

COURSE CONTENT OVERVIEW

# DSEAR Training



**DANGER**

**FLAMMABLE  
LIQUIDS**

The Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) apply to all workplaces where dangerous substances are used or produced. This includes many low-risk workplaces, such as those where petrol is used and stored in small containers or flammable grain dusts are produced. DSEAR requires all such workplaces to carry out a risk assessment and ensure suitable control measures are in place.

This online course will help you to understand your responsibilities, comply with the law by assessing the risks to people's safety, and ensure the controls you have in the workplace are suitable and sufficient.

### **Module One: Introduction to DSEAR**

This module explains what dangerous substances and explosive atmospheres are and the risks that they cause if not controlled.

- What are dangerous substances?
- What are explosive atmospheres?
- What are the risks from dangerous substances?
- What is DSEAR?
- What does DSEAR apply to?
- Activities covered by DSEAR
- The Regulatory Reform (Fire Safety) Order 2005
- DSEAR and the Fire Safety Order
- The Petroleum (Consolidation) Regulations 2014

### **Module Two: Legal Requirements of DSEAR**

This module looks at the detailed requirements of the DSEAR Regulations and how they affect workplaces, and begins to explain the order in which control measures should be considered and implemented.

- Where does DSEAR apply?
- Who has duties under DSEAR?
- Risk assessment
- Elimination, reduction or mitigation of risks
- General safety measures
- Explosive atmospheres
- Classification of hazardous zones
- Equipment and protective systems in hazardous zones
- Work clothing and personal protective equipment
- Accidents, incidents and emergencies
- Information, instruction and training
- Identification of hazardous contents of containers and pipes
- The storage and use of petrol in containers
- Duty of co-ordination

### **Module Three: Risk Assessment**

This module looks at each of the vital elements of a risk assessment and helps you to understand the basic requirements of a suitable and sufficient risk assessment as required by DSEAR.

- What is a risk assessment?
- Key definitions
- Who should carry out a risk assessment?
- Identifying hazards
- Examples of dangerous substances
- Deciding who might be harmed and how
- Evaluating existing control measures
- Specific control measures required by DSEAR
- Emergency arrangements
- Recording findings
- Reviewing and updating the risk assessment

### **Module Four: Controlling the Risks: Part 1**

This module describes some of the key ways to substitute alternative safer substances and put in place engineering controls, how to mitigate the effects of fires and explosions, and considers the types of training, instruction and information that are required.

- General fire safety
- Emergency arrangements
- Safe storage, transport, handling and use of flammable liquids
- Causes of fires from dangerous substances
- Safe storage, transport, handling and use of flammable gases
- Hazardous substances on vehicles - case study
- Safe handling and use of gas cylinders
- The safe storage and use of petrol
- Safe use of petrol in MVR workshops
- The safe storage and use of petrol in containers
- Fuel gases for welding and cutting
- Flashback in gas welding and cutting arrestors

### **Module 5: Controlling the Risks: Part 2**

This module considers more of the important activities and substances that can cause serious health and safety risks from fire and explosion, and how to ensure that these are properly controlled.

- Hot work on tanks and drums
- Paint spraying booths and rooms
- Flammable dusts
- Oxygen
- Emergency procedures
- Hazard labelling and packaging
- Safety data sheets
- Information, instruction and training

## Aims of the training

By the end of this course, learners will:

- Understand the duties of employers under DSEAR and fire safety regulations.
- Understand the substances and work activities that are covered by DSEAR.
- Understand what is meant by a dangerous substance under DSEAR.
- Understand what is meant by an explosive atmosphere under DSEAR.
- Understand how fires and explosions at work occur and the consequences of these events.
- Understand the risk assessment process and how to carry one out in relation to dangerous substances.
- Understand the key controls for the safe transport, handling, storage, and use of the most commonly used dangerous substances and work activities involving dangerous substances.