

**DEPARTMENT OF TRADE AND INDUSTRY  
DEPARTEMENT VAN HANDEL EN NYWERHEID**

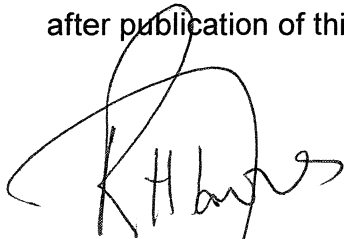
No. R. 74

7 February 2014

**NATIONAL REGULATOR FOR COMPULSORY SPECIFICATIONS ACT  
(Act 5 of 2008)**

**AMENDMENT OF THE COMPULSORY SPECIFICATION FOR INCANDESCENT  
LAMPS (VC 8043)**

I, Dr. Rob Davies, the Minister of Trade and Industry, hereby under section 13 (1) (a) of the National Regulator for Compulsory Specifications Act, (Act 5 of 2008), and on the recommendation of the NRCS Board, withdraw the current compulsory specification for incandescent lamps and replace it with the compulsory specification as set out in the attached schedule, with effect six (6) months **from the date of publication** of this notice. For products previously approved by the NRCS in accordance with VC 8043 published on the 21<sup>st</sup> of October 2005, the requirements of the attached schedule shall come into effect twelve (12) months after publication of this notice.



**Dr Rob Davies, MP  
Minister of Trade and Industry**

## SCHEDULE

### COMPULSORY SPECIFICATION FOR INCANDESCENT LAMPS (VC 8043)

#### 1 SCOPE

##### 1.1 General

This compulsory specification covers the requirements for safety, performance and quality of incandescent lamps intended for domestic and general lighting service, having:

- A power rating up to and including 1500 W;
- Rated voltage up to 250 V;
- Caps of any type, material, shape and finish.

1.2 This compulsory specification shall not apply to the following lamp types:

- Pilot lamps;
- Special lamps, not used for domestic and general lighting;
- Automotive lamps;
- Extra low voltage lamps  $\leq 12$  V;
- Temperature and shock-proof lamps.

## 2. DEFINITIONS

- 2.1** For the purposes of this compulsory specification the definitions in SANS 60432 series: Incandescent lamps — Safety specifications, SANS 60064: *Tungsten filament lamps for domestic and similar general lighting purposes- performance requirements*, SANS 60357: *Tungsten halogen lamps (non-vehicle)-performance specification* and IEC 60050: *International electrotechnical vocabulary* shall apply.
- 2.2** In addition, the following definitions shall apply:
- 2.2.1 applicant:** The manufacturer or importer seeking approval of incandescent lamps. The applicant shall be an existing legal entity within the Republic of South Africa.
- 2.2.2 approval:** Confirmation by the NRCS that a particular incandescent lamp type satisfies the requirements of this compulsory specification.
- 2.2.3 conformity of production:** Proof that incandescent lamps offered for sale have been manufactured to the approved design and continue to comply with the requirements of this compulsory specification.
- 2.2.4 declaration report:** a report, that is issued by an accredited conformity assessment body, indicating the equivalence of products and/or standards.
- 2.2.5 NRCS:** the National Regulator for Compulsory Specifications as established by the National Regulator for Compulsory Specifications Act, 2008 (Act No. 5 of 2008).
- 2.2.6 incandescent lamp:** a tungsten filament or tungsten halogen lamp.
- 2.2.7 reflector lamp:** a lamp having at least 80 % light output within a solid angle of  $\pi$  sr (corresponding to a cone with angle of  $120^\circ$ ).
- 2.2.8 Coloured Lamps:** lamps having the following chromaticity coordinates  $x$  and  $y$ :  $x < 0.270$  or  $x > 0.530$ ;  $y < -2.3172x^2 + 2.3653x - 0.2199$  or  $y > -2.3172x^2 + 2.3653x - 0.1595$ .
- 2.2.9 Appliance lamp:** lamp that is specifically designed to operate in a household appliance.

**2.2.10 proof of conformity:** documented evidence of conformity with the requirements of this compulsory specification.

**2.2.11 valid certificate of conformity:** an original or a copy of an original certificate of conformity.

**2.2.12 valid test report:** an original or a copy of an original test report.

### **3 REQUIREMENTS**

#### **3.1 Safety Requirements:**

**3.1.1** Tungsten filament lamps for domestic and similar general lighting purpose shall comply with the requirements of **SANS 60432-1** *Tungsten filament lamps for domestic and similar general lighting purposes- Safety specifications*.

**3.1.2** Tungsten halogen lamps for domestic and similar general lighting purpose shall comply with the requirements of **SANS 60432-2: tungsten halogen lamps for domestic and similar general lighting purposes-safety specification** or **SANS 60432-3 Tungsten halogen lamps (non-vehicle)-Safety specification**

#### **3.2 Performance, Quality and Energy Efficiency Requirements:**

**3.2.1 Tungsten filament lamps** shall comply with the minimum energy efficiency, performance and quality requirements as set out in Table 1, when tested in accordance with **SANS 60064: Tungsten filament lamps for domestic and similar general lighting purposes - performance requirements**.

**3.2.2 Tungsten halogen lamps** shall comply with the minimum energy efficiency, performance and quality requirements as set out in Table 1 of this compulsory specification, when tested in accordance with **SANS 60357: Tungsten Halogen lamps (non-vehicle) performance specification**.

**Table 1: Minimum performance, quality and energy efficiency requirement parameters for incandescent lamps**

<i>Parameters</i>	<i>Requirement</i>
Lamp efficacy	$\geq \Phi / (0.704 * \sqrt{(\Phi)} + 0.0392 * \Phi) \text{ lm/W}$
Lumen Maintenance	$\geq 85\%$ , measured at 75% of rated life
Lamp Life	$\geq 1000\text{hrs}$
Failure Rate	$\leq 5.0\%$ at 100h

Where;  $\Phi$  = initial rated luminous flux in lumens (lm)

**3.3** The following lamps are exempted from requirement 3.2.1, 3.2.2 and 3.4 of this compulsory specification :

- Reflector or directional lamps
- Coloured lamps
- Appliance lamps

**3.4** Lamp or packaging of the lamp shall be marked with light output in lumens (lm).

**3.5** The applicant shall ensure that each type of incandescent lamp has been approved by the NRCS before offering it for sale, in accordance with the requirements of Annex A.

- 3.6 The applicant shall inform the NRCS of any change in design or materials affecting any mandatory requirement in terms of this compulsory specification. In the event of such change/s the NRCS may, at its discretion, demand that the applicant submit a new application for approval.
- 3.7 The applicant shall, on request, provide the NRCS, within five (5) working days, with satisfactory proof of approval in respect of any type of incandescent lamp included in the scope of this compulsory specification.
- 3.8 The applicant shall on request provide the NRCS, within five (5) working days, with satisfactory proof of conformity of production.
- 3.9 Failure to provide such proof shall constitute reasonable grounds for suspicion of non-compliance with the requirements of this compulsory specification.

#### **4 EQUIVALENCE OF STANDARDS**

Standards issued by different standardization bodies such as ISO, IEC and EN, will only be accepted if it is proven, in the form of a declaration report from an accredited conformity assessment body, to be technically equivalent to the relevant South African National Standard. The applicant shall be responsible for obtaining such a declaration report. Proof of conformity with such a standard shall be accepted as conformity with the corresponding South African National Standard.

## **5 CONFORMITY TO REFERENCED STANDARDS**

- 5.1** For the purposes of this compulsory specification, a new edition of a referenced standard shall become effective six months from the date of publication as a South African National Standard.
- 5.2** New products, or products resubmitted for approval because of a change in design or materials, shall in all cases be evaluated against the requirements of the latest edition of any referenced standard.
- 5.3** When a new edition of a referenced standard is published, products originally approved in accordance with the previous edition of that standard may have their approval extended for up to five years from the effective date of the new standard, subject to the requirements of Annex A, unless declared otherwise by the Minister.

## **6 EVIDENCE OF CONFORMITY**

The following forms of evidence shall be submitted to the NRCS as proof of conformity with the requirements of this compulsory specification:

- 6.1** Valid test reports and valid certificate of conformity (where applicable) shall be in IEC format or any equivalent format acceptable to the NRCS and issued by an appropriately accredited and internationally recognized body being a member of an IAF/ILAC mutual recognition scheme in accordance with the NRCS's conformity assessment policy
- 6.2** The certificates and test reports shall prove conformity with all the applicable mandatory requirements.
- 6.3** Evidence of conformity shall be traceable to the specific type of incandescent lamp.

## **ANNEX A - APPROVAL OF INCANDESCENT LAMP**

### **A.1 APPLICATION FOR APPROVAL**

An application for approval of each type of incandescent lamp intended for sale shall include:

**A.1.1** Details of the type of incandescent lamp for which approval is sought and the standard/s to which it is claimed to conform;

**A.1.2** Details of the manufacturing plant/s in which the incandescent lamp type is produced;

**A.1.3** For new applications, proof of conformity, with all the requirements of this compulsory specification, issued less than 36 months before the date of submission to the NRCS;

**A.1.4** On expiry of the approval, an application for an extension may be granted, provided that all the conditions of the previous approval were met. In this case, proof of compliance, with all the requirements of the relevant compulsory specification, issued less than 60 months before the date of submission to the NRCS, shall be required;

**A.1.5** Identification markings and other information appearing on the product; and

**A.1.6** Any reasonable additional information in order to clarify the above that may be requested by the NRCS.



## **A.2 APPROVAL**

**A.2.1** The NRCS shall assess the evidence of conformity supplied by the applicant and shall grant approval when all mandatory requirements have been complied with.

**A.2.2** The NRCS shall assign a unique number to each approval.

**A.2.3** The NRCS shall issue a letter of authority certificate (LOA) for each successful application, to the applicant, when all the requirements have been met. The validity period of an LOA shall be three years and two years for an extension.

**A.2.4** The approval granted with respect to a type of incandescent lamp pursuant to this compulsory specification may be withdrawn at any time, after the applicant has been notified in writing, if the requirements have not been met or maintained.