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Guide for Risk Assessment in Small and Medium Enterprises

**Chemical Hazards**
Identification and Evaluation of Hazards; Specification of Measures
Guide for Risk Assessment in Small and Medium Enterprises

3 Chemical Hazards

Identification and Evaluation of Hazards; Specification of Measures

Section for Electricity
Section for Iron and Metal
Section for Machine and System Safety
This brochure is intended to meet the requirement for a risk assessment for work with hazardous substances.

The brochure is divided into the following chapters:

1. Principles
2. Risk Assessment
3. Specification of Measures
4. Annexes

Note:
This brochure serves for implementing the Framework Directive on the introduction of measures to encourage improvements in the safety and health of workers at work (89/391/EEC) of its adopted specific Directives and of the relevant provisions transposed into national law.

The documentation of the risk assessment is not subject of this series of brochures as there are great national differences between the individual Member States.

Besides the subject "Chemical hazards", brochures with the same structure are planned (available) on the following issues:

- Hazards caused by machinery and other equipment
- Hazards caused by electricity
- Hazards caused by fire and explosions
- Hazards caused by whole-body/hand-arm vibrations
- Falling on the plane and falling from a height of persons
- Physical strain (e.g. heavy and one-side work)
- Noise
- Mental workload
### 1. Principles

Hazardous substances can be found at nearly all workplaces, including small and medium enterprises e.g.:

<table>
<thead>
<tr>
<th>Workplace</th>
<th>Hazardous Substances</th>
<th>Old Symbols</th>
<th>New Symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sites</td>
<td>Paint removers, paints and varnishes, cements, auxiliary, building materials etc.</td>
<td>![X]</td>
<td>![Exclamation]</td>
</tr>
<tr>
<td>Hairdressers</td>
<td>Hair colours, hairspray, decolorants, bleaching agents</td>
<td>![Flame]</td>
<td>![Flame]</td>
</tr>
<tr>
<td>Cleaning agents</td>
<td>Cleaning agents, disinfecting agents, etc.</td>
<td>![X]</td>
<td>![Exclamation]</td>
</tr>
<tr>
<td>Shops</td>
<td>Oils, solvents, diluents and thinners, etc.</td>
<td>![Flame]</td>
<td>![Flame]</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Workplace</th>
<th>Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farms, plant nurseries</td>
<td>Pesticides and herbicides etc.</td>
</tr>
<tr>
<td>Electroplating shops</td>
<td>Acids, bases, nickel chloride, potassium cyanide, chromic acid etc.</td>
</tr>
<tr>
<td>Production and application of coating materials</td>
<td>Binders, solvents, additives, pigments</td>
</tr>
</tbody>
</table>

Hazardous substances are any liquids, gases or solids that affect workers’ health or safety. These are also substances which are generated or released (welding fumes, emissions from diesel engines, wood dust, flour dust etc.) during processing as well as those where no labelling is required. These substances are delivered or stored in different types of packaging.
Hazardous materials are shipped and stored in different packaging forms.

| Different types, storage and packaging of chemicals |
|-----------------|-----------------|-----------------|
| solid           | liquid          | gas             |

- **solid**
  - Powder
  - Granules
  - Tablets

- **liquid**
  - Various liquid substances

- **gas**
  - Gas cylinders

These are also substances which are generated or released (welding fumes, emissions from diesel engines, wood dust, flour dust etc.) during processing as well as those where no labelling is required.

These substances are delivered or stored in different types of packaging.

**Legal bases**


**Manufacturers, importers and users**

On 1 July 2007, the REACH Regulation, a new law on chemicals applicable within the European Union came into force (EC No. 1907/2006).

REACH is the short form for Registration, Evaluation, Authorisation and restriction of Chemicals.

REACH is intended to force manufacturers and importers of chemical substances by means of a registration and assessment procedure to provide sufficient data for a safety assessment of the chemicals. This information is entered in the safety data sheets and serves as an important base for risk assessment.

There is a new global classification and labelling of chemicals regulated by the GHS system (Globally Harmonised System). GHS is implemented in Europe by the CLP Regulation (classification, labelling and packaging of Substances and Mixtures) and will apply to substances from 1 December 2010, including transition periods, and to mixtures from 1 June 2015.

Concerning different labelling of chemicals according to the regulation on carriage of dangerous goods by road and rail, to the hazardous substances regulation and to GHS/CLP see the following figure.

**Identification of Dangerous Chemical Substances**

<table>
<thead>
<tr>
<th>ADR/RID</th>
<th>EC-Directive 67/548/ECC</th>
<th>GHS</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="ADR/RID symbols" /></td>
<td><img src="image2" alt="EC-Directive symbols" /></td>
<td><img src="image3" alt="GHS symbols" /></td>
</tr>
</tbody>
</table>
2. Risk Assessment

The employer shall ensure that hazards of employees caused by hazardous substances are identified, eliminated or reduced to a minimum by means of protective measures.

2.1 | Systematics of Risk Assessment

The individual steps for the risk assessment (see scheme) are described in the following clauses.

2.2 | Identification of hazardous Substances at the Workplace

Pursuant to the Hazardous Substances Ordinance, the employer shall first determine whether hazardous substances are present at the workplace.

How can we find out, whether a working substance is a hazardous substance?

- labelling of chemicals (danger symbols, R-sentences/H-statements)
- Safety Data Sheets
- list of occupational exposure limit values
- list of occupational diseases

A lot of information can be taken from the product label (see label for methanol with labelling according to previous Directive 67/548/EEC and future labelling for GHS/CLP).

During working with hazardous substances, the following items shall be considered when performing risk assessment:

- hazardous properties (labelling, SDS)
- level, type and duration of exposure, taking all ways of exposure into account
- working conditions and processes, including working substances and the amount of hazardous substances
- health and safety information of the manufacturer or of the importer (SDS)
- exposure limit values including short-term values (exceeding factor) or biological limit values
Examples of hazardous substances

<table>
<thead>
<tr>
<th>Hazardous Substance</th>
<th>Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrofluoric acid</td>
<td>T+; C; R 26/27/28, R35</td>
</tr>
<tr>
<td>Methanol</td>
<td>T, F; R11, R23/24/25, R39/23/24/25</td>
</tr>
<tr>
<td>Glass Cleaner/AAA</td>
<td>F, Xi; R11, R36, R36/38, R67 (contains Isopropanol, Ethanol)</td>
</tr>
<tr>
<td>Hydrochloric acid &gt; 25%</td>
<td>C; R34, R37</td>
</tr>
</tbody>
</table>

Registration of hazardous substances, their properties and their effects

Hazardous substances are systematically registered in the table of hazardous substances (see Annex 1). This table can be prepared related to the workplace, work area or department.

If many working substances are used at a workplace or in a work area (e.g. in chemical laboratories, pharmacies), also representative substance groups such as acids/bases (key components) may be chosen. The risk assessment is then prepared for these key components.

Health effects

Hazardous substances may have acute (acute toxic, caustic, irritative) and/or chronic (carcinogenic, toxic to reproduction, mutagenic) properties. Hazard characteristics and warnings of danger (R-sentences/H-statements) point out these properties.

On the basis of the R-sentences R 20 up to and including R 68 (with the exception of R 44, R 50 and R 59) different health hazards can be derived.

2.3 Further Information on hazardous Substances (safety data sheets, exposure scenarios)

Hazards caused by hazardous substances may be influenced by the following items:

- their hazardous properties
- processing temperature, vapour pressure and saturation concentration
- particle size
- by displacement of atmospheric oxygen

Required and useful documents:
- up-to-date safety data sheet (should not be older than 3 years) including exposure scenarios according to REACH
- labelling of the working substance with danger symbols and R-sentences/H-statements or information for use and/or package insert text for working substances, which are covered by other regulations (e.g. pharmaceuticals, cosmetics, fertilizers, hazardous wastes)
- occupational exposure limit values
- results from occupational health examinations
Working conditions shall be identified by taking into account technical, organisational and personal measures. This shall be done in cooperation with the workers and superiors concerned.

Technical measures
Technical protective measures available at the workplace such as local ventilation or forced ventilation shall be considered. The efficiency of this equipment shall be checked at regular intervals.

Processing conditions
For the type of processing, workplace specific circumstances such as increased temperature or pressure shall be considered. Furthermore, the processing technology shall be taken into account, e.g. spraying, dip coating, painting.

Quantity used
Limitation of hazardous substances present at the workplace to a quantity required for the relevant work.

Level of exposure
The evaluation is carried out on the basis of reliable measuring values representing the exposure level at the workplace. If no limit value is specified, international limit values shall be used. If no international limit value exists, limit values for homologous substances or substances with comparable chemical effect shall be used.

Work intensity
The respiratory volume and hence the intake of hazardous substances is influenced by different intensities of work.

Exposure time (duration of exposure)
A crucial criterion for the weight of exposure of persons by a hazardous working substance is the duration of exposure at the workplace of the worker concerned.

Co-exposed persons, exposure of bystanders
Are other, possibly noninvolved employees also exposed due to the working method at the workplace?

Aptitude, training, instruction
Employees shall regularly, at least annually, be instructed and trained in working with hazardous substances.

Required PPE (personal protective equipment)
The provided PPE shall meet the requirements of the safety objective and be consequently used. It shall always be in perfect condition. The employer is responsible for its provision and functionality.

Eye/skin contact
Skin/eye contact shall be prevented, e.g. by using suitable protective gloves (e.g. acid-proof, oil resistant, solvent resistant) particularly for work with toxic, caustic, irritant, allergising or skin-resorptive substances. Information is given in the safety data sheet. Eye contact is prevented, if complete spectacles (e.g. goggles) or a face screen are used.

2.4 Further Information about the Workplace

Exposure of persons by a hazardous working substance is the duration of exposure at the workplace of the worker concerned.

On the basis of the “substance properties” (degree of possible harm) and “probability of occurrence of harm”, the risk of handling a working substance is evaluated. Risk elimination is actually the first principle for prevention.

Carcinogens and mutagens shall be replaced at the workplace by less dangerous substances. This obligation exists whenever it is technically and economically possible to do so. This process is supported by registration, evaluation, authorization and restriction of chemicals according to the REACH ordinance. Thus, Annex XVII of the REACH Regulation contains restrictions for manufacturers for the placing in the market and use of certain substances, preparations and products.

The purpose of a risk assessment is to evaluate the risks for exposed persons and the possible hazards depending on the conditions given at the workplace.

2.5 Risk estimation

The risk occurring during work with hazardous substances may depend on the following factors:

- risk generated due to hazardous chemical reactions which may affect the health and safety of workers (chemical reactivity and instability of hazardous substances etc.)
- risk due to inhalation of substances depending on the toxicity of the substances, exposure time, and sensitising properties
- risk due to absorption through the skin depending on the toxicity of the substance as well as on the type, duration and frequency of contact

Examples for such substances:

K1: benzene, asbestos, chromate (VI) compounds
K2: hydrazene, cadmium compounds
M2: cadmium and its compounds

R51: passivesmoking, lead, carbon monoxide
R51: special hormones

When these listed substances are used at workplaces, they have to be substituted.

To help employers, there is a list of substances subject to authorisation in Annex XIV of REACH. The manufacturer and the importer shall indicate on the safety data sheet for which process the substance is authorised. The user wanting to work with the authorized substances shall check whether his/her process conditions comply with the authorisation.

Such chemicals have special health risks or hazards (carcinogenic (K), mutagenic (M) and/or toxic to reproduction (RF) or teratogenic (RE) in categories 1 or 2).

Category 1: explicitly proven in human beings

Category 2: proven in animal experiments

The substances are labelled with the danger symbol toxic (T) and the R-sentences R45, R49, R46, R60 and R61 and all combinations with other R-sentences.

Examples for such substances:

K1: benzene, asbestos, chromate (VI) compounds
K2: hydrazene, cadmium compounds
M2: cadmium and its compounds
It is not always possible to eliminate risks. Therefore, appropriate protective measures are necessary, the efficiency of which must be checked.

During work with hazardous substances, it shall in principle be checked whether the hazardous substance can be substituted by a less dangerous substance (substitution test) or whether exposure can be prevented or reduced by changing the working process.

When carrying out protective measures, the following sequence of measures shall be observed:

- Use of working substances as non-hazardous as possible, i.e. use of working substances with the smallest hazard possible for persons.
- Working processes and working operations shall, if technically possible, be so designed that employees cannot come into contact with hazardous working substances and that hazardous gases, vapours or suspended matter cannot be released. Minimization of the capability of release or improvement of technical equipment. Written working instructions shall be laid down in which individual safety requirements and their monitoring are specified.
- If measures cannot prevent hazardous gases, vapours or particulate matter from being released, they shall be completely captured at their outlet or point of generation and then removed without any hazard for the employees, as far as allowed by the state of the art. If such a capture is not possible, ventilation measures shall be provided which correspond to the state of the art.
- Limitation of quantity of available hazardous working substances to the extent essential for work.
- Limitation of duration and intensity of a possible exposure of employees to hazardous substances to the essential extent. This obligation is of special importance in case of carcinogenic substances. This could be achieved by providing sufficient ventilation of premises or by an effective room ventilation.
- Limitation of number of employees who are exposed to hazardous working substances, e.g. by limiting access to certain work areas at risk or by spatial separation.
- Where despite the measures given in the different items a sufficient protection can still not be obtained for the employees, the employer shall ensure that appropriate personal protective equipment is used, e.g. eye, skin protection, respiratory equipment.
The following figures describe the hierarchy and the principle of protective measures. The photos show good respective incorrect practical examples of decanting and storing of hazardous substances in practice.

**Elimination or reduction of danger by using non hazardous substances**

- smoking
- missing PPE
- missing sign
- missing impounding basin

**Isolation of danger by the selection of a low-emission working process, e.g. by using closed systems (gases, vapours or fumes shall not release and skin contact shall be eliminated)**

**Extraction of the released hazardous substances at the occurrence or leak source**

Use of mask is not necessary. It is discomfort for employee. You have to think about PPE.

**Local exhaust ventilation measures in addition to extraction at the source of generation (supply air and discharge air for a proper balance)**

**PPE Personal Protective Equipment e.g.: protective gloves, protective clothing, respiratory protective equipment**

- ventilation
- earthing
- PPE
- impounding basin (room)
Pouring of flammable liquid – incorrect –
- missing PPE
- missing sign
- missing impounding basin

Pouring of flammable liquid – correct –
Improvements are possible!

Storage of chemicals – incorrect –
Chemicals shall be stored in appropriate, labelled containers. These shall be resistant to the substances so that leaking or decomposition is prevented

Storage of chemicals – correct –
- suitable containers
- labelling available
- impounding basin available

Use of personal protective equipment (PPE)
There is a variety of PPE on the market. Protective equipment against hazardous substances can be identified by the icon with the filled receptacle (Erlenmeyer flask).
If this icon is missing, e.g. on gloves, they are not suitable.
Examples of PPE for work with hazardous substances:

Eye protection

Hand protection

Foot protection

Breathing protection

Protective clothing against chemicals

3.1 | Evaluation of protective Measures

Check if the measures are sufficient or not.

See also check list in annex 2.

You have to fill in the checklist and check the color smiles:

<table>
<thead>
<tr>
<th>Smiley</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🙁</td>
<td>Protective measures are immediately required</td>
</tr>
<tr>
<td>😞</td>
<td>You have to think about improvement</td>
</tr>
<tr>
<td>😊</td>
<td>O.K.! Protective measures are sufficient</td>
</tr>
<tr>
<td>☹️</td>
<td>Irrelevant</td>
</tr>
</tbody>
</table>

3.2 | Documentation

Based on the check list, risks and protective measures shall be documented. It shall also be laid down how protective measures are controlled.

Other applicable documents for the documentation are the hazardous substances list, safety data sheets and operating instructions.

3.3 | Operating instructions and instruction

Further measures shall be initiated by the employer for work with hazardous substances. Employees shall have access to written operating instructions in a form and language they understand.

The operating instructions shall contain information on hazardous substances occurring at the workplace. In particular, the following information shall be given:

- designation of the hazardous substance
- hazards to human beings and to the environment
- information on protective measures and rules of behaviour
- behaviour in case of danger
- first aid
- correct disposal

On the basis of the operating instructions, employees shall annually receive oral instruction by the employer on occurring hazards and corresponding protective measures. The instructed persons shall confirm this by signature. The proof of instruction (content, time, participants) shall be kept.

An example for operating instructions is given in Annex 3.
### Annex 1

#### Table of hazardous substances

<table>
<thead>
<tr>
<th>No.</th>
<th>Trade product/ manufacturer</th>
<th>Substitutability checked?</th>
<th>Current safety data sheet available?</th>
<th>Average</th>
<th>Hazard marking R-sentences/ S-sentences</th>
<th>Limit value mg/m³</th>
<th>Classification TWA/STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>Consumption/time unit</td>
<td>Quantity in stock</td>
</tr>
<tr>
<td>1</td>
<td>Glass cleaner Firma X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>24 kg/year</td>
<td>2 kg</td>
</tr>
<tr>
<td>2</td>
<td>Paint Firma X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>150 kg/year</td>
<td>30 kg</td>
</tr>
<tr>
<td>3</td>
<td>Pipe cleaner Firma X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>3 kg/year</td>
<td>0,5 kg</td>
</tr>
<tr>
<td>4</td>
<td>Solvent Firma X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>120 kg/year</td>
<td>10 kg</td>
</tr>
<tr>
<td>5</td>
<td>Anti rust Firma X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td>30 kg/year</td>
<td>6 kg</td>
</tr>
</tbody>
</table>
# Annex 1

## Table of hazardous substances

<table>
<thead>
<tr>
<th>No.</th>
<th>Trade product/manufacturer</th>
<th>Substitutability checked?</th>
<th>Current safety data sheet available?</th>
<th>Average</th>
<th>Hazard marking R-sentences/H-sentences S-sentences/P-sentences</th>
<th>Limit value mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>yes</td>
<td>no</td>
<td>yes</td>
<td>no</td>
<td>Consumption/time unit</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Workplace/area: _____________________________

Identified by: _____________________________ Date: _____________________________
Annex 2

Example of Checklist of principles with activity involving chemical agents

This Checklist is about the principles with activity involving chemical agents regarding the application of protective measures at workplace.

<table>
<thead>
<tr>
<th>Information and labelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous substances are known in the company</td>
</tr>
<tr>
<td>● Substances or products with hazardous labelling</td>
</tr>
<tr>
<td>● Substances or products without hazardous labelling</td>
</tr>
<tr>
<td>● Substances are released during working processes</td>
</tr>
<tr>
<td>Hazardous substances can be easily identified and are correctly labelled</td>
</tr>
<tr>
<td>Labelling of containers and pipes</td>
</tr>
<tr>
<td>Collection of safety data sheets is complete and up-to-date and accessible to employees</td>
</tr>
<tr>
<td>Table of hazardous substances</td>
</tr>
<tr>
<td>● Available and up-to-date</td>
</tr>
<tr>
<td>● Reference to safety data sheets</td>
</tr>
<tr>
<td>Operating instructions available</td>
</tr>
<tr>
<td>Instruction of employees is realised</td>
</tr>
<tr>
<td>First-Aid measures are implemented, e.g. emergency- and eye-showers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Worksite/workplace design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sufficient forced or natural ventilation of the working room</td>
</tr>
<tr>
<td>Warning device in case of ventilation failure</td>
</tr>
<tr>
<td>Clean air recirculation does not cause any stress</td>
</tr>
<tr>
<td>Easy to clean surfaces (e.g. floor)</td>
</tr>
<tr>
<td>Anti-slip floor</td>
</tr>
<tr>
<td>Possibilities for dust deposits</td>
</tr>
<tr>
<td>Separate rest room of area</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Design of working process and working organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees exposed to hazardous substances is limited</td>
</tr>
</tbody>
</table>

Duration and extent of exposure to hazardous substances is kept as low as possible
- Inhalative exposure (take a breath)
- Dermal exposure (skin contact)

Periodic testing of function and efficiency or technical protection measured and documentation

Low-dust working and waste removal technologies

Wet cleaning or use of industrial vacuum cleaners

Appropriate means for removing leaked or spilled working substances

Containers are kept closed and are only opened for taking substances

Lockable containers for waste disposal

Appropriate disposal of no longer required hazardous substances, fully emptied containers and cleaning cloths

Safekeeping and storage of hazardous substances

Quantity of hazardous substances at workplace limited to daily requirement

Do not store in containers which may be confounded with food

Marked storage areas/rooms

Storage cabinets for chemicals/acids/bases

Safety storage cabinets for flammable liquids/solvents

Safety storage cabinets for gases

Storage of highly toxic and toxic substances in locked facility

Principles of occupational health

Required work clothing is worn

Contaminated work clothing is changed

Personal protective equipment is used as intended

Rest areas or rooms for duty staff are not used with contaminated work clothing

Splatter or contaminants of hazardous substances on the skin are immediately removed

Cleaning cloths/rags are not used for hands

Dusty work clothing is not shaken out or blown off

Work places are regularly cleared and cleaned
National aspects

Hodnotenie rizika

Model hodnotenia rizika rakúskej úrazovej poisťovne AUVA pracuje so zoznaním klasifikácie látok, ktorý berie do úvahy účinky chemikálií (akútne aachronické), ich schopnosť uvoľňovať sadopračovného prostredia, technické a organizačné opatrenia a individuálne podmienky zamestnancov. Model umožňuje navrhať a opatrenia na zníženie rizík.

Počet bodov na odhad rizika v závislosti od chemikálií na pracovisku vychádza z nasledovného vzorca:

\[ R_{chemikálie} = (W_a + W_{ch}) \cdot F \]

\[ W_a = \text{akútne pôsobenie} \]
\[ W_{ch} = \text{chronické pôsobenie} \]
\[ F = \text{Schopnosť uvoľňovať sa} \]

Vyššie číslo pre \( R_{chemikálie} \) znamená vyššie je riziko poškodenia zdravia účinkom chemikálie na pracovisku.

Počet bodov pre odhad rizika v závislosti od podmienok na pracovisku vychádza z nasledovného vzorca:

\[ R_{pracoviska} = T + O + M \]

Vyššie číslo pre \( R_{pracoviska} \) znamená, že sa na pracovisku zaobchádza s chemikáliami nebezpečnejším spôsobom.

Pridelenie bodov chemikáliam na pracovisku a samotnému pracovisku je podkladom pre prípravu a navrhovanie priorít opatrení ktoré je potrebné vykonať.

Stanoví sa, ako naliehavo je potrebné opatrenia prijať:

- tam, kde bolo bolo stanovených viac bodov pre \( R_{chemikálie} \)
- tam, kde bolo stanovených viac bodov pre \( R_{pracoviska} \)
- tam, kde v jednej alebo niekoľkých koloniek zoznamu 1–5 vyšlo viac ako 8 bodov.

Môže sa použiť matrica rizík ako podklad pre určovanie priorít. V zmysle tejto matrice môže byť riziko determinované.

Hodnotenie rizík chemikálií

Výsledkom hodnotenia rizík chemických látok je zníženie ohrozenia zdravia a zlepšenie pracovných podmienok a to tak vo vzťahu k cnebezpečným vlastnostiam hemikálií ako aj vo vzťahu k pracovným podmienkám na pracovisku.
Contact persons

V prípade záujmu o ďalšie informácie sa môžete obrátiť na miestne príslušné inšpek-}

toráty práce, regionálne úrady verejného zdravotníctva, ktoré nájdete na web

spránkach: www.nip.sk a www.uvzsr.sk,

prípadne:

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