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SAFETY REGULATION

Safety Guidelines for User Experiments

June 2020

Safety and Radiation Protection (SRP) group
at European XFEL

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Revisions

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1.0	10 June 2020	First release

Contents

Cited documents

The following documents are cited in this Safety Regulation:

- Hazardous Substance Ordinance (*Gefahrstoffverordnung*)
- Safety Regulation “Biological Safety”
- Safety Regulation “Chemical and Laboratory Safety at European XFEL”
- Scientific Data Policy of European X-Ray Free-Electron Laser Facility GmbH
- Technical Note “UPEX: Experiment Proposal and Registration Guide”
- User Note “Transporting Goods”
- User Office Form 1A, “Advance Shipping Notification”
- User Office Form 2, “Return Shipping Notification”

NOTE: The European XFEL “Scientific Data Policy” as well as Safety Regulations, Technical Notes, and User Forms are listed in this section. Templates and other forms are not listed. The templates are provided, if necessary, by the responsible persons.

Preface

These safety guidelines for user experiments are meant to define the relevant responsibilities and principles for the safety topics regarding user experiments. These safety regulations are mandatory for everyone who is involved in user experiments.

The document is divided into two parts:

- **PART I. BEAMTIME PROCESS**

  The first part describes the process beginning with the submission of proposals and ending with the departure of the user group from the European XFEL (EuXFEL) site at the end of the beamtime.

  For safety procedures during user experiments, we include an overview as chapter 6 of this document.

- **PART II. SAFTEY TOPICS**

  The second part covers all relevant safety topics with the most important rules for users.

  The following safety topics are described in detail:

  — Laser safety
  — Machine safety
  — Chemical safety
  — Biological safety

Radiation safety is not listed since the use of radioactive samples or substances is currently not allowed. If you intend to prepare for using radioactive substances, pieces of equipment involving radiation, or sources, contact the Safety and Radiation Protection (SRP) group well in advance in order to check about feasibility conditions in future runs.

Electrical work, craning or transporting heavy goods, and work or transport of gases and cryogenics is only allowed by authorized and trained personnel.

PART I. BEAMTIME PROCESS

This part of the Safety Regulation describes the process beginning with the submission of proposals and ending with the departure of the user group from the European XFEL (EuXFEL) site at the end of the beamtime

1 Guidelines for experiment

This part describes the responsibilities and the process of user experiments regarding the safety-relevant parts, beginning with the submission of proposals, preparation for the experiment, and what users must do before leaving European XFEL (EuXFEL) after the experiment.

2 Before your beamtime

Research proposals for beamtime must be submitted through the User Portal of the European XFEL (UPEX) in the framework of specific calls for proposals. For details, such as rules for submission or responsibilities within the user team, see the Technical Note “UPEX: Experiment Proposal and Registration Guide”. In the following, only the experiment responsible persons who are involved in safety procedures are mentioned.

The Main Proposer acts as the contact person for proposal authors and for the Safety and Radiation Safety (SRP) group. This person is also responsible for the practical preparations for the experiment.

For each scheduled experiment, one local contact will be assigned. The local contact acts as the coordinator between users and persons or groups at European XFEL (EuXFEL). The local contact is responsible for performing the corresponding experiment (external or internal user) according to the rules described in this document. This includes, in particular, samples and equipment brought to European XFEL and the instruction of internal and external participants in this experiment. If special measures (e.g. special cleaning procedures) are defined, the local contact, together with the Main Proposer, is responsible to make sure that everybody who is involved in the experiment is informed about these measures.

The local contact, together with the Main Proposer or another assigned person from the user group and the safety engineer, signs the safety approval form and risk assessment, if necessary.

The SRP group checks all proposals for safety-related aspects before the experiments are awarded beamtime and scheduled. When a proposal is awarded beamtime by EuXFEL, the SRP group may need further information on the experiment to be carried out. For every experiment, a “safety letter”, in which the SRP group asks to provide complementary information in the experiment, will be sent to the Main Proposer. The Main Proposer should answer as soon as possible (no later than one week before start of the

experiment) to avoid any delay in the preparations of the experiment. SRP also prepares a safety approval form, and safety approval will be done on site shortly before start of the experiment.

The experiment and the samples and handling at the instrument should be described in detail in the experiment description and in the sample/substance sheets when you upload your proposal.

Please submit one sample sheet for each sample or substance you intend to use as well as for buffer substances or additives. Categorize the risk regarding the sample itself, not only for your experiment. If e.g. you have a hazardous substance that will be used in very low concentration, label it in the sample sheet as a hazardous substance and mention in the description that only a very low amount or concentration will be used. Add the respective Material Safety Data Sheet (MSDS) for all hazardous substances.

If you plan to bring your equipment, please check Chapter 8, “Machine safety and equipment”, for more details.

If you want to use or bring a laser, please check Chapter 0, “This part of the Safety Regulation points out the most important rules for the safety issues related to user experiments. Relevant safety issues are laser safety, machine safety, chemical safety, and biological safety. As mentioned in the preface, radiation safety is not listed because the use of radioactive samples or substances is currently not possible at our facility.

Operating cranes and forklifts and handling gases is permitted only for European XFEL (EuXFEL) staff members who are trained in the specific field. Also, electric work of any kind is not allowed for users at EuXFEL.

Laser safety”, for more detailed procedure that must be followed.

3 Preparing for your experiment

Before you start your experiment at the European XFEL (EuXFEL), you need to carry out the mandatory User General Safety Training. In specific cases (e.g. if you want to use the user laboratories), additional training is needed. Most of the training can be taken online, but, for every specific area, additional onsite training is necessary. The onsite training for the instrument is organized by the local contact for the experiment.

If you want to use a laboratory for sample preparation (chemical or biological laboratory or laboratory for nozzle preparation), please send a request to the assigned lab contact or the Sample Environment and Characterization (SEC, sample.environment@xfel.eu) group in advance; you will have to fill out a work description, which will be provided by the contact person from the SEC group. For using the laboratories, additional specific training is needed. For accessing the chemistry laboratories, you will need the online User General Safety Training and the online Chemical and Laboratory Safety Training. For the biology laboratories, you need the online General User Safety Training, the online Chemical and Laboratory Safety training, and the online Biological Safety Training. In addition, specific dedicated onsite training is required for the areas you will use.

Completed training courses are associated with your personal DACHS card. The access control system grants access only if the specific access right and the required training course(s) are present.

Shortly before starting your experiment (typically the day before), the SRP group will take care of the safety approval procedure together with the Main Proposer or another assigned member of the user group and the local contact of the experiment. The purpose of the safety approval is to check that samples, equipment, and participants are indeed those that were previously approved. At the conclusion, a Safety Approval Form is signed by all persons who took part in this safety approval. All relevant documents (e.g. the list of participants, samples, experimental risk assessments, and operating

instructions) are attached to the Safety Approval Form. By signing this form, all participants of the safety approval procedure confirm that they have taken notice of these documents, will follow the written rules, and will use only the listed samples. Also, these people are responsible to take care that all other participants in the experiment are informed about the allowed samples and any defined special measures.

If you want to transport/ship equipment, instrumentation, samples, or substances used in the experiment, please follow the instructions in the User Note “Transporting Goods” (XFEL.EU UN-2017-002). Submit the relevant forms to the User Office (useroffice@xfel.eu). Make sure that you ship the samples, equipment, and any other items by following the legal and customs requirements for each category of goods.

In general, please consult with the experts in your home institution for instructions and regulations on shipping, procedures, and international commercial transactions (incoterms) or procurement processes applying to your goods.

4 Beamtime at EuXFEL

If your experiment is scheduled, the Safety and Radiation Protection (SRP) group strives to send the safety letter four weeks before (at the latest, two weeks before) the start of the experiment. In the safety letter, the SRP group asks the Main Proposer to provide additional information about the experiment. The Main Proposer or another person from the user group should answer as soon as possible to avoid any delay in the preparations for the experiment, in any case, at least one week before the start of the experiment. All samples listed in the proposal and approved in the safety checks prior to beamtime allocation are allowed at the instrument or in the user labs. If specific samples listed in the proposal are not approved at that step—but the proposal is allocated beamtime—you will receive the specific information with the invitation. If additional samples are required that were not included in the original proposal, you must contact the User Office in writing (useroffice@xfel.eu). The User Office will provide the specific forms and details about the procedure. For all samples, the SRP group may define measures or restrictions that will then be documented in the safety letter.

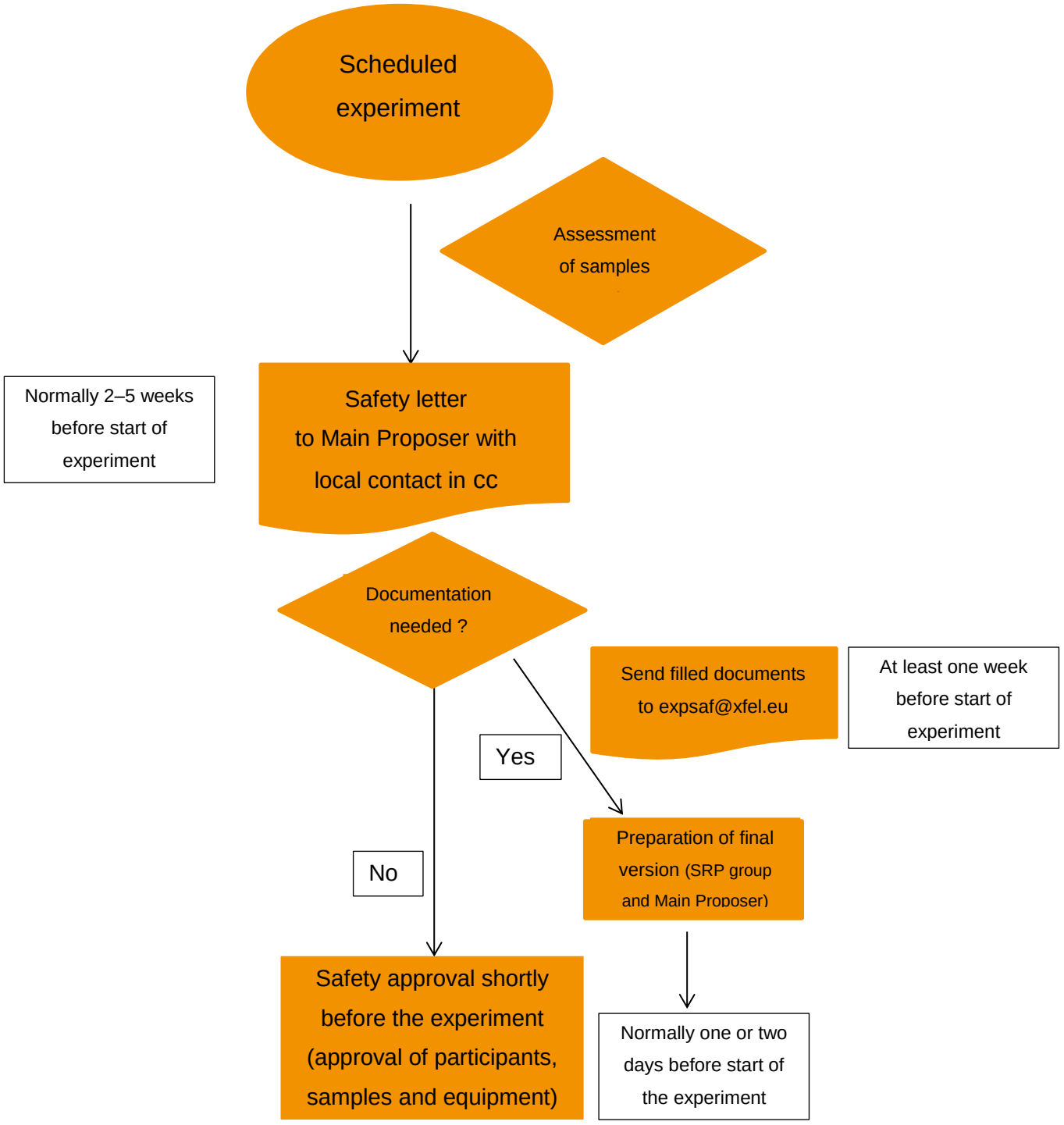
When you arrive at European XFEL (EuXFEL), you get a personal DACHS card and a transponder to enter the experiment hall. The transponders are activated at the turnstile. It is not permitted to circumvent the turnstile and enter the hall or to give somebody else your DACHS card or transponder. In case of emergency, the transponders provide information about how many people are in the experiment hall (no personal data will be collected). All your training properties and access rights are saved on the DACHS card.

5 After the experiment

After the experiment, you have to ensure that all equipment and remaining substances brought or shipped to European XFEL (EuXFEL) are taken back to your home institute. You also have to clean up the working area (e.g. clean sample injection systems) at the instrument and in the user laboratories if you used them. Cleanup and handover of the waste must be coordinated with staff from the instrument or the responsible person from the lab (e.g. lab contact). If waste should be disposed of by EuXFEL, everything must be clearly labelled and handed over to the responsible person. To inform us about your shipping arrangements, submit User Office Form 2, "Return Shipping Notification", to the User Office (useroffice@xfel.eu).

Transponders must be given back to the User Office. You can keep your DACHS card for your next visit.

6 Overview of safety procedures during user experiment



PART II. SAFETY GUIDELINES

This part of the Safety Regulation points out the most important rules for the safety issues related to user experiments. Relevant safety issues are laser safety, machine safety, chemical safety, and biological safety. As mentioned in the preface, radiation safety is not listed because the use of radioactive samples or substances is currently not possible at our facility.

Operating cranes and forklifts and handling gases is permitted only for European XFEL (EuXFEL) staff members who are trained in the specific field. Also, electric work of any kind is not allowed for users at EuXFEL.

7 Laser safety

If you want to use or bring a laser to European XFEL (EuXFEL), you have to get in contact with the laser expert from the Safety and Radiation Protection (SRP) group and the beamline responsible person ahead of time and provide them with the following information:

- Class of the laser you intend to use
- Name and type of the laser
- Maximum power of the laser
- Place of use
- Name of users who want to work with the laser
- Name of the experiment responsible person if different from that of the Main Proposer

In addition, you need to submit a laser safety risk analysis well before the experiment.

Depending on the risk evaluation, further tests or modifications to the laser could be required well before (at the latest, two weeks before) the experiment to adapt the laser for use at the EuXFEL. Lasers that are brought by users to EuXFEL remain entirely the responsibility of the Main Proposer or the experiment responsible person if the main proposer is not attending the beamtime.

7.1 Working with lasers at EuXFEL

If you intend to work with Class 3 B and/or Class 4 lasers, you must take the online General Laser Safety training. Additionally, upon arrival, you must take the onsite Laser Safety Training by the designated Laser Safety Officer (LSO) of the instrument. These trainings are associated with your personal DACHS card. After the training, depending on the risk level of your experiment, you

might be eligible to run the experiment without the presence of a EuXFEL staff member in the instrument experiment hutch. Technical and safety requirements must be discussed with the designated LSO of the relevant instrument and approved by the senior LSO of the SRP group.

At the EuXFEL, each instrument has an instrument laser hutch and an experiment hutch. The instrument laser hutch is used to prepare the pump–probe laser, while the experiment is performed in the experiment hutch. At EuXFEL, you are not allowed to enter any instrument laser hutch unless you are accompanied by a staff member who is a frequent operator of that room.

7.2 Introducing lasers to EuXFEL

All lasers that you bring to EuXFEL must be CE (*Conformité Européenne"*; French for "European Conformity") certified. If they are not you must contact the safety specialist from the SRP group in advance to assess the possibility and feasibility of using such equipment at the EuXFEL. You must submit all technical data sheets, operation manuals, and the declarations of Conformity (for CE-marked equipment) or any safety certificate issued by the laser's manufacturer to the SRP group (expsaf@xfel.eu). Documents have to be checked by the SRP group before the lasers can be transported.

If your user group is to bring a Class 3 or Class 4 laser for use at the EuXFEL, the laser must be registered with the senior LSO of the SRP group at least four weeks before its arrival. The possible hazards must be documented in a safety risk assessment, including preventive protective measures and a proposed laser safety concept that includes the name and the qualification of the lead laser operator. Laser interlocks are also required for Class 3B and Class 4 lasers, and the requirements must be discussed by the designated LSO and approved by the senior LSO of the SRP group.

8 Machine safety and equipment

This procedure applies to all the equipment that you intend to use during beamtime. It does not apply to general-purpose IT equipment (e.g. laptops, printers, or similar equipment) and hand-operated tools and consumable hardware (e.g. screws, screwdrivers or scissors, etc.). Please describe in the experiment description of the proposal where the equipment will be installed at the beamline and for what purpose it will be used. Also, please clarify as early as possible with the local contact for your experiment whether it is necessary to bring your own equipment or whether the equipment can be supplied by European XFEL (EuXFEL).

All equipment must be inspected prior to starting to operate, especially if no CE (European conformity) marking or certification is present. The inspection is done by the SRP group or SRP will contact other specialists. If the equipment has already been used during previous beamtime with approval of the safety group, then its latest maintenance report needs to be provided only.

8.1 CE-marked equipment

In Europe, the CE marking logo (see Figure 1) that appears on the nameplate of the equipment means that the equipment is safe since it complies with general European safety requirements relevant to those products.

Figure 1. *CE label*

For CE-marked equipment, the assessment performed by the responsible person of the SRP group is very simple. You need only to provide the certificate of CE conformation. Please note that this is not valid if one or

several pieces of CE-marked equipment are put together in combination with another or several pieces of CE-marked equipment or non-CE-marked equipment to form one assembly (see also Section 8.2.). Furthermore, a CE marking is not valid if you have made changes to the original product design or characteristics.

8.2 Type of equipment items

At EuXFEL, equipment items are divided in three categories:

- **Equipment**
  Item bought from an industrial manufacturer that is ready to be used
- **Kit**
  Item fabricated by the user
- **Assembly**
  Several pieces of equipment manufactured by industrial manufacturers and users that are assembled together in order to create a unique piece of equipment that has a specific function

8.2.1 Equipment: Information required

In instruction manuals, manufacturers should highlight any residual risks that may arise when using the equipment and the necessary precautions that users must observe during its use.

The user needs to provide the CE certificate. If the equipment is not CE-marked, a declaration needs to be provided that the user has bought equipment from an industrial manufacturer. The user also has to confirm that the equipment complies with national and European laws.

Furthermore, the user also needs to provide documentation on the operative procedure/instructions to be followed while working with this equipment at its usual place of installation

8.2.2 Kits: Information required

Assessment of kits that the user has designed and manufactured follows a different procedure. To facilitate the process, it is required to submit documentation that substantiates the claim that the kit is safe for use.

Please also provide the following documents:

- Operating Procedure[1] for installation, commissioning and use of the kit
- Equipment Risk Assessment

8.2.3 Assemblies: Information required

The documents needed for the assemblies are as follows:

- For each off-the-shelf component, the same documents as reported in “Equipment: Information required”
- For the entire assembly, the documents listed in “Kits: Information required”

8.3 EuXFEL assessment: Outcome and updates

After review of the documentation from the user, the responsible person of the SRP group will inform you about the outcome of the assessment.

The outcome of the assessment might include required changes that need to be implemented in the Operating Procedure, e.g. substitution of the Personal Protective Equipment with a different appropriate type (from a standard glove to a glove protecting hand and wrist; etc.).

As a user, you also have to bear in mind that the use of equipment can be forbidden, if EuXFEL considers it unsafe or not compatible with its site policies. User equipment must also be approved by the beamline responsible person.

[1] If an Operating Procedure does not exist yet, you should develop one (with or without the support of the SRP group, expsaf@xfel.eu) by performing an initial risk assessment.

Please provide the information required in this procedure as soon as you know that beamtime has been awarded to your proposal, at the latest, six weeks before start of the experiment. If anything needs to be integrated into the EuXFEL control or data and acquisition (DAQ) systems, you have to contact the beamline responsible person early enough.

All information and documents may be inspected by the EuXFEL Works Council, if requested.

8.4 Site provisions

8.4.1 Electrical power specifications

One of the following:

- 230 V, 50 Hz, single-phase AC outlets
- 400 V, 50 Hz, three-phase AC outlets

Grounding system: TN-C-S (IEC 60364-1: 2005 – Picture A.31B2)

8.4.2 Electrical connections

In order to supply your device with electrical power, it should have one of the following standardized plugs:

- 230 V, one-phase:
  - Type F; also known as CEE 7/3
  - Type C; also known as CEE 7/16
- 400 V, three-phase + N + PE:
  - IEC 60309-2: 2013-01, Sections 8, 16 A, and 32 A

If your device has a plug that does not fit, you should replace it before you bring your device on site. You can also use an adaptor (not provided by us). If you want to use a multiple outlet socket, you will have to bring your own. Daisy chaining multiple outlet sockets is forbidden at EuXFEL. Please be aware that only halogen-free cabling is allowed in the underground area of EuXFEL.

Figure 2. *Multiple outlet socket*

8.4.3 Junction boxes

If you need to power your equipment from a junction box, the local contact has to organize an appointment with electricians from EuXFEL. Only EuXFEL electricians are allowed to set up the connection for you.

Please inform your local contact well in advance if you need to use junction boxes.

8.4.4 Compressed air

Compressed air supply (up to 10 bar):

- Compressed air according to ISO 8573 is provided
- All pneumatic components must have a minimum design pressure of 10 bar

Connection type:

- Different connection types.
- Ask your local contact for the connection type in the room you will use to handle compressed air.
- Adaptors or pressure reducers are not provided by EuXFEL.

8.4.5 Cooling water

EuXFEL provides:

- De-ionized water for cooling

If you need water for cooling, you have to consider that your connection lines are stable to this kind of water (e.g. cast iron cannot be used)

8.4.6 Gas supplies

EuXFEL can provide the following pressurized liquefied gases:

- Nitrogen (delivery time: approximately 3 days);
- Helium (delivery time: approximately 4 weeks)
- Carbon Dioxide (60 bar; room temperature)

Requests for other gas supplies will be assessed on a case-by-case basis.

Gases that are not allowed at EuXFEL:

- Cryogenic Liquid Oxygen
- Cryogenic Liquid Carbon Dioxide

All equipment relating to gases brought in by users has to be checked by Technical Services (TS). Ask your local contact to organize an appointment with the responsible person from TS.

9 Chemical safety

Users have to fill in one sample sheet for every sample/substance in the sample section of the experiment proposal form in the User Portal of the European XFEL (UPEX). Also, solvents or buffer components must be listed. When filling out the samples section, please give as much details as possible and add a material safety data sheet (MSDS) in the English language for every hazardous substance. This also applies if you intend to use hazardous substances in very low amounts or concentrations. Provide the detailed name of every substance and the entire composition of the sample, including the chemical formula or CAS number (unique numerical identifier for every chemical substance assigned by the Chemical Abstracts Service), if available. For hazardous substances, you have to fill in an Experimental Safety Risk Assessment and Operating Instruction. The link to the document will be provided in the safety letter.

If you want to use chemicals in the user laboratories at EuXFEL (e.g. for sample preparation), you have to contact the “lab contact” or the Sample Environment and Characterization (SEC; sample.environment@xfel.eu) group. You have to fill out a Work Description, which will be provided by SEC group.

Work with chemicals is allowed in only chemical laboratories at EuXFEL. When working with chemicals, handling according to the Chemical and Laboratory Safety Regulations is mandatory for everybody. For access to the chemical laboratories, you need to take the Chemical Safety Training (you can do it online) and you need onsite training for the laboratory you want to enter.

In chemical laboratories, follow these rules:

- Do not eat, drink, or smoke.
- Food and beverages may not be taken into these rooms and stored there.

- Working under the influence of alcohol or other substances that cloud your consciousness (also be careful with medications, please note the package that comes with the drug) is generally prohibited at EuXFEL.
- Pets are not allowed.
- Applying make-up or changing contact lenses is forbidden. In general, contact with the face should be avoided.
- Personal protective equipment (coats, goggles) must be worn permanently in chemical laboratories.
- Only flat and closed shoes may be worn in the laboratory.
- Laboratory equipment may be only used after receiving proper instruction.
- It is not allowed to work alone in any laboratory unless special measures are taken.
- Long hair must be tied back or a hair net used before entering a chemical laboratory. For hairnets, please contact the SRP group.
- Pipetting should only be carried out with pipetting aids.
- Containers may be transported only with carriers provided for this purpose.
- Access-restricted doors must always be closed after entering. Unauthorized persons are not allowed to enter restricted areas except in emergency situations. It must always be ensured that the work carried out does not endanger anyone.
- Always wear suitable gloves when handling hazardous substances. After contamination, before using other devices (e.g. computers but also pens) or touching surfaces and before leaving the laboratory, the gloves must be removed and the hands washed.
- Personal protective equipment must be removed before leaving the laboratory.

It is mandatory to label all prepared mixtures and solutions clearly and permanently with the name of the content, GHS pictogram (Globally Harmonized System of Classification and Labelling of Chemicals, Table 1) if necessary, name of a contact person, experiment number, and date of

preparation. Refilling contents from an original container should be avoided, but, if it is necessary, it must be clearly recognizable which contents and which original container it is.

Table 1. *Hazard pictograms according to CLP Regulation 1272/200. More detailed information can be found in Annex 1 of the CLP Regulation.*

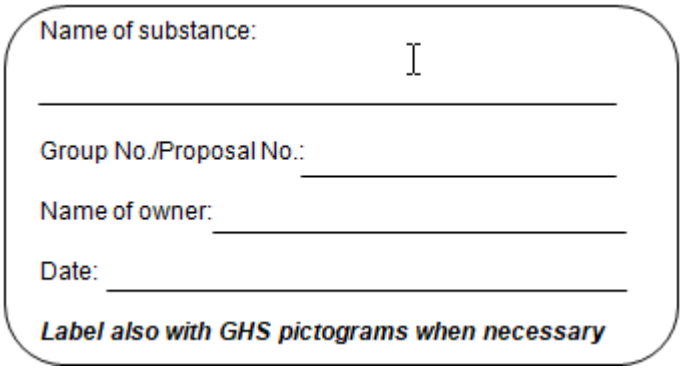
GHS01 **Explosive** 	**GHS02** **Flammable** 	**GHS03** **Oxidising** 
GHS04 **Gas under pressure** 	**GHS05** **Corrosive** 	**GHS06** **Acute toxicity** 
GHS07 **Health hazard/Hazardous to the ozone layer** 	**GHS08** **Serious health hazard** 	**GHS 09** **Hazardous to the environment** 

When submitting your proposal, please state under “Reception and storage requirements” how the samples arrive at EuXFEL (brought by users or sent to EuXFEL) and whether there are special requirements for reception and storage (e.g. temperature, humidity, and light control). When shipping samples/substances directly to EuXFEL, always name the Main Proposer at the top of the address; underneath that, add “c/o”(care of) and the name of your local contact. If the delivery address does not contain the name of your local contact, the package will not be accepted. Also, add your proposal number and name of the scientific instrument to the address.

Please get in contact with the relevant EuXFEL lab responsible staff to further discuss reception and storage options, before the proposal is submitted.

When shipping your samples to EuXFEL, follow the national and international rules for shipping. In Germany, these are the “European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)” and “International Air Transport Association (IATA)” for transport via airplane. These regulations include specific packaging regulations for the transport of hazardous substances, which must be complied with during transport. For storage, it is mandatory that containers have be clearly and permanently labelled with the name of the owner, the proposal number, the name of the substance, and the appropriate hazard labels according to the GHS. The provided label template (Figure **1**3) can be used; other clear labelling is also allowed.

Figure 3. *Label template that is provided in the laboratories*



All samples and substances must be taken back or disposed of in a proper manner by you after completion of the experiment. In case you wish to dispose of samples or substances on site, the waste disposal policy of EuXFEL must be followed (see Hazardous Waste Disposal document).

10 Biological safety

Users have to fill in one sample sheet for each sample/substance in the sample section of the experiment proposal form in the User Portal of the European XFEL (UPEX). It is allowed to handle wild types and genetically modified organisms up to Biosafety Level 2 (BSL2) in the support laboratory, but only wildtype organisms of Biosafety Level 1 (BSL1) are allowed at instruments in the experiment hall. When filling out the sample sheet, also consider buffer substances and supplements. Give as much details as possible about the origin, risk level, and planned work for the biological materials. If you only want to bring purified proteins or crystals, they must be considered according to Hazardous Substance Ordinance (Gefahrstoffverordnung).

If you want to bring genetically modified organisms, you have to fill in a special form (Form Z). We need some more information so that the necessary documents can be filled in and we can get in contact with the authorities if it is necessary. The Safety and Radiation Protection (SRP) group will send you the link to Form Z with the safety letter, if you have to fill in one.

If you want to use biological materials in the user laboratories at EuXFEL (e.g. for sample preparation), you have to contact the Sample Environment and Characterization group (SEC, sample.environment@xfel.eu). You have to fill out a Work Description, which will be provided by the contact person of the SEC group.

Work with genetically modified organisms is allowed only in biology laboratories at EuXFEL. When working with biological materials, handling according to the Biological Safety Regulation is mandatory for everybody. For access to the biology laboratories, you need to take the Chemical and Biological Safety Training (can be done online) and you need onsite training for the laboratory you want to enter.

When shipping your samples to EuXFEL, follow the national and international rules for shipping. In Germany, these are the “European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR)” and “International Air Transport Association (IATA)” for transport via airplane. These regulations include specific packaging regulations for the transport of biological materials, which must be complied with during transport. For storage purposes, it is mandatory to clearly and permanently label containers with name of the owner, the proposal number, the content of the container, and the appropriate hazard labels according to GHS, if required. The provided label template (Figure 3 in Section 9, “Chemical safety”) can be used; other clear labelling is also allowed.

All samples and substances must be taken back or disposed of in a proper manner by you after completion of the experiment or given over to the user laboratory contact person for autoclaving or disposing. All biological materials must be autoclaved before disposal, and all equipment that is contaminated with biological materials must be disinfected according to the authorized hygiene plan. The waste disposal policy of EuXFEL must be followed.