

Airedale Ecodesign Recycling Requirements

Health and Safety

Before any work is carried out on the Airedale unit, Health and Safety and Environmental requirements must be taken into consideration.

All works to be carried out by fully trained Airedale approved person(s) and in accordance with the Health and Safety at Work Act 1974.

European Waste Catalogue (EWC code)

The sections below identify the EWC codes to fulfil the legal requirements of the duty of care (DoC) legislation in the UK. The EWC code highlights the specific component in the unit to be disposed of, and ensure that the waste carrier is qualified for this disposal. In addition to the code the waste transfer note must include a written description of the waste, where it's come from and what packaging is used to contain the waste during transportation. The containment of the waste should be suitable to ensure safe handling and management of the substance from the waste producer, via the carrier, to the disposer. The sections below identify the EWC code for guidance only. The waste handler must be competent to dispose of the specific product under that code.

Dismantling and Disposal

Careful consideration must be given to the dismantling and disposal process of refrigeration equipment before commencing. The following list of procedures (not exhaustive) should be followed.

Electrical Power

Ensure all electrical power is isolated from the machine before commencing work. The electrical supply is locked off or disconnected with a minimum of two points of isolation. Checks must be made with a verified functional meter that the power is off.

Refrigerant Reclaim

Reclaim refrigerant from the machine using a recovery machine that is suitable for the classification of refrigerant, especially with A2L, A2 or A/B3 refrigerants. The refrigerant should be sent for disposal as per EU F-Gas regulations 842/2006. The recovery cylinder must be labelled with the content and transported following F-Gas transportation standards. EWC code 14 06 01.

All engineers requested to carry out the HFC refrigerant decanting operation will be trained to City & Guilds 2079, or BESA F-Gas Category 1-4, to comply with EU F Gas legislation (842/2006). Contact Airedale for further information.

Care must be taken that the refrigeration circuit is reclaimed and is at atmospheric pressure, before the circuit is disassembled. Severe injury or even death can occur if components are removed under pressure. Oil within a refrigeration system can cause a build-up of pressure after recovery. Ensure all valves are open and that all parts of the system are recovered. The use of magnetic coil lifters may be required for solenoid valves.

If the refrigeration circuit of the unit is contaminated with water due to a damaged evaporator, special considerations must be taken. The refrigeration circuit cannot be reclaimed conventionally as doing so would damage the recovery equipment. EWC code 13 05 07. Contact Airedale for further information.

Waterside Drainage and Disposal

Drain unit of water/glycol fluid, glycol or treated water from a unit must not enter drains or water courses. It must be contained in appropriate vessels ready for disposal by a licenced waste trader. EWC codes 10 01 26, 16 10 01, 16 10 02 apply.

Pipework

Pipework should be sorted and recycled accordingly. Copper pipe should be sorted into clean and dirty where the different grades of copper are recycled accordingly. EWC code 17 04 01.

Plate Heat Exchangers

Plate heat Exchangers should be disassembled from the unit and recycled according to the material type. EWC codes 16 01 17, 17 04 01

Pumps

Pumps shall be removed from the unit and recycled accordingly. EWC code 16 01 17.

Buffer vessels

Buffer vessels must be drained before being lifted from the unit, glycol or treated water from a unit must not enter drains or water courses. They must be contained in appropriate containers ready for disposal by a licenced waste trader. The contents must be disposed of accordingly as per the waterside drainage and disposal section. EWC code 10 01 26.

Refrigeration

Compressors

Compressors shall be removed from the unit and then disposed of/recycled to local standards. Ensure that there are no oil spills from the compressor. EWC codes 16 01 17, 13 02 08.

Compressor Oil

Oil from a compressor must not enter drains or water courses. They must be contained in appropriate containers ready for disposal by a licenced waste trader. EWC code 13 02 08.

Coils

Condenser Coils

Condenser coils should be disassembled from the unit and recycled according to the material type. EWC codes 17 04 01, 17 04 02.

Evaporator Coils

Evaporator coils should be disassembled from the unit and recycled according to the material type. EWC codes 17 04 01, 17 04 02.

Electrical

Fans

Fans should be removed from the unit and recycled accordingly. EWC code 16 01 17.

Electrical Cables

Electrical cables can be recycled. EWC codes 17 04 01, 17 04 02, 17 04 07.

Electrical Components

Electrical components are to be recycled in accordance to The Waste Electric and Electronic Equipment (WEEE) directive 2014/19/EU. EWC code 20 01 36.



Sheet Metal Components

Sheet Metal components such as panels and doors should be sorted into their appropriate material and recycled. EWC code 16 01 17.