



CARE GUIDANCE

RECOMMENDATIONS ON BEST PRACTICE

LEVEL 1

Working with
High Temperature
Insulation Wool (HTIW) –
Effective Risk Management



WORKING WITH HTIW – EFFECTIVE RISK MANAGEMENT

INTRODUCTION

This document is an overview of the process that should be followed for controlling (eliminating or reducing) exposure in the workplace. This is the level 1 document in the ECFIA CARE Guidance series.

WHAT IS THE CARE PROGRAMME?

ECFIA’s Controlled And Reduced Exposure (CARE) Programme is an important part of the Product Stewardship Programme. It allows employers to proactively minimize fibrous dust exposure and thus protect workers’ health.

WHAT ARE THE CARE GUIDANCE DOCUMENTS?

These documents form a comprehensive library of information on the safe handling and use of HTIW products. They have been written by industry experts and are designed to give customers of ECFIA members helpful information to put in place effective controls to minimise exposure to airborne fibres. This series of documents will progressively grow as new documents are produced.

Level 1 guidance document: Working with HTIW - Effective risk management

Level 2 guidance documents: Risk management measures applicable to HTIW

Level 3 guidance documents: Examples of specific applications

WHAT ARE EXPOSURE CONTROL MEASURES?

Control measures are generally a combination of technological solutions and working practices designed to eliminate or reduce exposure. Selecting the right combination is very important and measures will only work effectively if they are properly applied.

HIERARCHY OF CONTROLS

There is an order or priority when it comes to evaluating controls. The best controls are those that work at the source of dust emission. The least desirable are those that control the exposure when dust has already spread into the work environment.

SUBSTITUTION

The hierarchy is as follows

- Change to alternative materials: remove the hazardous substance from the existing process. Care must be taken to ensure that any substitute is not classified, or is classified in a lower hazard category than the original. This should be discussed with your supplier to make sure the right technical solution is found, as well as being acceptable from a health and safety stance.
- Change the process: use different technology to avoid using the hazardous substance.

Procedures for the elimination or substitution of a hazardous material are specific to the material and the situation in question and are detailed in the level 2 document series. The other control measures, detailed below, form good working practices for the use of both hazardous and non-hazardous materials.

PROCESS DESIGN TO MINIMISE EXPOSURE

- Change to ready-to-use product forms: this solution can often significantly reduce the fibrous dust production by using products specifically designed for an application, for example by using pre-cut or encapsulated pieces to avoid further finishing.
- Automate and/or enclose: in many cases dust generation is inherent in the setup of the job or the organisation of the work process itself. Changing the process design is often possible and is frequently done to improve efficiency or introduce new technologies. In many cases it is possible to review and change the process design to minimise workers' exposure. This can be done by enclosing and/or automating the whole or part of the process, for example.
- Local Exhaust Ventilation (LEV): where it is not possible to avoid dust generation LEV should be used to remove the dust emission as close to the source as possible. Further information on LEV can be found in the level 2 document "Local Exhaust Ventilation (LEV) systems for HTIW".

WORKING PRACTISES

- Limit access (mandatory for substances classified under the new REACH CLP system, Regulation on Classification, Labelling and Packaging of Substances and Mixtures, in carcinogen category 1B or 1A): procedures should be in place to minimise the number of workers that are exposed to dust in the workplace. Access to areas where fibrous dust exposure can reasonably be expected should be limited to as few workers as possible.
- Good Housekeeping: hygiene practices assist in keeping the work environment clean and prevent dust from materials left on floors and work surfaces becoming airborne. Further information on good housekeeping can be found in the level 2 document "Good housekeeping and working practices".

PERSONAL PROTECTIVE EQUIPMENT (PPE)

- If it is not possible to adequately control the dust levels using the above methods, it is necessary to use the correct type of PPE and ensure that it is properly fitted and in good condition. For further information please see the level 2 document "Personal protective equipment for HTIW".

INFORMATION AND TRAINING

- Training of staff should include instruction on specific working practices to minimise exposure, as well as general information for all workers on health and safety aspects of HTIW. For further information please see the level 2 document "HTIW relevant training".

In conclusion, for each process in the workplace an evaluation should be carried out to determine the best method of risk management. In many cases it will be necessary to combine a number of different measures to achieve dust levels below local requirements, and as low as technically feasible.