

Seminário Europeu
Avaliação do Risco Químico
Regulamentos REACH e CLP
+ Workshop
27 novembro 2017

Avaliação de Riscos e prática laboratorial em Química: segurança, investigação e ensino

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organização:



decivil
universidade de aveiro
departamento de engenharia civil



dq
universidade de aveiro
departamento de química



AUTORIDADE PARA AS
CONDIÇÕES DO TRABALHO

Personal conduct inside the buildings/laboratories

Conduct yourself in a responsible manner by respecting the laboratorial safety rules!



★ Safe working protects:

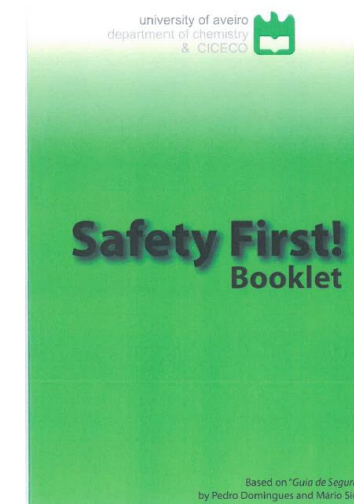
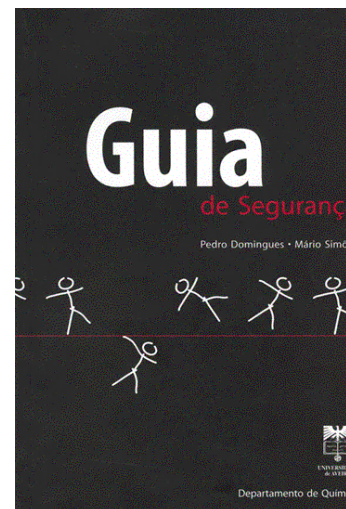
- ◆ You
- ◆ Other lab workers
- ◆ Cleaners
- ◆ Visitors
- ◆ Your work



Personal conduct inside the buildings/laboratories

- ❖ A Chemical Laboratory is a potential hazardous working place!
- ❖ In the Chemistry Department we act as if our buildings are big laboratories.
- ❖ Inside the laboratory (also in the building) there are several compounds and scientific equipment.
- ❖ All laboratorial activities involve risks (accidents can happen!).
- ❖ Aim: risk assessment for risk mitigation.

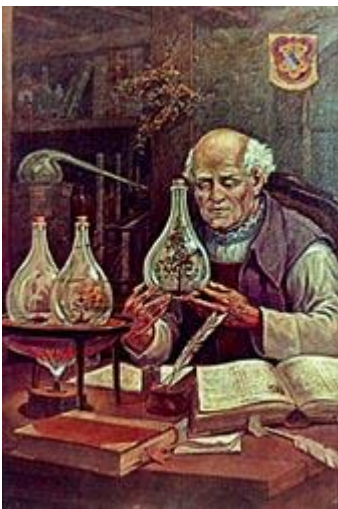
We have documents produced by the Safety Committee in Portuguese “Guia de Segurança” and in English “Safety First!”



Personal conduct inside the buildings/laboratories

- ❖ General recommendations;
- ❖ Access to the Chemistry Buildings and Laboratories;
- ❖ Procedures in case of an emergency;
- ❖ Standard procedures for working with Human body fluids and tissues, micro- or nano-particles, and gases (compressed gas cylinders, cryogenic gases, piped gases);
- ❖ Risk assessment;
- ❖ Standard procedures for working with hazardous chemicals;
- ❖ Laboratory waste disposal.

Risk assessment / Standard procedures for working with hazardous chemicals



"Sola dosis facit venenum"

Only the dose makes the poison

Paracelus (1493-1541)

All things are poison, and nothing is without poison.



Risk assessment / Standard procedures for working with hazardous chemicals

Material safety data sheet (MSDS) Fundamental in risk assessment



Material Safety Data Sheet: important document containing detailed information about a compound physical, chemical and toxicological properties. Includes information about handling and security procedures. The MSDS reading is mandatory in the Chemistry Dep.

Risk assessment / Standard procedures for working with hazardous chemicals

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Requisição para Utilização de Substâncias Carcinogénicas, Embriotóxicas e Especialmente Tóxicas
Form for the Utilization of Carcinogenic, Embryotoxic and Specially Toxic Compounds

I. Docente / Investigador Responsável Supervisor Contato Contact

II. Substância Compound

Nome Name Nota: adicionar MSDS em anexo
CAS Note: add MSDS as an attachment

Local de utilização Room / Laboratory

Tipo de utilização ☐ Regular Regular ☐ Irregular Irregular

Período de utilização Periodicity of Use

Quantidade máx. a usar Max. quantity to be used

Local de Armazenagem Storage location

Quantidade a adquirir Quantity to be purchased

III. Descrição do modo de utilização da substância
Description how the compound will be used

IV. Investigadores que poderão ser expostos à substância perigosa
Researchers who may be in contact with the hazardous compound

- Investigadores autorizados a utilizar a substância
- Authorized researchers to use the compound

1.
2.
3.
4.

- OUTROS INVESTIGADORES QUE UTILIZAM O MESMO EQUIPAMENTO DE TRABALHO
- Other researchers who work in the laboratory where the hazardous compound will be used

1.
2.
3.
4.
5.
6.
7.
8.

Robrica Signature

V. Descontaminação e eliminação
Decontamination and elimination

- Métodos de descontaminação
- Decontamination procedures

- Métodos de limpeza da área de trabalho (inclui equipamento e bancadas)
- Workplaces cleaning procedures (including equipment and benches)

- Procedimentos de eliminação (intermediários, resíduos e substância não usadas)
- Removal procedures (intermediate compounds, residues and unused compound)

VI. Procedimentos de emergência (inalação, ingestão e inoculação)
Emergency procedures (when inhaled, ingested and for inoculation)

Orientador(es) Supervisor(s) Assinaturas Signatures

Utilizador(es) User(s)

Data Date

The use of substances that pose significant threats to human health (carcinogens, embryotoxins, special toxicity and potential explosive) is only permitted after submission of a form to the Safety Committee.

Laboratory waste disposal

Elimination of chemical residues or dangerous substances directly to the Environment is forbidden!

- ❖ Small amounts of chemical residues;
- ❖ Recycling;
- ❖ Waste disposal.



Laboratory waste disposal

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department of chemistry

Serviço de Recolha de Resíduos
Chemical Waste Disposal Service

A preencher pelo fiel do Armazém

Entrega N.º	Data
Contentor N.º	

Armazenamento <i>Beginning of storage</i>	Data	Laboratório <i>Laboratory</i>
Entrega no Armazém <i>Delivery at the Stores</i>		

Componente principal <i>Main component</i>	Quantidade <i>Quantity</i>
Outros componentes <i>Other components</i>	

O orientador responsável <i>Supervisor</i>	Telefones D.Q. / L.T.	Telephones Outro <i>Other</i>

Responsável pela segurança:
Head of Safety Commission:

Este registo deve ser preenchido para todos os resíduos a eliminar.
*Quando os resíduos a eliminar pertencem às classes 1, 4, 5 ou 6 exige-se a assinatura do responsável pela segurança.
This form should be filled for all chemical waste to eliminate.
*If the chemical waste to eliminate belong to categories 1, 4, 5 or 6 the signature of the head of the Safety Commission is mandatory.

Procedure for the elimination of residues



- ❖ Identify the category to which the chemical residues belong;
- ❖ Store chemical residues in appropriate vessels (properly labelled) for elimination by the contacted company

Safety Day

- ❖ Besides the daily procedures associated to safety assessment, the Chemistry Dep. organizes a thematic Day dedicated to this issue
- ❖ This event is open to ALL and project/master students are encouraged to participate.

Dia da Segurança Laboratorial
13 de dezembro de 2017
(Anfiteatro 15.1.59 às 15h)

- ❖ *Regras gerais para prevenção de acidentes;*
- ❖ *Tratamento e eliminação correta de resíduos;*
- ❖ *Plano de evacuação dos edifícios*

Ficha de dados de segurança:
o instrumento fundamental na gestão de risco



Leio-a Equipo-me Eu manuseio produtos químicos



All welcome!



Reunião com a Comissão de Segurança do DQ

www.fppt.info

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Químico - Regulamentos
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Despertar Consciências *Gerar Responsabilidades* *Formar Pessoas*

Thanks to all the members of the Safety Committee, current and past. As well as to all the Department directors for their support.



Com o apoio de:

