Healthy Workplaces Campaign 2018-19

Manage dangerous substances in the workplace
HWC Summit 2019 Bilbao

European Agency for Safety and Health at Work

EU2019.FI

25 1994 - 2019

Healthy Workplaces

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PARALLEL SESSION 2:
GOOD PRACTICES AND INTERVENTIONS

How can we effectively communicate to workers about dangerous substances?

European Agency for Safety and Health at Work

EU2019.FI

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Healthy Workplaces

Employers, managers, supervisors, workers and their representatives need to know about the risks to workers' health in the workplace and how to manage those risks.

Effective communication about them is a challenge.

How can we effectively communicate to workers about dangerous substances?

FLINN SCIENTIFIC, INC.
Safety Data Sheet (SDS)

n-Butyl Alcohol

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

SECTION 2 — HAZARDS IDENTIFICATION

SECTION 3 — COMPOSITION, INFORMATION ON INGREDIENTS

SECTION 4 — FIRST AID MEASURES

SECTION 5 — FIRE FIGHTING MEASURES

SECTION 6 — ACCIDENTAL RELEASE MEASURES

ECHA
EUROPEAN CHEMICALS AGENCY

SDS
Safety data sheets

Labels

J-117 Lubricating Oil and Belt Dressing

Product Code: J-1107 U3

DANGER

Highly flammable
Liquid and vapor

In case of Fire: Use dry chemical (BC) or Carbon dioxide (CO_2) fire extinguisher

First Aid (ingestion): DO NOT INDUCE VOMITING. Rinse mouth with water. Never give anything by mouth to a person who is unconscious or drowsy. Get immediate medical attention by calling a poison Control Center, or hospital emergency room. If medical advice cannot be obtained, then take the person and product to the nearest medical emergency treatment center or hospital.

Dispose of in accordance with local, regional, national, international regulations as specified.

Fill Weight: 18.52 lbs
Exp. Date: 1/5/2016
Lot Number: A0323111323
Fill Date: 1/5/2014
Gross Weight: 20 lbs

Direction Use: Make sure to shake well before using. If crystalization has occured, do not use and discard in accordance to approval methods.

Thane Chemical Company

REACH aims to improve the amount and quality of information available on chemicals and defines new provisions for **communication** throughout the supply chain.
CLP uses this information to help identify accurate classifications and hazard **communication** for the user.

How can we effectively communicate to workers about dangerous substances?

REACH
CLP
Exposure scenarios

Símbolos de Perigo DSP / DPP

Pictogramas de Perigo CLP

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Healthy Workplaces

How can we effectively communicate to workers about dangerous substances?

REACH and or CLP are not (fully) applicable to some types of substances, for example

- medicines such as cytostatic drugs,
- cosmetics such as hairdressing products, and
- food and feed stuffs.

hairdressers

Users may then not have access to SDS or labelled chemicals but may receive the information on hazards and safe use from their suppliers in a different form.

REACH and or CLP are not (fully) applicable to some types of substances, for example:

selective collection of solid waste

How can we effectively communicate to workers about dangerous substances?

REACH and or CLP are not (fully) applicable to some types of substances, for example:

deburring

stone cut

some waste

The chemical agents directive specifies that employers shall obtain additional information that is needed for workplace risk assessment from the supplier or other readily available sources.

How can we effectively communicate to workers about dangerous substances?

Under workplace legislation, employers must have an overview of all these risk factors and how they may interact to put workers at risk. They must also consider all the products, even when those are used as intermediaries, stored or transported, and all relevant tasks.

Workers in many modern industrial settings have long faced a multitude of chemical threats to their health and safety–some of them obvious, many more barely perceptible.

It is important to note that hazards depend on how and under which circumstances substances are used at the workplace.

acute

chronic

Risk Assessment

Flour dust is not commonly perceived as dangerous, but it may become a **health hazard** to bakers, or may even cause **explosions**.

Manual weighing

Cleaning- Use of vacuum cleaner

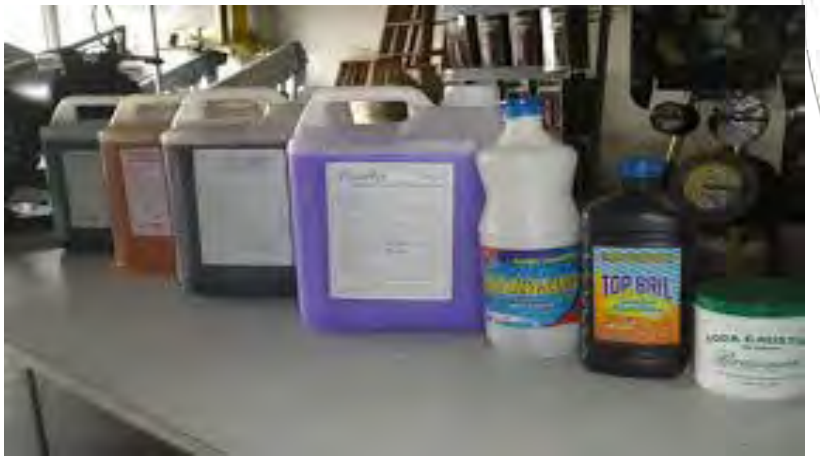
How can we effectively communicate to workers about dangerous substances?

The employer's responsibility to ensure that workers and their representatives are informed and trained about:

- hazardous properties of the chemicals;
- the level, type and duration of exposure and the circumstances of work;
- appropriate precautions to safeguard themselves and other workers in the workplace, including what to do if there is an accident (e.g. spillage) or emergency;
- the effect of risk-management procedures;
- relevant occupational exposure limit (OEL) values;
- conclusions to be drawn from any health surveillance and exposure assessment already undertaken.

Source: Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC) (http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1998:131:0011:0023:EN:PDF).

How can we effectively communicate to workers about dangerous substances?

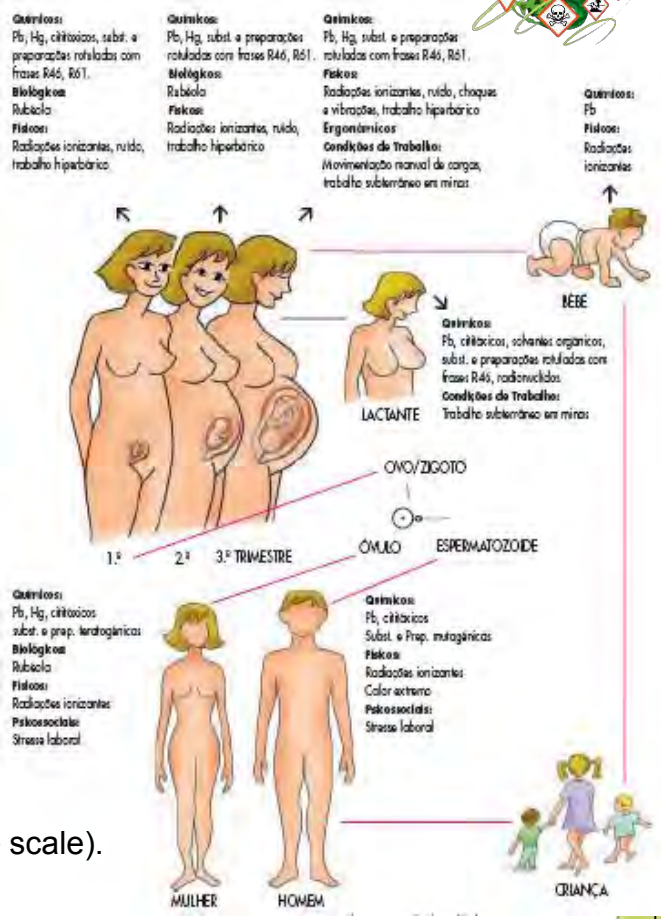


The employer shall ensure that workers are aware of changes in processes or substances used.

How can we effectively communicate to workers about dangerous substances?

There are specific rules for protecting young people and pregnant or breastfeeding workers and workers who have recently given birth, and for informing them.

for example:
Pregnant and lactating women are kept away from workplaces where the following chemicals are used:
Toxic and
CMR - H340 and H341; H360 and H361; H362 (lactating); H370-H371-H372-H373.



(Note: the drawings are not all on the same scale).

How can we effectively communicate to workers about dangerous substances?

Employers must keep records about exposure and health surveillance of workers who are likely to be exposed to hazardous substances, especially carcinogens and mutagens, and give workers access to their personal data.

for example:

Specific tests to ensure that exposure to substances such as lead, nickel and thiocyanates is controlled.

Member States are entitled to

To Support to Hygiene and Safety Technicians

GUIDES
Control of Exposure to Chemical Agents
Selection of Individual Protection Equipment (PPE)
Selection of Protective Gloves - Chemical Hazards
Selection of Respiratory Protection Apparatus

SHEETS
Chemical Risk Assessment
From Manufacture to Use of Chemicals. A Complementarity of Approaches.
Communication of Chemical Risks in the Supply Chain
Safety technician at work

Source: (http://www.act.gov.pt/(pt-PT)/Campanhas/Campanhas%20a%20decorrer/REACH/Instrumentosdeinformacao/Paginas/default.aspx)

PT

To Support to Hygiene and Safety Technicians and Medical Surveillance

Technical Guide # 2
Health surveillance of workers exposed to carcinogens, mutagens and substances toxic to reproduction

Integrated Risk Assessment Form


DGS

OCUPACIONAL

FICHA DE AVALIAÇÃO INTEGRADA DE RISCO PROFISSIONAL
A AGENTES QUÍMICOS CMR (Cancerígenos, Mutagénicos e Tóxicos para a Reprodução)

Trabalhador — Nome: — Data de nascimento
Posto de trabalho
Empresa (do trabalhador) — Designação — NIPC/NIF
Morada — Código postal

1. INFORMAÇÃO DISPONÍVEL (vide Rótulo) – Ponto 6.1. do Guia Técnico da DGS

1.1. Designação do produto
1.2. Pictograma de perigo CMR: Sim ☐ Não ☐ — 1.3. Palavra Sinal: Perigo ☐ Atenção ☐
1.4. Código de advertência (colocar cruz sa(s) opção(ões) seguinte):
Cancerígeno: H350 ☐ H351 ☐ / Mutagénico: H340 ☐ H341 ☐ / Tóxico para a Reprodução: H360 ☐ H361 ☐ H362 ☐

2. ANÁLISE DO RISCO PROFISSIONAL – Ponto 6.2. do Guia Técnico da DGS

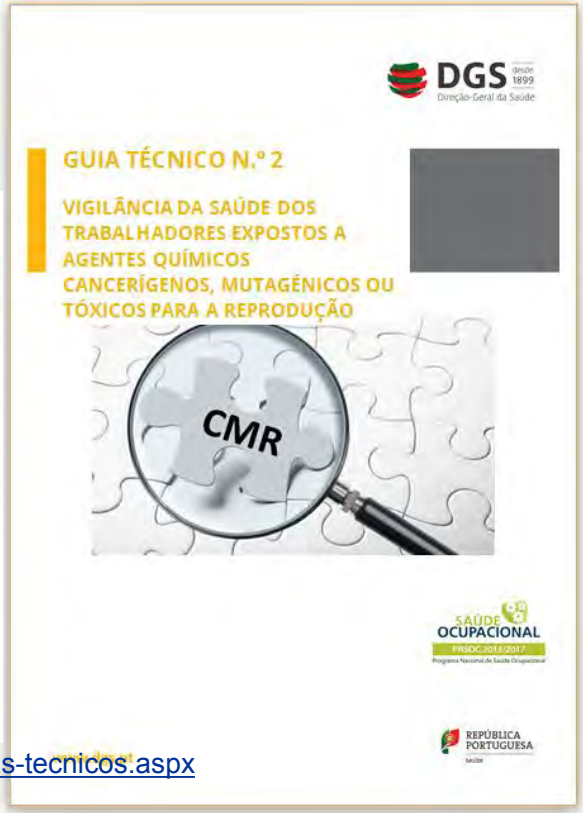
2.1. Identificação/qualificação do fator de risco profissional (vide FDS – Ficha de Dados de Segurança) – Ponto 6.2.1. do Guia Técnico da DGS:
2.1.1. Agente químico (colocar cruz na opção seguinte): Substância ☐ Mistura ☐
2.1.2. Identificar a(s) substância(s)/mistura(s) do produto que estão classificadas em pelo menos uma classe de perigo CMR:

Designação/ identificação	N.º Index	N.º CAS	N.º CE	Classe e categoria de perigo	Código de advertência de perigo	Recomendações de Prudência	Informação suplementar

2.1.3 Informação toxicológica do agente químico:
2.1.3.1. Indicar principais propriedades toxicológicas (incluindo vias de exposição):
2.1.3.2. Indicar principais efeitos perigosos para a saúde:
2.1.4 Manipulação do agente químico (e.g. adição, diluição, etc.) – colocar uma cruz na situação existente:
Não existe manipulação ☐
Sim, existe manipulação ☐ Se "Sim" qual: _____
Se, Sim, a FDS:
• Desaconselha a manipulação? Não ☐ Sim ☐
• Prevê a manipulação? Não ☐ Sim ☐

2.2. Trabalhador exposto e qualificação do contexto de exposição profissional – Ponto 6.2.2. do Guia Técnico da DGS
2.2.1. Indicar principais atividades/tarefas com utilização/manuseamento/exposição profissional ao agente químico CMR:
2.2.2. Contexto de exposição profissional
2.2.2.1. Utilização profissional - indicar as operações com utilização do agente químico CMR de maior relevância:
2.2.2.2. Condições operacionais: (vide Quadros 6 a 7 do Guia Técnico da DGS) – preencher os quadros abaixo:

Categorias:	Quantidade utilizada	Propriedades físicas: ☐ Pó ☐ Líquido ☐ Fumos	Condições de trabalho/ do processo	Frequência da utilização	Duração da utilização	TOTAL da exposição: Qualificação do contexto de exposição profissional
Pessoas:						



Source: https://www.dgs.pt/saude-ocupacional/referenciais-tecnicos-e-normativos/guias-tecnicos.aspx

To Support to Hygiene and Safety Technicians and Medical Surveillance

Technical Guide # 1
Surveillance of the health of workers exposed to ionizing radiation

Source: https://www.dgs.pt/saude-ocupacional/referenciais-tecnicos-e-normativos/guias-tecnicos.aspx

European Lung Foundation - occupational quiz

http://yourlungsatwork.europeanlung.org/pt/index

PT

Pict. 3: *Safety Booth – Quizz game and GHS Game*

How can we effectively communicate to workers about dangerous substances?

PT

ROADMAP ON CARCINOGENS

10 FACTSHEETS:

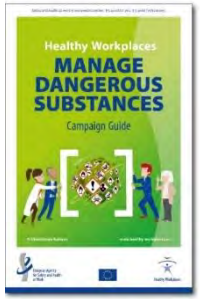
- ASBESTOS
- BENZENE
- VINYL CHLORIDE
- CHROMIUM VI
- FORMALDEHYDE
- WELDING FUMES
- DIESEL ENGINE EXHAUST
- POLYCHYCLIC AROMATIC HYDROCARBONS - PAH
- SILICA DUST
- HARDWOOD DUST

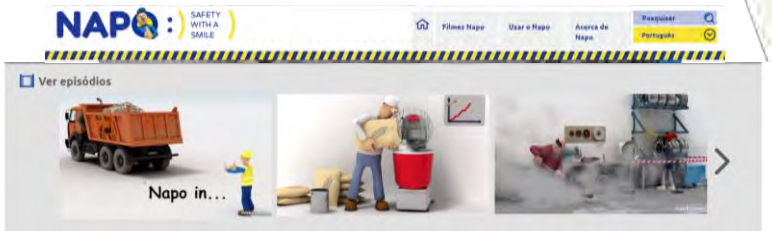
8 FACTSHEETS:

- ACRYLAMIDE
- BERYLLIUM
- CADMIUM
- ETHYLENE OXIDE
- HYDRAZINE
- LEAD
- NICKEL
- TRICHLORETHYLENE

https://roadmaponcarcinogens.eu/

How can we effectively communicate to workers about dangerous substances?





The European Campaign HWC materials

European Agency for Safety and Health at Work

www.healthy-workplaces.eu

How can we effectively communicate to workers about dangerous substances?

Type of exposure

OiRA

E-tools

Informed WORKER

How can we effectively communicate to workers about dangerous substances?

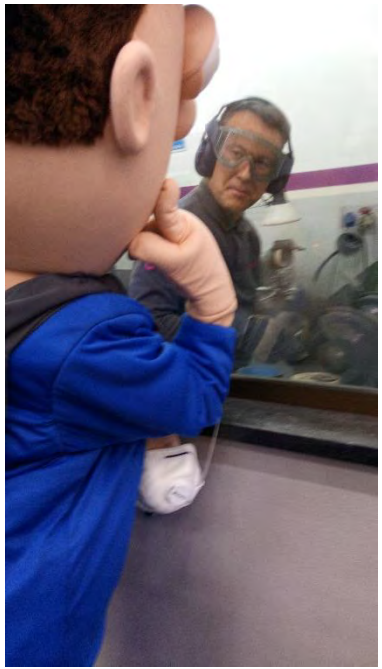
Type of exposure

OiRA

E-tools

It's enough

HOW TO COMMUNICATE WITH THE WORKER?



go to the worker on the **shop floor** and observe his behavior towards dangerous substances

FACE to FACE

OHS expert - worker

continuously and permanently

How can we effectively communicate to workers about dangerous substances?

Install touch screen computer kiosks at various factory sites so that workers and contractors can refer to the SDS. These kiosks must have their own directory for the Occupational Safety and Health System, subdivided into folders.

How can we effectively communicate to workers about dangerous substances?

The employer should adjust the recommended measures from the safety data sheets to the specific conditions of each workplace.

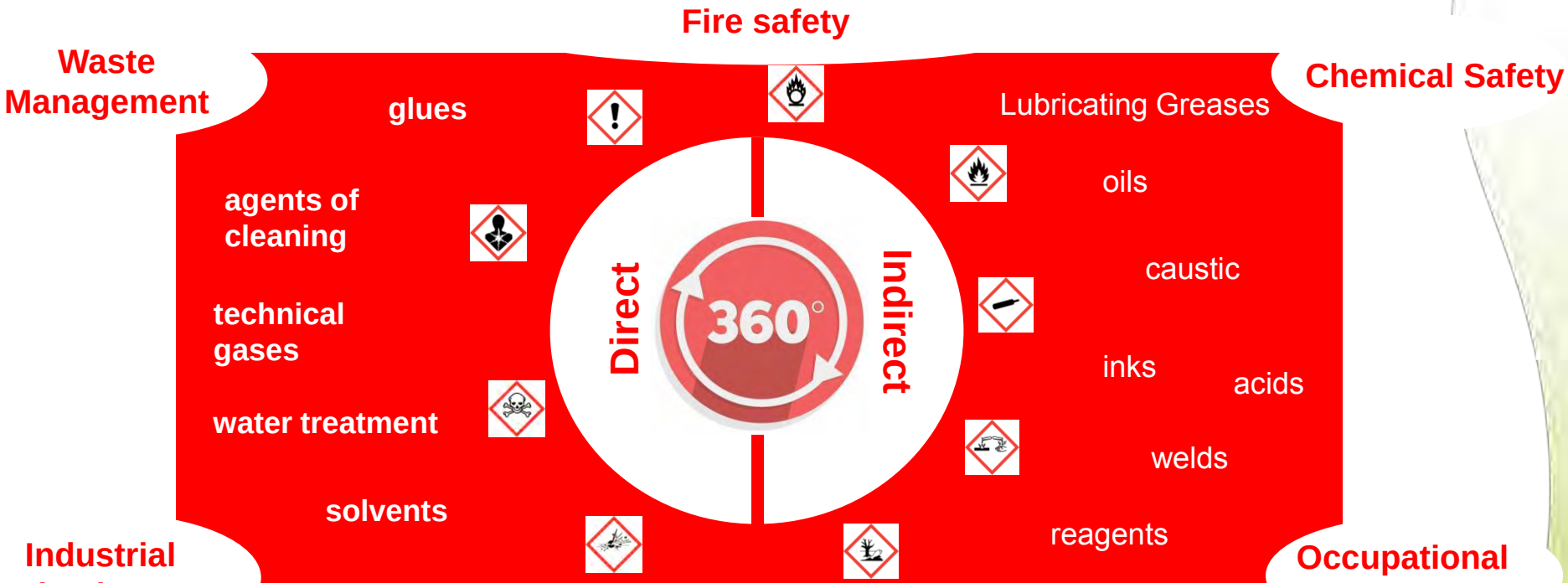
- Preparation of a summary sheet
- Put next to the workstation where this product is used

How can we effectively communicate to workers about dangerous substances?

Conduct weekly or daily activities called "Safety Dialogues", with various topics related to OSH, where the subject of Chemical management is sometimes addressed and discussed.

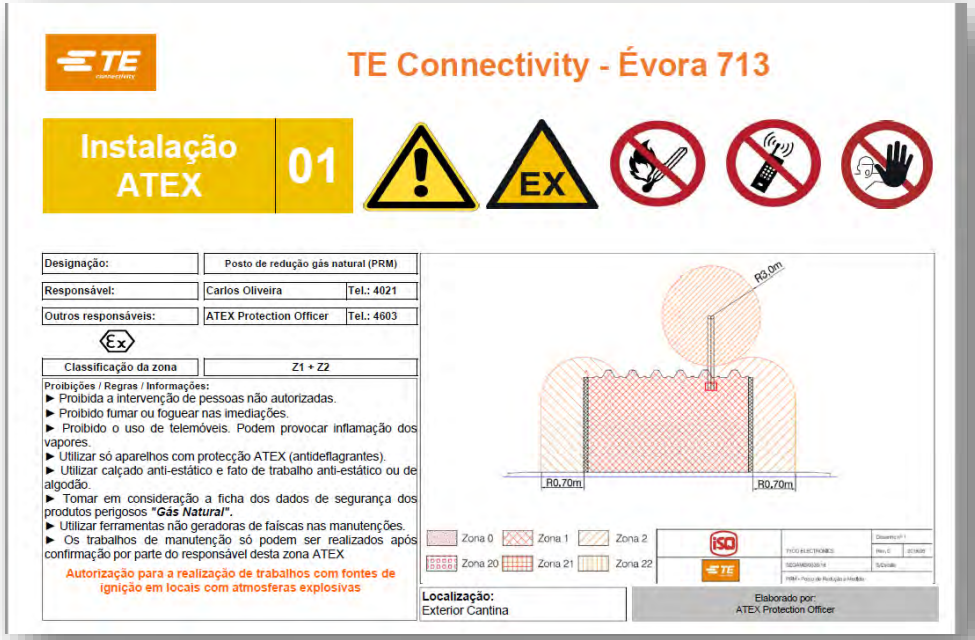
“Safety Dialogues” are quick meetings of about 10 minutes at the workplace.

360º vision in Hazardous Substances management



How can we effectively communicate to workers about dangerous substances?

There is clear evidence to suggest that SDSs are an ineffective way of communicating information to employees.



TE Connectivity - Évora 713

Instalação ATEX 01

Designação:	Posto de redução gás natural (PRM)	
Responsável:	Carlos Oliveira	Tel.: 4021
Outros responsáveis:	ATEX Protection Officer	Tel.: 4603
Classificação da zona	Z1 + Z2	

Proibições / Regras / Informações:
- ► Proibida a intervenção de pessoas não autorizadas.
- ► Proibido fumar ou foguear nas imediações.
- ► Proibido o uso de telemóveis. Podem provocar inflamação dos vapores.
- ► Utilizar só aparelhos com protecção ATEX (antideflagrantes).
- ► Utilizar calçado anti-estático e fato de trabalho anti-estático ou de algodão.
- ► Tomar em consideração a ficha dos dados de segurança dos produtos perigosos ***"Gás Natural"***.
- ► Utilizar ferramentas não geradoras de faíscas nas manutenções.
- ► Os trabalhos de manutenção só podem ser realizados após confirmação por parte do responsável desta zona ATEX

Autorização para a realização de trabalhos com fontes de ignição em locais com atmosferas explosivas

R3,0m R0,70m R0,70m

Zona 0 Zona 1 Zona 2 Zona 20 Zona 21 Zona 22

Localização: Exterior Cantina

Elaborado por: ATEX Protection Officer

Training / Awareness raising / Information

New Employees - 2 hours General Training in Chemical Safety

Workplace - specific training on each chemical used

The supporting document is a Safety Instruction which is ultimately signed on the back.

Specialized training for roles such as ATEX and Fire Prevention or ADR Officer.

The Resp. Department have every 2 years training in EHS Legal Requirements, which always includes the topic of chemical safety.

Specific Training by Chemical Instruction based on Safety Instruction

Do all workers know:

- about the risk assessment of their workplace?
- what hazards they are being exposed to?
- how they may be affected?
- about the results of any exposure monitoring or health surveillance?
- what they have to do to keep themselves and others safe (i.e. how the risks are to be controlled)?
- how to make full and proper use of all the control measures provided?
- how to check and spot when things are wrong and to whom they should report problems and defects with any control measures?
- how to carry out the foreseen maintenance and functionality checks, especially of local exhaust ventilation and other protective devices?
- about preventive and protective measures to be taken in case of maintenance work?
- about first aid and emergency procedures?
- what they should do in the event of an accident, incident or emergency involving hazardous substances?
- how to handle waste?

Are workers involved in regular updates of risk assessment and regularly retrained?

Effectiveness

Changes in product knowledge

Attitudinal changes

Changes in risk perception

Behavioural changes

Changes in cumulative exposure

Training of new collaborators with approach to the theme "Use of Chemical Substances and Preparations", with the viewing of didactic films on the subject.

Host

create need and curiosity

How can we effectively communicate to workers about dangerous substances?

8 million chemicals

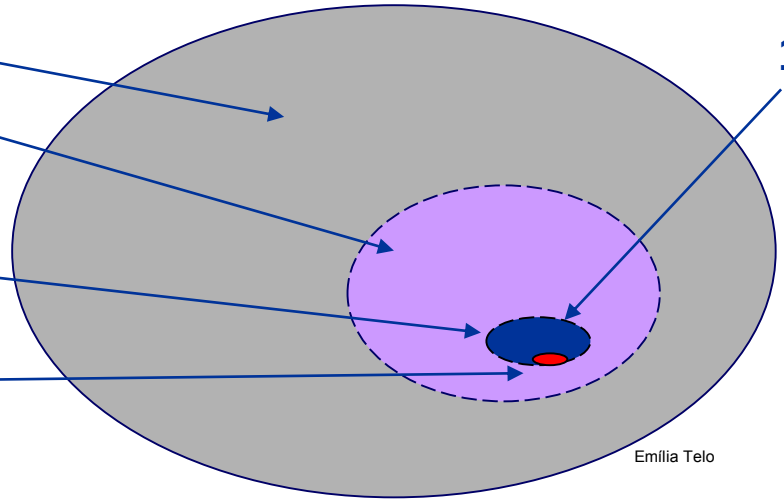
Used
110 000

LIMITED KNOWLEDGE

Well tested
8 000

Black list
2000

1700-1800 OLE



Emília Telo

C ▪ **1098 carcinogenic confirmation in humans H350 H351**

M ▪ **555 mutagenic (in germ cells) H340 H341**

R ▪ **313 reprotoxics H360 H361 H362**

How can we effectively communicate to workers about dangerous substances?

Thank You!

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#EUhealthyworkplaces