

Categorization of products covered by legislation (BAT)

DPA-System is short for Danish Producer Responsibility System. DPA-System is in charge of administrative tasks associated with the rules on producer responsibility under Danish environmental law regarding waste from electrical and electronic equipment, end-of-life batteries and accumulators, and end-of-life vehicles.

Producer responsibility for these waste types has authority in the Danish Environmental Protection Act. This Act translates into three Statutory Orders for the different waste types: the WEEE Order, the Battery Order, and the End-of-life Vehicles Order (the current statutory texts can be found on www.dpa-system.dk).

The Danish Statutory Orders take offset in three EU directives for the same waste types: the so-called WEEE Directive, the Batteries Directive, and the ELV Directive. Also these directives with exact titles and dates can be found on www.dpa-system.dk.

Producer responsibility rests on the principle that each producer or importer assumes responsibility for collection and management of WEEE, waste batteries, and end-of-life vehicles to the effect that products becoming waste are managed in an environmentally correct manner, with the highest possible utilisation of resources contained in such products. Producers and importers are in the following referred to as *producers* as the rules applying to both types are the same.

In general, the following abbreviations are used: WEEE for waste electrical and electronic equipment, BAT for batteries and accumulators, and ELV for end-of-life vehicles.

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In pursuance of rules on producer responsibility for waste batteries and accumulators this document describes types of batteries and accumulators covered by legislation. The purpose is to provide guidelines in correct categorisation during registration. Until 1 January 2009 batteries incorporated in electrical equipment were covered by the rules on electrical equipment. From 1 January 2009 batteries have been covered by stand-alone legislation.

Batteries incorporated in electrical and electronic equipment

Since 1 January 2009 batteries and accumulators and electrical equipment have been regulated by separate legislation. This means that companies producing and/or importing equipment containing batteries must assess whether the company is also covered by producer responsibility for batteries and accumulators. If so, batteries must be reported separately.

Batteries imported in vehicles

If you import a vehicle containing a starter or other types of batteries you are also covered by producer responsibility for batteries and must be registered accordingly in the producer register. The weight of imported batteries must be reported separately.

Batteries not covered by producer responsibility

As a general rule, all batteries and accumulators are covered by producer responsibility; however with a few exemptions. The exemptions appear from section 2 of the Battery Order. The Order (and thereby producer responsibility) does not apply to batteries and accumulators used in:

1. equipment connected with the protection of Denmark's essential security interests, arms, munitions and war material, and other products that are intended for specifically military purposes;
2. equipment designed to be sent into space.

Note that if batteries used in the above equipment can also be used in other types of equipment they will be covered by the Order. It is a precondition for exemption that batteries are specifically manufactured and exclusively sold for use in the two above applications.

Definition of batteries and accumulators

In section 3 of the Battery Order batteries and accumulators are defined as:

Any source of electrical or electronic energy generated by direct conversion of chemical energy and consisting of one or more primary battery cells (non-rechargeable) or consisting of one or more secondary battery cells (rechargeable).

A capacitor is not considered as a battery/accumulator. The distinction between a battery/accumulator and a capacitor is as follows:

- Capacitor: electrostatic energy storage (charge is stored in the field between the foils/plates separated by an insulator)
- Battery/accumulator: chemical energy storage (charge is contained in the substance/migration of electrons between the poles)

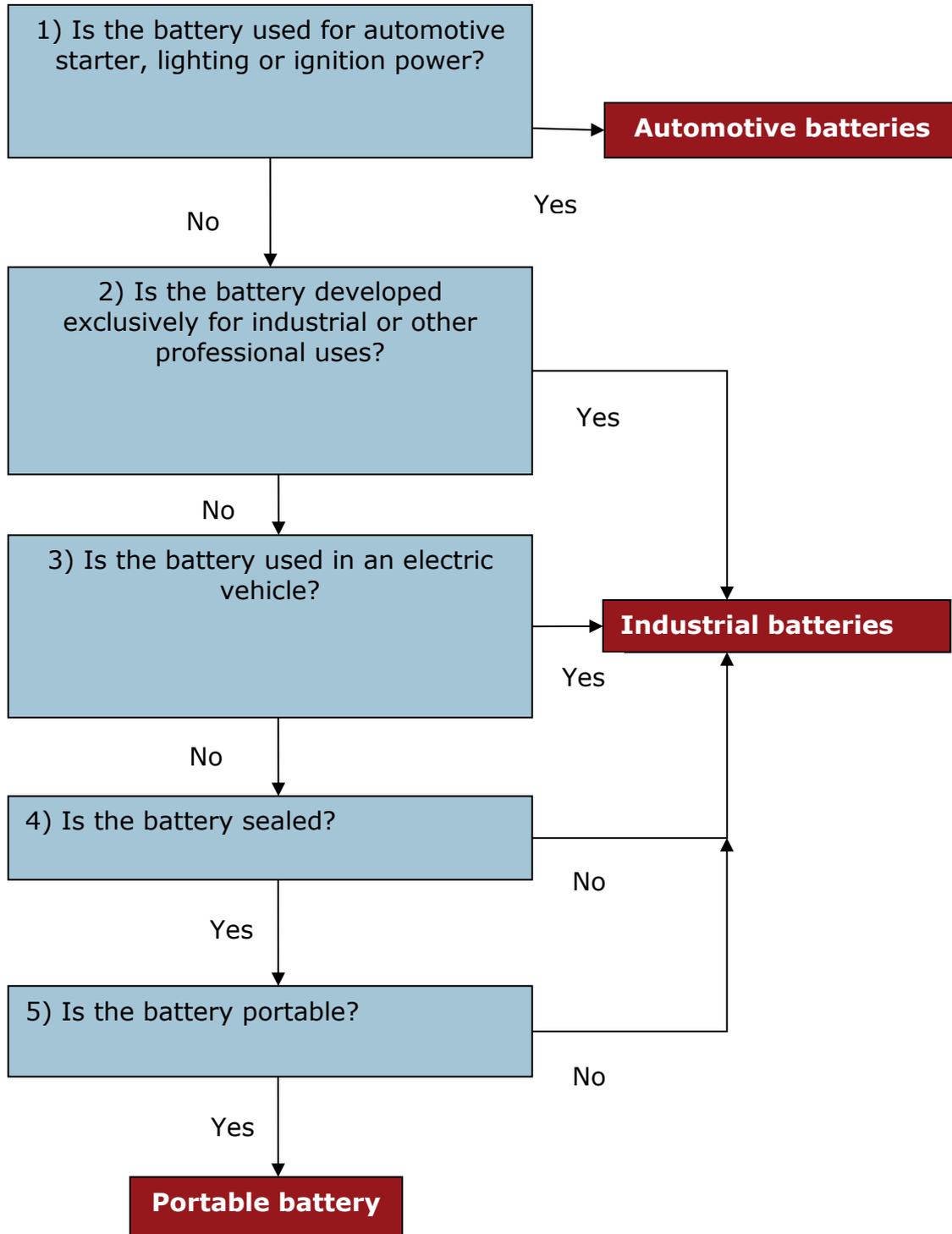
Batteries and accumulators may be so-called battery cells which may be rechargeable or non-rechargeable. Batteries may furthermore come in the form of battery packs – several battery cells that may be interconnected and sealed.

Batteries are divided into three main categories:

1. Industrial batteries
2. Automotive batteries
3. Portable batteries

Decision tree

Assignment of a battery or an accumulator to a category



See more details next page.

NOTE! Batteries **MUST** be assigned to one of the categories in the registration.

In the following the different battery categories are described in more detail. Numbers refer to the fields in the decision tree.

Automotive batteries

1) The battery is used for automotive starter, lighting or ignition power.

The definition of automotive batteries and accumulators is based on their technical characteristics. The most important feature of an automotive battery is its ability to give off very strong current to the starter for a short period of time. Thus, it is not decisive whether the starter is located in a car, in agricultural machinery, a truck, a boat or an aircraft.

In addition to starter batteries there are a number of other batteries that are similar to starter batteries in their form and size. These batteries are also assigned to the category of automotive batteries. They are covered under the same collection systems and are environmentally managed in the same way as automotive batteries. These batteries are often referred to as camping, marine, or leisure battery and are suitable for providing current for ordinary use for instance in caravans.

Automotive batteries and other batteries incorporated into imported vehicles when the vehicles enter the country must be reported separately under the given battery category.

Industrial batteries

2) The battery is developed exclusively for industrial or other professional uses.

The definition of industrial batteries and accumulators is based on their purpose, which can exclusively be professional. A battery that was originally developed for industrial purposes but is now also used for non-professional purposes is thereby NOT defined as an industrial battery. An example of this is a button cell battery, which was originally developed for industrial and professional uses, but which is today common in private households.

Button cells that are exclusively used for industrial purposes are defined as industrial batteries. Such industrial button cells must not have a content of mercury (Hg) exceeding 0.0005 % (by weight).

Button cells that are not exclusively used for industrial purposes are defined as portable batteries. Such button cells may contain up to 2 % (by weight) of mercury (Hg).

3) The battery is used in an electric vehicle (not automotive batteries)

The criterion in Denmark for batteries used in electric vehicles (not automotive batteries) is defined in a way that it only covers traction batteries in electric vehicles for personal transport. Other types of batteries in electric vehicles may fall under other categories.

The definition aims at batteries for traction of electric vehicles and hybrid vehicles. However, traction batteries are also found in other types of vehicles than cars. For example, electric wheelchairs, electric scooters and Segways. Other examples are water scooters, ships/boats and trains using batteries for their primary traction.

Since the battery must be the primary source of traction batteries in electric bicycles are not considered as industrial batteries, since the primary source of traction is the cyclist. Batteries in electric bicycles are generally considered as portable batteries.

Toys in the form of, for instance, electric cars and motorbikes for children are not considered as electric vehicles for personal transport. Batteries in such equipment will not fall under the category of industrial batteries, but instead be defined as portable batteries.

4) Battery is not sealed

If the battery is designed in a way that the user can add liquid, the battery is not sealed. If the battery is not sealed it is considered as an industrial battery.

Portable batteries

5) The battery is portable

A portable battery means that the battery is sealed and has a weight and a form making it portable.

The following criteria must be complied with in order for the battery to be defined as portable:

- It is sealed. I.e. the user is not meant to add liquid.*
- Its weight does not exceed 3 kg.**
- It does not fall under the definition of an industrial battery or an automotive battery.

* If the battery is not sealed, it is defined as an industrial battery.

** A battery with a weight under 3 kg is categorised as portable while a battery with a weight exceeding 3 kg is normally defined as an industrial battery. The weight limit of 3 kg is based on a guideline from the Danish Working Environment Authority (available in Danish on [Arbejdstilsynets vejledning om løft.](#))

Button cell batteries that are not exclusively used for industrial purposes are categorised as portable batteries. They are used in equipment such as hearing aids, watches, small portable equipment, and emergency power systems. Such button cells must not contain more than 2% (by weight) of mercury (Hg).

Examples of other portable batteries are batteries for alarms, mobile phones, computers, lawn mowers, golf caddies, and large toy motor cars. In some cases the battery in, for instance, golf caddies and toy motor cars will have a form and features corresponding to camping batteries and they will in this case be categorised as an automotive battery.

A battery for an electric bicycle with a weight under 3 kg will be categorised as a portable battery while a similar battery with a weight over 3 kg and/or which is not sealed will be categorised as an industrial battery¹.

¹ Since the weight and/or lack of sealing of the battery prevent the use of the portable battery category the battery is re-classified into the category of industrial battery, cf. the decision tree above.

Batteries changing categories

Portable batteries can be used in the production of battery packs exclusively manufactured for industrial purposes, i.e. industrial batteries. In such case the portable batteries change category into industrial batteries.

Further division of batteries and accumulators

In connection with producers' and importers' reporting to DPA-System of volumes of batteries placed on the market a registration of batteries and accumulators must be made according to the chemical substance groups contained in batteries. Batteries must be stated in the report in the groups appearing in the below table.

Division of batteries according to chemical substance groups

Portable batteries and accumulators	
	<ul style="list-style-type: none">• Button cells (Zinc / Mercury oxide / Silver oxide)• Lead acid• Nickel Cadmium (NiCd)• Others
Automotive batteries and accumulators	
	<ul style="list-style-type: none">• Lead acid• Nickel-Cadmium• Others
Industrial batteries and accumulators	
	<ul style="list-style-type: none">• Lead acid• Nickel-Cadmium• Others

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