

The Dangerous Substances and Explosive Atmospheres Regulations 2002

1. These Regulations impose requirements for the purpose of eliminating or reducing risks to safety from fire, explosion or other events arising from the hazardous properties of a "dangerous substance" in connection with work. "Dangerous substance" is defined by regulation 2(1) to mean:

(a) a substance or preparation which meets the criteria in the Approved Guide to the Classification and Labelling of Dangerous Substances and Dangerous Preparations (5th Edition) (ISBN 0717623696) for classification as a substance or preparation which is explosive, oxidising, extremely flammable, highly flammable or flammable, whether or not that substance or preparation is classified under the Chemicals (Hazard Information and Packaging for Supply) Regulations 2002 (S.I. 2002/1689);

(b) a substance or preparation which because of its physico-chemical or chemical properties and the way it is used or is present at the workplace creates a risk, not being a substance or preparation falling within subparagraph (a) above; or

(c) any dust, whether in the form of solid particles or fibrous materials or otherwise, which can form an explosive mixture with air or an explosive atmosphere, not being a substance or preparation falling within subparagraphs (a) or (b) above.

2. The Regulations implement, as regards Great Britain, Council Directive 98/24/EC (OJ No. L 131, 5.9.98, p.11) on the protection of the health and safety of workers from the risks related to chemical agents at work, so far as that Directive relates to safety, and Council Directive 99/92/EC (OJ No. L 23, 28.1.00, p.57) on minimum requirements for improving the safety and health protection of workers potentially at risk from explosive atmospheres. Both of these Directives are individual Directives within the meaning of Article 16(1) of Council Directive 89/391/EC.

3. The Regulations apply outside Great Britain in the same way that sections 1 to 59 and 80 to 82 of the Health and Safety at Work etc. Act 1974 apply by virtue of the Health and Safety at Work etc. Act 1974 (Application outside Great Britain) Order 2001 (*regulation 12*).

4. Regulation 3 contains disapplications in respect of certain provisions of the Regulations. Regulations 3 to 14 and 17(1) to (3) do not apply to the normal ship-board activities of a ship's crew (*regulation 3(1)*). The duties under the Regulations on an employer in relation to his employees extend to non-employees, with certain savings (*regulation 4(1)*). The duties under the Regulations also extend to self-employed persons (*regulation 4(2)*).

5. An employer is required to carry out a suitable and sufficient assessment of the risks to his employees where a dangerous substance is or may be present at the

workplace (*regulation 5*). "Risk" is defined as meaning "the likelihood of a person's safety being affected by harmful physical effects being caused to him from fire, explosion or other events arising from the hazardous properties of a dangerous substance in connection with work and also the extent of that harm" (*regulation 2(1)*). Under regulation 3 of the Management of Health and Safety at Work Regulations 1999 (S.I. 1999/3242), an employer is already required to carry out a risk assessment. However, where a dangerous substance is or may be present at the workplace, he will now additionally need to assess the risks in the light of the requirements for the assessment under regulation 5 of these Regulations.

6. Employers are required by these Regulations to eliminate or reduce risk so far as is reasonably practicable. Where risk is not eliminated, employers are required, so far as is reasonably practicable and consistent with the risk assessment, to apply measures to control risks and mitigate any detrimental effects (*regulation 6(3)*).

7. Places at the workplace where explosive atmospheres may occur must be classified as hazardous or non-hazardous and hazardous places must be classified into zones on the basis of the frequency and duration of the occurrence of an explosive atmosphere (*regulation 7(1) and Schedule 2*). Equipment and protective systems in hazardous places must comply with the requirements of Schedule 3 (*regulation 7(2)*) and, where necessary, hazardous places must be marked with signs at their points of entry in accordance with Schedule 4 (*regulation 7(3)*).

8. Employers are required to make arrangements for dealing with accidents, incidents and emergencies (*regulation 8*). Employers will also need to provide employees with precautionary information, instruction and training where a dangerous substance is present at the workplace (*regulation 9*). Containers and pipes used at work for dangerous substances must, where not already marked in accordance with the requirements of the legislation listed in Schedule 5, clearly identify their contents (*regulation 10*).

9. Where two or more employers share a workplace where an explosive atmosphere may occur, the employer responsible for the workplace is to co-ordinate the implementation of the measures required by these Regulations (*regulation 11*).

10. Regulations 13 and 14 allow for exemptions to be made from all or any of the requirements of these Regulations. Amendments are made to legislation which mainly concerns petroleum-spirit (*regulation 15 and Schedule 6*) and repeals and revocations of legislation are also made (*regulation 16 and Schedule 7*). Regulation 17 makes transitional provision.

11. A copy of the Regulatory Impact Assessment prepared in respect of these Regulations can be obtained from the Health and Safety Executive, Economic and Statistical Advice Unit, Rose Court, 2 Southwark Bridge, London, SE1 9HS. A copy of the transposition notes in respect of the implementation of the two Directives referred to in paragraph 2 above can be obtained from the Health and Safety Executive's International Branch at that Rose Court address. A copy of both documents has been placed in the library of each House of Parliament.

REPEAL AND REVOCATION include

The Factories Act 1961	c. 34	Section 31.
The Highly Flammable Liquids and Liquefied Petroleum Gases Regulations 1972	S.I. 1972/917	The whole Regulation
The Workplace (Health, Safety and Welfare) Regulations 1992	S.I. 1992/3004	Regulation 6(3)(b).
The Carriage of Dangerous Goods (Classification, Packaging and Labelling) and Use of Transportable Pressure Receptacles Regulations 1996	S.I. 1996/2092	Regulation 22(b).
The Petroleum (Consolidation) Act 1928	c. 32	The proviso to section 2(1). Section 9. Section 17. In section 25A, the word "and" at the end of paragraph (a).

ACOPs include (in H&S library)

Control and mitigation measures L136
 Storage of dangerous substances L135
 Safe maintenance, repair and cleaning procedures L137
 Design of plants, equipment and workplaces L134

Leaflet on Hse's web site Fire and explosion how safe is your workplace