

Personal safety,

protect yourself

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personal safety



close

1 Introduction

When we perform work that may be bad for our health we must protect ourselves. We use a safety helmet to protect ourselves from falling debris. Working gloves protect our hands during rough work.

We choose means of protection that protect our bodies and our health. We call these personal means of protection because they protect our body. Examples of personal safety means are:

1. coveralls
2. eye protection
3. ear protection
4. protection gloves
5. safety shoes
6. dust masks
7. gas masks

Your company will supply these personal safety means. Ask your boss for adequate safety means that are related to the work that you have to do.

Check frequently if the means are damaged or outworn. Safety shoes with soles that have no profile become slippery and therefore very dangerous.

2 Eyes

When the work may be dangerous for our eyes we put on safety glasses. Make it a habit to wear those glasses always. Choose the right glasses. If you have any doubt whether the glasses are the correct ones to wear during the work you perform go to your boss for advice. Signs are put up at locations where the safety glasses or eye protection is mandatory.

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3 Hands

We do everything with our hands. So there is always the danger of damaging or hurting our hands. The least hazard is that they become dirty. To protect our hands we put on gloves. There are different kind of gloves we can use under different circumstances:

1. working gloves
2. heat resistant gloves
3. chemical resistant gloves

Which gloves we should use is indicated on the production order or on the packing label. Nowadays there are protective hand creams. Those creams prevents the entering of dangerous particles. We also call this way of protecting our hands chemical glove.

With any work we do our hands get dirty. Via the skin all sorts of bacteria or materials may enter our body. Therefor it is very important to wash our hands frequently. You should wash your hands when:

1. you stop working
2. you are going to use the bathroom
3. you are leaving the bathroom
4. you start eating anything
5. you are touching objects that should not get dirty

Washing our hands with soap and water may not be sufficient when the hands are very dirty. You can use specific cleaning hand creams. Do not use abrasive soaps or brushes because they can damage you skin.

Never use solvents to clean your hands. Your hands are by nature protected by a thin layer of fat. The solvent will remove the protective layer in such a way that all kinds of materials may enter your skin. Signs are put up at locations where wearing gloves is mandatory.

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4 Respiratory organs

We breath through our nose and mouth. Hazardous particles may enter our body via our lungs. To prevent this we use protective means. We shield our nose and mouth. The mouth and nose protection prevents the inhaling of:

1. hazardous fumes
2. annoying or hazardous dust
3. drops of liquids

4.1 Gas and fumes

Inhaling gas or fumes is prevented by a gas filter. The gas filter is mounted on a gas mask. The mask is of a rubber material and completely covers mouth and nose.

4.2 Dust

We protect ourselves from dust by wearing a dust mask. When we look at the toxicity of dust we distinguish:

1. annoying dust
2. hazardous dust
3. toxic dust

Dust filters of dust masks are labeled with the codes P1, P2 or P3 by the manufacturer. The dust mask indicated with P3 gives the most protection.

4.3 MAC value

The MAC value is the quantity of dust we are allowed to breath before it gets hazardous (during an 8 hour shift). The abbreviation MAC stands for Maximum Acceptable Concentration. The unit of the MAC value is ppm. The unit ppm stands for parts per million

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and is the number of particles of a specific product that is allowed in one million particles of air.

4.4 Dust masks

There are several different dust masks:

1. the crude dust mask

The crude dust mask only protects us from non-hazardous dust. They may never be used while working with hazardous or toxic dust.

2. the fine dust mask

Fine dust masks protect us from very fine and floating dust. Fine dust mask are indicated with the code P1 and protect us from non-hazardous dust. When we work in an environment with hazardous dust we should use fine dust masks that are coded P2.

3. the facial mask

These masks cover (parts of) our face and have filters to remove the dust out of the air that we breath. These masks protect us from toxic dust or fumes.

Before using any of these masks we have to check whether they are stil operational. Used filters from dust of gas masks are considered chemical waste.

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¹ this is a photo of young's eco hobbyist Petr Sojka

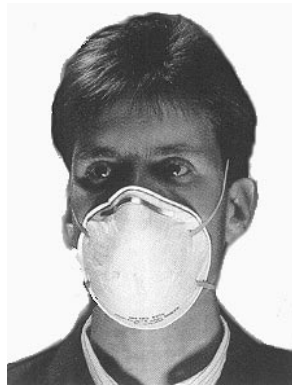


Figure 1 A crude dust mask¹

5 Hair

When we work with machines with moving parts long hairs must be gathered in a hairnet. Close to open fire there is the possibility of scorching or burning our hair. So it is advisable to wear a hairnet.

In dusty environments we should cover our head with a cap. The dust will settle in our hair and may cause irritation or other skin problems.

6 Head

At some locations we are summoned to wear helmets. Wear a helmet in the following situations:

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1. in small enclosed spaces under the ground
2. in places where there is the danger of falling materials
3. while working under a partner

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