# "Blaue Engel" certification Summary of technical requirements

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Marketing Department





## What is "Blaue Engel" (Blue Angel)?



#### Definition

Blue Angel is an environmental label organized by the federal government of Germany for the protection of people and the environment. It sets very exacting standards, is independent and has proven itself over more than 35 years as a guide for selecting environmentally-friendly products.

#### Main target

Climate protection, a reduction in energy consumption and the avoidance of pollutants and waste are key objectives of environmental protection.

The Blue Angel eco-label for electric hand dryers may be awarded to products featuring the following environmental properties:

- low energy consumption
- achievement of a high degree of dryness
- durable, safe and recyclable design
- avoidance of environmentally damaging materials.

### Who is behind it?

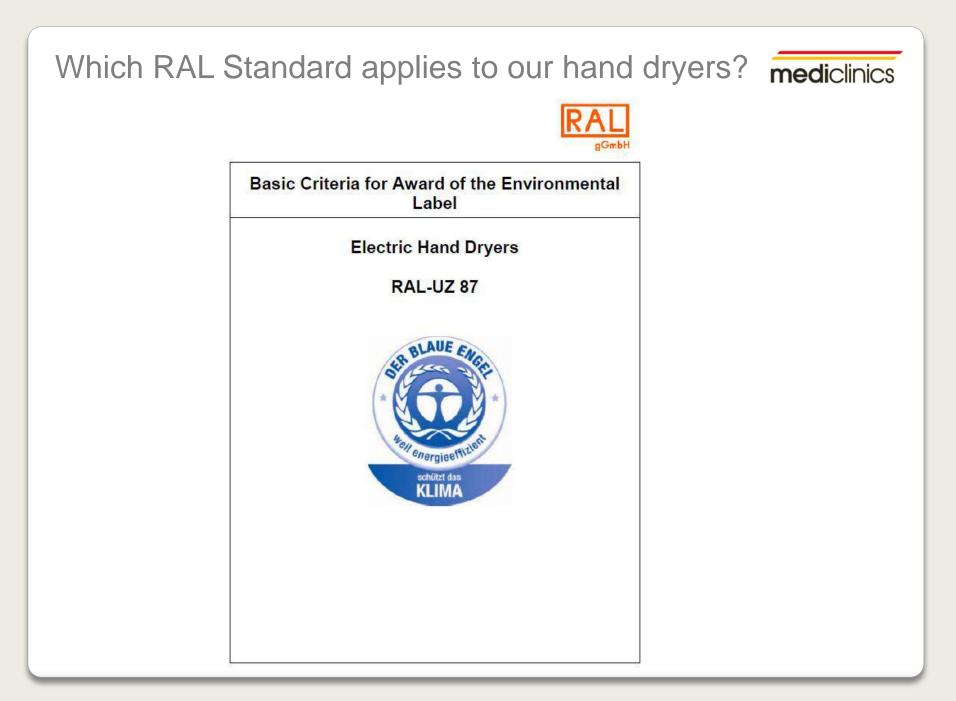
The Blue Angel is supported by the following four institutions:



Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety







### Which are the main technical requirements?



#### **On/off switch**

The hand dryer shall have a contactless on/off switch that places the device into operation when a person's hands are placed in the intended position for the drying process. The power consumption in standby mode shall not exceed 0.5 W.

#### Drying

The hand dryer will when used in accordance with its proper use achieve a degree of dryness of 90 percent within a maximum of 30 seconds.

#### **Noise emissions**

Electric hand dryers must not exceed a sound power output of 85 dB(A) in their loudest operating state. The noise emissions shall be measured in accordance with DIN EN 60704-1.

#### **Energy efficiency**

The electric hand dryers may not exceed a power consumption of 12 Wh per drying process.

### Which are the main technical requirements?



#### Automatic switch-off and maximum drying time

Once the person's hands have been withdrawn, the hand dryer shall switch off after a maximum of 2 seconds. The maximum drying time after being switched on shall be limited to 60 seconds.

#### Safety

The hand dryer carries the "Tested Safety" mark (GS mark).

#### Material requirements for plastics used in the housing and housing parts

The plastics may not contain as constituent parts any substances classified as carcinogenic, mutagenic and reprotoxic, in categories 1 or 2 according to Table 3.2 of Annex VI to EC regulation 1272/2008.

Halogenated polymers shall not be permitted. Neither may halogenated organic com-pounds be added as flame retardants.

#### **Recyclable design**

The hand dryer shall be designed and constructed in such a way that it possible to easily and quickly dismantle it for the purposes of repair and the separation of recyclable components and materials.