

DSEAR Policy			
Policy✓	Code of Practice...	Guidance...	Procedure...
Organisation-wide✓		Local...	
Approved by the University Health & Safety Committee			
Chairperson	Manuel Alonso	Date	October 2025
		Review date October 2028	
The purpose of presenting this documents to the University Health and Safety Committee			
Standard	Changes in practice and/or legislation...		New Policy✓...

1. Introduction

Brunel University London has a duty under the Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR) to protect staff, students, contractors, and visitors from fire, explosion, and similar risks arising from dangerous substances.

The University will, so far as reasonably practicable:

- Eliminate or substitute dangerous substances with safer alternatives;
- Implement engineering controls such as ventilation or explosion-proof equipment;
- Apply safe systems of work, including storage, handling and ignition control;
- Ensure effective emergency procedures, training, and supervision; and
- Where required, classify and mark hazardous zones in accordance with DSEAR Schedule 2.

Our aim as always is to ensure a safe environment for all, and to align with best practice across sector and in line with ISO 45001 requirements, while taking a proportionate risk-based approach.

2. Scope

This policy applies to all activities involving dangerous substances across Brunel University London, including work by staff, students, visiting researchers, and contractors, whether on campus or at off-site University-controlled premises. Activities involving dangerous substances, include but are not limited to:

- Teaching and research laboratories.
- Workshops and technical areas.
- Storage and transport of chemicals and flammable gases/liquids.
- Maintenance activities (e.g. use of solvents, welding gases).
- Commercial and catering operations (e.g. kitchens, cleaning chemicals).
- Research collaborations or tenants operating on university premises

- Contractors carrying out work that could introduce dangerous substances (e.g., maintenance using LPG torches).

3. Responsibilities

3.1 Executive Team Members (Executive Deans, Directors, COO, Deputy COO or equivalent)

Executive Team Members are responsible for the implementation of this Policy and for ensuring that under the Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR), the University takes a systematic approach to managing risks from hazardous substances. This involves identifying all dangerous substances used or stored on campus and how they could cause harm, for example, through leaks, spills, vapour clouds or dust explosions. Risk assessments must be conducted and suitable controls in place before work with dangerous substances is undertaken. Sufficient resources and competent advice must also be made available to enable compliance with DSEAR.

3.2 Senior Managers reporting to an Executive Team Member (Associate Directors, Heads of Department and other Academic/Administrative Units and Service Managers or equivalent)

Senior Managers. Research Supervisors or equivalent are responsible for;

- Ensuring DSEAR risk assessment(s) where dangerous substances or materials are to be used, and for the implementation of any control measures identified by the assessment
- Ensuring that work is only undertaken where a DSEAR risk assessment has been undertaken and where adequate information, instruction, training and supervision have been provided.
- Ensuring that before approving new or modified activities involving dangerous substances, managers must consult with the Health, Safety and Environment Team to confirm whether a DSEAR assessment or zoning is required.

3.3 Employees and Research staff and Students

Employees, research staff and students shall:

- Comply with the appropriate DSEAR risk assessment and any supplementary guidance and use any controls identified in an appropriate manner
- Report any defects in the procedure, protective equipment or plant to their manager/supervisor; and
- Undertake any training and health surveillance deemed necessary.
- No person shall work with or store dangerous substances unless covered by a current, approved DSEAR risk assessment.

4. Definitions

- *Dangerous Substances*: Substances that may present a risk due to fire, explosion, corrosion, or similar hazardous properties.
- *Explosive Atmosphere*: A mixture of dangerous substances with air, under atmospheric conditions, which can be ignited.
- *Competent Person*: An individual with adequate training, knowledge and experience to carry out a DSEAR risk assessment or zoning classification.”
- *Zoning*: The classification of areas into Zones 0, 1 or 2 (gas/vapour) or Zones 20, 21 or 22 (dust) based on the likelihood of explosive atmospheres forming.

Further Information can be found [HSE Guidance and Regulation DSEAR](#) and also @ [Dangerous substances and explosive atmospheres - HSE](#)

5. Risk Assessment

A DSEAR risk assessment shall be undertaken for any process, activity, or area involving dangerous substances where there is a potential for fire, explosion, or similar hazard. Assessments should be proportionate to the level of risk. Simple low-risk uses (e.g. sealed containers of small quantities) may be covered under a general laboratory or workshop DSEAR assessment, whereas higher-risk work (e.g. large-scale solvent use, compressed gases, or spray processes) requires a specific assessment.

Risk Assessments must

- Be undertaken before work with dangerous substances begins.
- Be recorded and kept under review.
- Consider risks from storage, handling, use, and disposal.
- Include possible formation of explosive atmospheres.
- Be stored locally in a shared space, the combined risk from dangerous substances in the entire space must be considered

The template for DSEAR risk Assessments can be found here: [Health, Safety and Environment](#)

6. Assessment Development, Review and Records

Risk assessment findings must be recorded and all staff or students informed of both the risk and the risk mitigation procedures. Assessments should be reviewed regularly (at least yearly) - and at once in event of significant change in circumstances (substance, equipment, legislative changes etc.) or other indication that an assessment is no longer valid.

Assessments should similarly be reviewed in light of relevant accident reports, monitoring results or other indication that controls are inadequate. Where assessment review indicates a need for additional control measures, those controls must be implemented before work continues with the substance(s) concerned. Colleges/Institutes should keep maintenance and training records and copies of current, and superseded assessments for at least five years after cessation of the activity concerned

7. Accident and Emergency

All incidents involving dangerous substances must be reported in accordance with the University Accident and Incident Reporting Policy and investigated to identify root causes. Emergency procedures, including spill response, fire, and evacuation, must be prominently displayed in affected areas and communicated to all personnel. The University Security Team must be informed of any DSEAR-classified zones or flammable stores requiring emergency access protocols.

Emergency Evacuations of buildings must not be delayed to close experiments down unless closing is essential for safety and can be done in safety.