
LIGHT AND ENVIRONMENT

PRODUCT ENVIRONMENTAL INFORMATION ON LED-TECHNOLOGY LAMPS

- **Product description**

LED-Technology lamps are lighting equipment with standardised sockets and bases so that they can replace less efficient lamps without changing the fixture (*“retrofit”*). These lamps are available in many different designs such as reflector, classic, pin-based or tubular shaped lamps. LEDVANCE markets under the OSRAM® brand among other lamp families Parathom® PAR16, Parathom® MR16, Parathom® R50, Parathom® Classic and Parathom® Special, as well as LED Star and LED Superstar, LED Pin, LEDinestra® or Substitube® Products

In LED-technology lamps, light is emitted from one or more semiconductors, the so-called light-emitting diodes (*“LED”*) in combination with a ballast being integrated into the lamp. The light-emitting diodes contain so-called III-V-semiconductors mostly with a Gallium compound as substrate.

LEDVANCE LED-technology lamps distinguish themselves from most other lamp types by a very high energy efficiency (up to 90 % saving compared to incandescent lamps) and a very long lifetime. The lamps are mercury-free.

- **Environmental impact**

When used and disposed of as intended lamps do not pose a risk to the environment, they do not differ from most other electrical or electronic equipment. Parathom® lamps do not contain mercury.

- **Health risks**

In many LEDVANCE LED types phosphors are contained which are bound in epoxy resin or a silicone matrix and cannot be released even in case of breakage. Life cycle information can be found on the LEDVANCE internet www.ledvance.com/lca.

- **Legal requirements (EU)**

LED-technology lamps are under the scope of the EU Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (*“RoHS”*). See www.ledvance.com/rohs

For information on Regulation (*“EC”*) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (*“REACH”*) see www.ledvance.com/reach.

- **Disposal of used LED Retrofit lamps**

LEDVANCE Parathom® lamps are covered by the EU Directive 2002/96/EC and respectively the EU Directive 2012/19/EU (Recast) on waste electrical and electronic equipment (*“WEEE”*), implemented in the EU by national legislation. Lamps from private households and small commercial consumers can be disposed free of charge at designated collection facilities in common household amounts. You can find more information under: www.ledvance.com/weee or contact your national LEDVANCE sales partner.

In other countries the relevant national regulations must be followed.

The European Waste Catalogue (“EWC”) classifies waste LED-technology lamps as:
EWC Code 20 01 36 „discarded electric and electronic equipment other than those mentioned in 20 01
21, 20 01 23 and 20 01 35“

- **Technical Information**

Specific technical information can be found in the internet in LEDVANCE product data sheets:
<https://www.ledvance.com/products/lamps/led-lamps/index.jsp>

- **LEDVANCE contact address**

If you need further information, please contact your LEDVANCE sales partner or directly our department of
Security, Environment, Health and Safety (SEHS):

Email: environment@ledvance.com

Status: December 2016, subject to change without notice