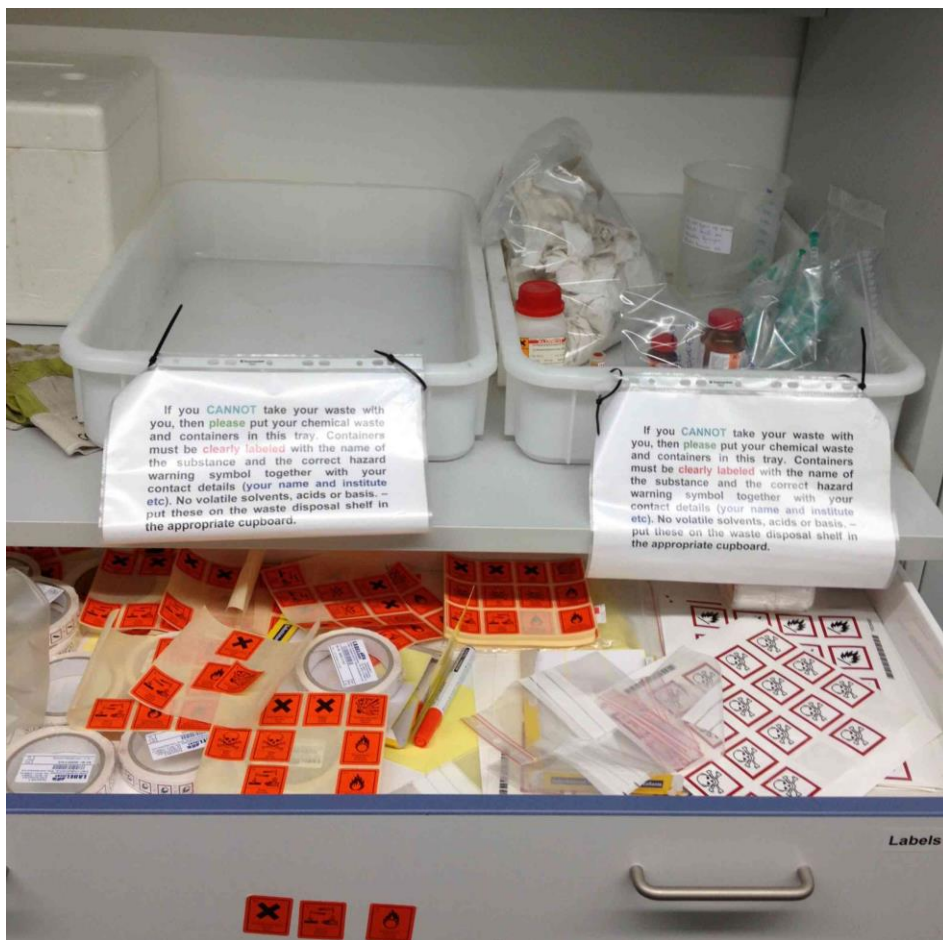
- All chemicals must be **labeled** with **substance, owner, entry date** and **contact information**

Storage and Waste



- All cupboards with chemicals have a contents lists
- If chemicals are to be stored and are not listed then update the list in the space provided. Likewise strike it out when it is removed or used up.
- All chemicals must be **labeled** with **substance, owner, entry date** and **contact information**

Storage and Waste



- You are responsible for your waste
- If chemicals cannot be stored safely we must be informed in advance.
- Unlabeled Chemicals must be disposed of. This is expensive and unnecessary.

- All chemicals must be **labeled** with **substance, owner, entry date** and **contact information**

Summary

- Fill out **forms**
- Familiarize with **safety equipment** and its locations
- Use **Personal Safety Equipment (PSE)**

Summary

- Fill out **forms**
- Familiarize with **safety equipment** and its locations
- Use **Personal Safety Equipment** (PSE)
- Avoid time pressure and **plan** ahead
- Keep the work space **clean**
- **Label** chemicals and waste

Summary

- Fill out **forms**
- Familiarize with **safety equipment** and its locations
- Use **Personal Safety Equipment** (PSE)
- Avoid time pressure and **plan** ahead
- Keep the work space **clean**
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In case of an emergency call

3333

Auch

Du



hältst die Küche sauber,
Genosse!