

Certificate of Exemption No 1 of 2013

The Health and Safety at Work (Northern Ireland) Order 1978
The Ionising Radiations Regulations (Northern Ireland) 2000

1. The Health and Safety Executive for Northern Ireland, in pursuance of the power conferred on it by regulation 37 of the Ionising Radiations Regulations (Northern Ireland) 2000 ("the 2000 Regulations") and being satisfied as required by regulation 37(2) of those Regulations, grants the following exemption.
2. Radiation employers are exempt from the requirements imposed by regulation 6(2) of the 2000 Regulations (notification of specified work), subject to the conditions set out in paragraphs 3, 4 and 5.
3. The exemption applies only to work involving the handling, use, holding, storage, transport or disposal of lamps containing Krypton 85 ("Kr-85").
4. The exemption applies only where, in relation to the work specified in paragraph 3, the total radioactive content of Kr-85 in lamps at premises under the control of the radiation employer or in a vehicle under the control of the radiation employer is 200 MBq or less.
5. For the purposes of paragraph 4, "premises under the control of the radiation employer" shall be taken to include the whole area under the control of the radiation employer, and for this purpose adjoining premises or two or more areas under the control of the same radiation employer and separated only by a road, railway or inland waterway shall be treated as one whole area.
6. This exemption comes into force on 24 July 2013 and is subject to revocation at any time by a certificate in writing, pursuant to regulation 37(1) of the 2000 Regulations.

Signed by

Dermot Breen
Deputy Chief Executive
Health and Safety Executive for Northern Ireland

24 July 2013

Ionising Radiation Regulations (Northern Ireland) 2000: Guidance to accompany Certificate of Exemption No 1 of 2013

Lamps containing krypton-85

Purpose

For functional reasons some types of lamps contain the radioactive gas krypton-85 (Kr-85). This guidance is aimed at employers involved in the handling, use, holding, storage, transport or disposal of these lamps in limited quantities. Under the Ionising Radiations Regulations (Northern Ireland) 2000, these employers fall into the category of 'radiation employers' however limited their use. The purpose of this guidance is to inform such 'radiation employers' of their responsibilities in relation to these lamps and provide guidance on their obligations.

What do I need to do?

If you have less than 40,000 lamps...

If the total radioactive content of krypton-85 in lamps at your premises is 200 MBq (megabecquerels) or less there is nothing you need to do. This is likely to equate to 40,000 lamps or less, but you should consult the lamp manufacturer or importer if you are in doubt. The Health and Safety Executive for Northern Ireland (HSENI) has issued an exemption certificate to this effect (attached). There is no need to make a formal application for the exemption to apply. You should employ normal risk assessment and manual handling procedures and are not required to prepare any contingency plans.

If you have over 40,000 lamps...

If you have over 40,000 lamps, you may be approaching the 200 MBq (megabecquerels) notification limit. You should consult the manufacturer or importer for confirmation that you are using lamps containing krypton-85, what activity level the krypton being stored is likely to be, and retain the advice received. If the manufacturer or importer confirms that you are approaching 200 MBq, or is unable to help, you should consult a radiation protection advisor (RPA) for further advice.

Description of the lamps

Which lamps contain krypton-85?

High intensity lamps, which produce bright white light in an energy efficient manner, are typically used in large numbers in public and professional spaces such as shops, warehouses, hotels and offices. They are also used in specialist entertainment applications, outdoor applications to illuminate streets or sports stadia, and architectural lighting. Some of these may contain krypton-85.

How do I identify these lamps?

It is possible that these lamps are labelled as HID-lamps or High Intensity Discharge Lamps, metal halide lamps, or are simply recognised by an order code such as MH-TS or MHN-LA. They may bear no identifying marks at all. If you are in any doubt, you should consult the manufacturer or importer.

What are the radiation exposure risks from these products?

Radiation exposure from normal operations involving warehouse storage, transportation, and trade handling is negligible. Physical damage to the glass encapsulation may cause release of a very small amount of radioactive gas into the environment. The gas will disperse rapidly in the surrounding air. Note that since krypton-85 gas is non-reactive, neither the skin surface nor remaining glass fragments can become radioactive. Exposure risk from accidents resulting in release of the gas is, therefore, very low.

Environmental requirements

There are no special requirements relating to the recycling or disposal of these lamps by users from a radiological perspective. However, they are classed as waste electronic and electrical equipment (WEEE) and need to be managed accordingly.

See *Exemption Guidance on lamps containing radioactive substances* issued jointly by NIEA, SEPA and EA (October 2011) for environmental guidance.
www.environment-agency.gov.uk/business/sectors

Further Information

For further information about health and safety, or to report inconsistencies or inaccuracies in this guidance, visit www.hseni.gov.uk. You can view HSENI guidance online and download publications from the web site.

This guidance is issued by the HSENI. Following the guidance is not compulsory, unless specifically stated, and you are free to take other action. However, if you do follow the guidance you will normally be doing enough to comply with the law. Health and Safety Inspectors seek to secure compliance with the law and may refer to this guidance.

HSENI acknowledges with thanks the help received from the Health and Safety Executive in Great Britain (HSEGB) in the preparation of this guidance which is closely based on “Ionising Radiation Regulations 1999: Guidance to accompany Certificate of Exemption No 1 of 2013” published by HSEGB.