



SWEDISH  
WORK  
ENVIRONMENT  
AUTHORITY

**We strive to reduce the risks of ill-health and accidents in working life and**

**to improve the work environment viewed from all aspects.**

# This is what we do

- **Rules and recommendations** (e.g. *Chemical hazards in the working environment*) – at head office
- **Supervision** – by inspectors in 5 regions
- Occupational injury **statistics**
- **Information**

# Supervision

Inspection activities and monitoring of markets, aimed at sectors with the greatest risks of ill-health and accidents.

Read about our inspections:

<http://www.av.se/inenglish/inspections/>



# Examples of factors impacting on the working environment

| work supervision

| working time

| work postures

| lighting

| dangerous substances

| work equipment



| workload

| scope for action

| working movements

| noise

| heat and cold

| machinery

# Systematic Work Environment Management



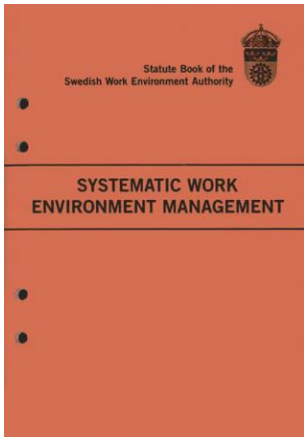
AFS 2001:1 with amendments



**These rules define basic stipulations for work environment management**

**The rules explain and define procedures to be followed by employers in discharging their work environment responsibilities**

**The rules are a transposition of EU framework directive 89/391/EEC to Swedish law**



# Method



- | investigate
- | assess the risks
- | document the risks
- | carry out measures
- | write an action plan
- | check the measures effectuated

# To bring home

1. Workers are most exposed and most at risk
2. Supervision of both suppliers and employers is necessary
3. Check the information from the user's perspective



# Risk Assessment - different roles

- **Producer** hazards of the chemical and risk in the intended use
- **User company** risk in their own handling of the chemical
- **State /authorities** provide regulations, guidance and limit values for some substances



## To consider when using a hazardous chemical product

Legislation on

- Work environment
- Handling of Flammable and explosive goods
- Transport of dangerous goods
- Civil protection against accidents (fire extinguisher etc)
- Reach and other chemical legislation
- Environmental protection
- Electrical installations
- Eventual specific legislation

**Different scopes**

**Risks to nature**

The Work Environ-  
ment legislation

**Risks to workers**

**Risks to public**

**The Chemical  
Legislation**

Chemical risks

Risks from machinery

Stress

Musculoskeletal  
disorders

Violence

Etc.

## *REACH ANNEX II*

### REQUIREMENTS FOR THE COMPILATION OF SAFETY DATA SHEETS

#### **General requirements for compiling a safety data sheet**

0.2.1. The safety data sheet shall enable users to take the necessary measures relating to protection of human health and safety at the workplace, and protection of the environment ...

0.2.2. The information provided by safety data sheets shall also meet the requirements set out in Council Directive 98/24/EC. In particular, the safety data sheet shall enable employers to determine whether any hazardous chemical agents are present in the workplace, and to assess any risk to the health and safety of workers arising from their use.

# To assess the chemical risks include

## Identify the hazards (collect information and investigate)

- List the hazards of different types
- Find out their hazardous properties from SDS:s and labels
- Find out the rules applicable for each hazard
- When and how can anyone get harmed or be exposed?

## Estimate the size of the risks

- Is the exposure clearly below the limit value?
- If not: Reduce exposure or investigate in detail
- Can the dermal exposure lead to harm? (Compare with the information)
- Are incidents that can cause damage likely?

## Decide if measures are necessary (risk evaluation)

- The exposure can be over the limit: Take action
- Probable dermal exposure may cause harm: Action
- Unplanned incident involves unacceptable risk (probability x consequence)
- Action required by law

Step in the risk assessment	Routes of exposure/ hazard				
	Inhalation	Skin contact	Ingestion	Fire	Reactions
<b>Intrinsic properties</b>	<b>Volatile Dangerous to inhale Acute and chronic injuries</b>	<b>Repeated exposure may cause skin dryness or cracking</b>	<b>Dangerous if swallowed</b>	<b>Highly flammable</b>	<b>No dangerous reactions are mentioned</b>
<b>Do the properties constitute a risk i our use?</b>	<b>Yes, the content in the air may be high. Very high in case of spillage.</b>	<b>No, only risk of splashing</b>	<b>No, no ingestion hazard</b>	<b>Yes, an explosive mixture can be formed in the assembly At spillage in the whole room.</b>	
<b>Is the risk so great that it needs to be addressed?</b>	<b>Yes</b>			<b>Yes</b>	

# Chemical hazards are more than just dangerous chemicals!

- Fumes from hot work, ex. welding
- Dusts from ex. grinding
- Lack of oxygen in confined spaces
- Chemicals on the surface of articles
- Natural allergenic substances
- Risk of burning on hot water etc.
- Cosmetics and medicins can be harmful

**The employer must consider all risks  
to health and safety**

# Basis for our provisions

- EU-directives for the work environment

Example: [Chemicals agents directive](#)

<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1998:131:0011:0023:EN:PDF>

- ILO-conventions

Example: Chemicals convention

[http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100\\_INSTRUMENT\\_ID:312315:NO](http://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO:12100:P12100_INSTRUMENT_ID:312315:NO)

- Obligations for suppliers

Example: SDS and label

- Occupational accidents, work-related diseases and other experience

# Some useful links for risk assessment and planning work environment

COSHH essentials:

<http://www.coshh-essentials.org.uk/>

Stoffenmanager:

<https://stoffenmanager.nl/Default.aspx>



<https://osha.europa.eu/en>



# **ILO – International Labour Organisation**

<http://www.ilo.org/safework/>

## **Toolbox for risk assessment (Control banding)**

[http://www.ilo.org/legacy/english/protection/safework/ctrl\\_banding/toolkit/icct/index.htm](http://www.ilo.org/legacy/english/protection/safework/ctrl_banding/toolkit/icct/index.htm)

### **Swedish Work Environment Authority:**

[www.av.se](http://www.av.se) / Other languages

How to assess the chemical risks (advice):

<http://www.av.se/dokument/inenglish/themes/chemicalrisks.pdf>

# Functioning System

- Regulations in force
- Guidance
- Co-operation: producer-user-authorities
- Inspections
- Legal action

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