



CROWBERRY CONSULTING

Environment, Ethics and Corporate
Responsibility Management

Dangerous Substances and Explosive Atmospheres Regulations FAQ's



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What are the DSEA Regulations?

DSEAR requires organisations to assess the potential risks of these substances and put in place suitable mitigation and control measures. Dangerous substances are any substances used or present at work that could, if not properly controlled, cause harm to people as a result of a fire or explosion or corrosion of metal. DSEAR puts the duties on employers and self-employed people to protect people from these risks in the workplace. The regulations contain two directives, which are Explosive Atmosphere Directive and the safety aspects of the Chemical Agents Directive (CAD).

Examples of Substances that come under the DSEA regulations

- Solvents
- Paints
- Varnishes
- Flammable gases
- Dusts from machinery ([Click here for a list of explosive dusts and safe handling](#))
- Pressurised gases
- Substances corrosive to metals

What does DSEAR require?

- Identify the dangerous substances in their work place and their potential risks.
- Put measures in place to remove these risks or, if unable to remove them, reduce them.
- Put controls in place to reduce the effects of an incident involving dangerous substances.
- Prepare procedures to deal with incidents and emergencies associated with dangerous substances.
- Employees who deal with these substances, must be appropriately trained and informed about the risks involved with these.
- Identify areas in the workplace where there are explosive atmospheres and avoid ignition sources.



[Chemical Agents Directive \(CAD\)](#)

This directive lays down the minimum requirements for the protection of workers from risks to their safety and their health that arise from the effects of any chemical agents in the workplace or any work related activity involving chemical agents. It is down to the employer to determine any chemical agents the pose a threat to Health and Safety and assess the possible risk that they have. The employer must take relevant preventative measures to eliminate the risk or it is reduced to a minimum. The employer must also have procedures established and in place which can be implemented in the event of an accident, incident or emergency occurring. The employer must inform all workers about:

- Emergency arrangements
- Results of the risk assessment
- The hazardous chemical agents in the work place and have access to safety data sheets
- By training on the appropriate precautions and the personal methods of protection

[The Explosive Atmosphere Directive](#)

Explosive atmospheres can be caused by flammable gases, mists or vapours or combustible dusts. If there is enough of this substance mixed with the air, all that is then required is an ignition source. Many workplaces have explosive atmospheres or perform activities that generate explosive atmospheres. Employers must eliminate or reduce to a minimum the threat caused by these explosive atmospheres. Under this directive, employers must have areas of classified zones that are to be protected from sources of ignition. The classification given to a particular zone, and its size and location depends on the likelihood of an explosive atmosphere occurring. The zones can be classified using [section 2](#) of the DSEA regulations.



Dangerous and Explosive substance: Ammonia

- Ammonia is non-flammable but when mixed with air, it may explode.
- When heated, it emits poisonous fumes, requiring liquid tight protective clothing and breathing apparatus to be used when handling.
- It is extremely dangerous to human health, it will cause irritation to the eyes, the burning of the mouth, throat and stomach and exposure to the skin will cause severe burns.
- Ammonia is toxic and corrosive

How can Crowberry Consulting help you?

- If you think that you have or use any products that would fall under the Dangerous Substances and Explosive Atmospheres Regulations, then Crowberry Consulting would be able to provide a DSEAR risk assessment for your business.
- Crowberry Consulting can also provide help with ISO 50001 internal audits for your organisation.
- Crowberry Consulting also provide help with updating a business's legal register.

Compiled by Nathan Green, Project Manager

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