# GOVERNMENT OF ZAMBIA

STATUTORY INSTRUMENT No. 44 of 2013

# The Standards Act (Laws, Volume 32, Cap. 416)

# The Standards (Compulsory Standards) (Chalk) (Declaration) Order, 2013

IN EXERCISE of the powers contained in section *seven* of the Standards Act, the following Order is hereby made:

- 1. This Order may be cited as the Standards (Compulsory Title Standards) (Chalk) (Declaration) Order, 2013.
- 2. The standards set out in the Schedule apply to school chalk and are declared as compulsory standards.

Declaration of compulsory standards

# SCHEDULE (Paragraph 2) ZAMBIA BUREAU OF STANDARDS Zambian Standard

# SCHOOL CHALK — Specification

ZS 071:2012

#### 1. Scope.

This Zambian Standard specifies the materials, size, mass, free moisture and breaking strength of moulded white and coloured chalks primarily intended for writing on chalkboards.

## Requirements

### 2.1 Materials

Chalk shall be made from calcined gypsum and to this may be added other materials for pigmentation or other manufacturing processes. Chalk shall not contain, in quantities which may cause harm to the health of a person, silica, aluminum, iron, phosphoreus, sulphur, manganese, copper, titanium, sodium oxide, potassium oxide, fluorine, arsenic or strontium. Chalk shall be of homogenous mass, free from grease, grit. sandy abrasives and not leave more than 50 percent of residue when passed a 250 um sieve.

### 2.1 Finish

- 2.2.1 Chalk shall be of smooth uniform shape and size, circular in cross-section, tapered at one end and free from external blow-holes.
- 2.2.2 Chalk shall produce freely, without scratching or damaging chalkboards, visible and distinct marks that can easily be erased with a dry eraser.
- 2.2.3 Chalk shall, when tested, comply with the requirements in table 1.

# TABLE 1: REQUIREMENTS FOR SCHOOL CHALK

SL N	o. Characteristics	Requirements
(i)	Calcium sulphate (as CaSO <sub>4</sub> . <sup>1</sup> / <sub>2</sub> H <sub>2</sub> O) minimum	80
	percent by mass	
(ii)	Maximum free moisture percent by mass	15
(iii)	Length of stick (millimetres)	$80 \pm 3$
(iv)	Diameter at thicker end (millimetres)	11±1
(v)	Diameter tapered end (milimetres) .	9 ±1
(vi)	Minimum mass per 100 sticks (grammes)	<b>5</b> 00
(vii)	Minimum transverse breaking strength, (kilograms)	0.9

### 3. PACKING

Chalk shall be tightly packed in suitable paperboard boxes which prevent damage of chalk during transportation. A box of chalk shall contain one hundred pieces of chalk, unless otherwise agreed between a purchase, and a supplier.

#### 4. MARKING

- 4.1 A box of chalk shall be marked on the outside with the following:
  - (a) the name of the product;
  - (b) the colour of the chalk;
  - (c) the number of pieces of chalk in the box;
  - (d) the manufacturer's name or trade-mark; and
  - (e) an identification mark or code for tracing records from the lot of manufacture.

E. T. CHENDA,

Minister of Commerce,

Trade and Industry

Lusaka 13th May, 2013 [mst.52/2/11c]