



Orange
Trading FZE

VIRGIN CARTRIDGES
QUALITY AND CERTIFICATIONS



**RESULT OF EXTENSIVE RESEARCH
AND DEVELOPMENT**

Printers and Cartridges

QUALITY AND CERTIFICATIONS

Orange Trading is highly committed to quality. Therefore we attach great importance to offering only the very best products to you as a customer. That is why we ensure that our production company is doing everything in its power to guarantee quality.

We fulfil the needs and expectations of our customers every day through our commitment to product quality. Investing in product excellence is non-negotiable and without complete confidence in our product how could we begin to convince our customers of its value?

The product is, from design to finished product, subjected to rigorous evaluation and testing during every step of its lengthy process to ensure our customers receive a product that is best in the market. Developing a product that is at least equal to the Original Equipment Manufacturers (OEM) product performance is our benchmark though our remanufacturing expertise and strategy of continuous improvement often surpasses this goal.



Research and development

The in-house engineering teams of our production company ensure our products meet or exceed OEM specifications for yield and print quality every time.

Benefits of a company committed to R&D

- Our production companies actively collect empty cartridges on a large scale. By doing so they have sufficient quantities for production at all times and access to the highest of quality empties to support new products;
- Our production companies constantly invest in R&D and work with vendors that ensure the highest quality components;
- Investments in R&D, Engineering and automation has outpaced all other companies in the industry combined;
- Digital Auto Filling;
- Ultrasonic welding on toner hopper, same as OEM;
- Colour laser products only use chemical toners for optimal, OEM-like performance;
- Utilise 100% new drums and wiper blades.

Laboratory capabilities include:

- Colour gamut analysis
- Optical density analysis
- Fade resistance analysis
- Particle size analysis
- Toner flow analysis
- Environmental testing
- Stability testing
- Beta ink and toner formulations
- In-house engineering team develops proprietary, cartridge specific cleaning and filling equipment
- 3-D modelling to ensure detailed DMIs

QUALITY

Stringent quality control is enforced during the entire production process, including research and development, product engineering, pilot runs, assembly and deliveries to ensure the quality of our products at the highest level.

Rigorous and unforgiving quality control procedures



Design Process

- Product testing & approval
- DMI's
- Vendor approval
- Packaging Drop testing
- Pilot Run verification and approval



Manufacturing Process

- Set up inspection for raw material and toner
- Inbound performance tests for components
- Destructive testing
- Operator training verification
- Process line audit
- Life testing
- Optical density & background testing
- 100% post testing
- Final product inspection



Packing

- Product appearance and cleanliness
- Labelling inspection
- Palletisation inspection



Final Release for Shipment

- Products will be held offline in isolation awaiting approval of Quality inspector
- Upon approval products will be shipped

100% Quality Testing

- Product performance tested and measured to ensure it meets or exceeds OEM performance
- Pressure gauges to test seals and adhesives
- Single page test mode to maximise component wear

Comprehensive Reliability Testing Performed Before Product Launch

- Extensive life testing of the final design
- Thorough destructive testing during pilot production phase
- On-going validation (life testing) of product
- 100% post testing
- Cross compatibility testing so our cartridges will work flawlessly with any combination of OEM and remanufactured in the same printer



REACH - Regulation on chemicals

REACH is the European Community Regulation on chemicals and their safe use (EC 1907/2007). It deals with the Registration, Evaluation, Authorization and Restriction of Chemical substances. This law came into force on 1st June 2007, with phased deadlines to 2018.

The purpose of REACH is to improve the protection of human health and the environment through a better identification of the inherent properties of chemical substances at an early stage. REACH is also intended to promote innovation and competitiveness of the EU chemicals industry.

In 2008 our production companies have pre-registered all substances used in our products as dictated by the Reach directive. Subsequently Orange Trading updated all "Safety Data Sheets" according to pre-registration requirements. We emphasise that there are no SVHC (Substances of very high concern) in our products with regard to the most recently published list. We continue to monitor all developments in this directive to ensure up to date and complete conformity.



EUROPEAN ECOLABEL - Established in 1992

The European Ecolabel was established in 1992 with the purpose of promoting products

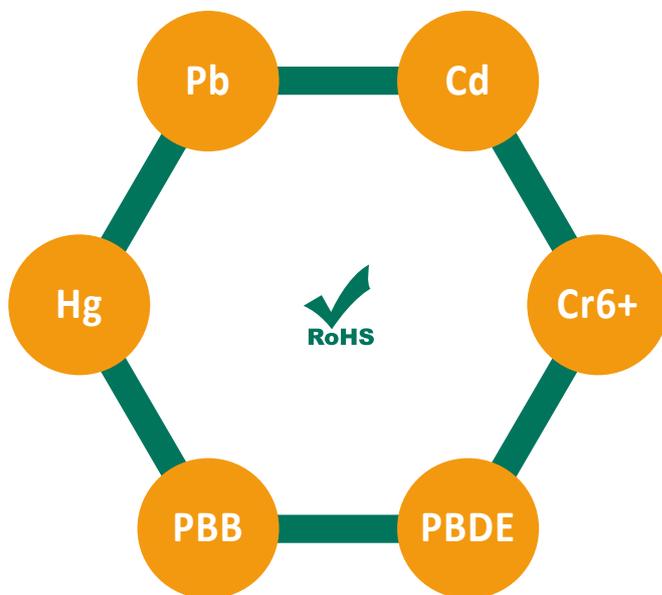
and services that are environment friendly. Products and services certified with the EU Ecolabel carry the flower logo, allowing easy identification. The EU Ecolabel covers a wide range of products and services such as Cleaning, Clothing, Do-it-yourself, Electronic Equipment, Floor coverings, Household Appliances, Lubricants, Other Household items, Paper and Services.

 **CE MARK - European Conformity**
 CE marking (originally EC mark) is a mandatory conformity mark for products sold within the European Economic Area (EEA). CE marking signifies that the manufacturer has ensured that the product meets all the requirements of the applicable EC Directives. The letters “CE” denotes “Conformité Européenne” (“European Conformity”).

We confirm that the European Directive 2004/108/EC (CE marking) does not apply to used and discarded Toner or Inkjet consumables independently from the relevant printer as these are not, by themselves, capable of any electromagnetic interference in communications of any kind (Chapter 1, Article 1, Paragraph 3 of the above mentioned legislation). All products sold by Orange Trading therefore conform to the conditions of this directive.

 **AMES - Ames test**
 The Ames test is a screening test that is used to help identify chemicals that affect the structure of DNA. The test consists of exposing Salmonella bacteria to chemicals and looking for changes in the growth of the bacteria. A positive result in an Ames test does not necessarily show by itself that a particular chemical is capable of causing cancer but it does suggest that a chemical can produce mutations and that more extensive testing is needed to determine whether that chemical is likely to produce cancer in humans.

 **ROHS - Restriction of Certain Hazardous Substances**
 The RoHS (Restriction of Certain Hazardous Substances) is a European Directive aiming to restrict and control the use of certain hazardous substances in the production of new electrical and electronic equipment (EEE).



 **WEEE - Waste Electrical and Electronic Equipment Directive**
 The Waste Electrical and Electronic Equipment Directive (WEEE Directive 2002/96/EC) imposes the responsibility for the disposal of waste electrical and electronic equipment on the manufacturers of such equipment. Its objective is to reduce the amount of electrical and electronic equipment being produced and to encourage everyone to reuse, recycle and recover it. The WEEE directive requires the collection of waste electrical and electronic equipment and the subsequent recovery and re-use or recycling of this waste.

The European Directive 2002/95/EC (RoHS) and European Directive 2012/19/EU (WEEE) does not apply to used and discarded Toner or Inkjet consumables independently from the relevant printer. All products sold by Orange Trading therefore conform to the conditions of this directive.

 **DIN 33870 - Monochrome laser**
 DIN stands for “Deutsches Institute für Normung” (German Institute for Standardization) and describes the requirements and testing for the preparation of refilled toner modules for electro photographic printers, copiers and facsimile machines.

All our products are produced and tested in accordance with the procedures defined in the DIN 33870 standard.

CERTIFICATION



SWAN ECO LABEL - Good environmental choice

The Swan eco label is an Eco labelling standard common to the entire Nordic region set up by the Nordic council of ministers in 1989. It is a non-profit making organisation. The purpose of the Swan standard is to reduce waste and assure quality. The simple message associated with having the Swan logo is that the product in question is a good environmental choice. Swan labelled cartridges are remanufactured, refilled cartridges, drum units or powder containers. They are used for black & white and colour printing in printers and copying machines. A comprehensive range of products from Orange Trading are certified under the Swan Eco label.

Swan labelled cartridges signify:

- *Less waste and a lower consumption of energy and raw materials. By remanufacturing toner cartridges the overall consumption is reduced thereby automatically reducing the impact of the product throughout its life cycle.*
- *The criteria aim to reduce waste but also places requirements on:*
 - *Product quality*
 - *Quality Assurance of the recycling process*
 - *Content of environmental hazardous and harmful substances*



CARBON TRUST - Reducing carbon emissions

The Carbon Trust Standard is a mark of excellence that is awarded in recognition of measuring, managing and reducing carbon emissions. Created in 2001 by the UK Government, Carbon Trust's stated mission is to accelerate and facilitate the move of businesses and public organisations towards a low carbon economy.

Carbon Trust provides specialist support to business and the public sectors helping them to reduce their carbon dioxide emissions by improving their energy efficiency, carbon management and developing a low carbon technology.



LGA - Tested for contaminants

The LGA (Landesgewerbeanstalt Bayern) and its brand name stands for a group of companies providing services mainly involving testing and examination, consultancy, certification and training. A number of our cartridge toners have been tested for measurement of emission and of harmful substances in accordance with the certification criteria of LGA and can demonstrate that its products meet the minimum legislative requirements (e.g., hazardous materials regulations and chemical prohibition regulation).

Essential certification criteria:

- VOC
- Heavy metals
- Tin-organic compounds

For more information kindly contact us on info@orangetrading.ae



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