

The Easy HANDBOOK

of European SDSs



SECTION 5:

firefighting measures

What information do I need to provide in section 5 of the SDS?



5.1 Extinguishing media



5.2 Special hazards arising from the substance or mixture



5.3 Advice for firefighters

5.1

subsection

FIRST STEP extinguishing media



This subsection shall provide **information on suitable and unsuitable extinguishing media** and directions on how to fight fires caused by the substance or mixture or occurring in the vicinity of the substance or mixture.

What are the **unsuitable** extinguishing media?

Those which must not to be used for safety reasons, including media which may cause chemical or physical reactions resulting in an additional potential hazard.

Remember: the indications must be suitable in general and for all situations, so avoid using criteria related to your production plant, if they cannot be applied to situations that may also occur in downstream users' plants.

5.2

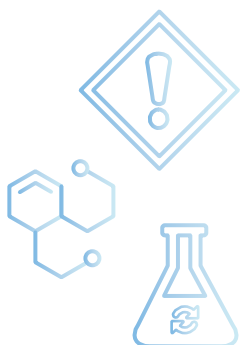
subsection

SECOND STEP

Special hazards arising from the substance or mixture

This subsection shall provide **information on the hazards that may arise from the substance or mixture**, such as dangerous combustion products that form when the substance or mixture burns, or the possibility of an explosion.

Examples



This subsection also includes information on **any specific hazards that arise from the chemical** (for example: vapors can cause vertigo, fainting or suffocation) or from the particular type of **packaging** (aerosol cans, if involved in a fire, burst and can injure people who are operating to contain the fire). If the product is a combustible powder, highlight the **risk of explosions**.

For example, there is a risk of explosions and fires in industrial processes where oxygenated compounds (e.g. acetaldehyde, ethylene oxide, phthalic anhydride, etc.) are produced by direct oxidation with air or oxygen, in processes for the production of hydrocarbons or other simple organic compounds, but also in numerous other operations such as storage or transport of combustible products, drying of materials to remove flammable solvents, during plant maintenance, etc.

5.3

subsection

THIRD STEP

Advice for firefighters

In this subsection, recommendations must be given **on possible protective measures to be taken** by firefighters.

Depending on the hazards of each substance, the recommended levels of protection can be divided into three categories:

1. Self-Contained Breathing Apparatus (SCBA) with chemical resistant gloves;
2. SCBA with a chemical protection suit only where personal close contact is likely;
3. SCBA with gas-tight suit when close proximity to the substance or its vapors is likely.



The gas-tight suit is the highest level of protective clothing against chemical agents. Such suits can be made of neoprene, vinyl rubber or other materials and are used in combination with SCBA. Protection can be guaranteed against many chemicals, but not all. If in doubt, seek the advice of a **specialist**.

The European **EN469** standards on the equipment of fire fighters provide a basic level of protection in the event of chemical accidents (helmets, safety shoes and gloves). If the presence of the product may cause contact with hazardous chemicals, it will be necessary to recommend the use of clothing that can protect the operator; in extreme cases, gas-tight clothing.

In addition, it is possible to recommend insulation measures of the area involved, to limit damage in the event of fire or for the disposal of residues of extinguishing media.



When compiling this subsection, it is necessary to consider whether the water used to extinguish the fire and the spillage could cause pollution of watercourses. If so, information should be given on how to minimize their impact on the environment.