Now, therefore, His Majesty pursuant to Section 8 of the Weights and Measures Act, 1878, by and with the advice of His Privy Council, is pleased to approve the weight of 0.25 metric carat as a new denomination of standard and that weight is hereby so approved.

This Order may be cited as the Weights and Measures (Board of Trade Standard 0.25 Metric Carat) Order, 1949, and shall come into operation on the 2nd day of April, 1949.

E. C. E. Leadbitter.

---

2. ELECTRICAL STANDARDS

The Weights and Measures (Electrical Standards) Order, 1949

1949 No. 1431

Made - - - -	*28th July*, 1949
Laid before Parliament	*29th July*, 1949
Coming into Operation	*1st October*, 1949

At the Court at Buckingham Palace, the 28th day of July, 1949

Present,

The King's Most Excellent Majesty in Council

Whereas it appears to the Minister of Fuel and Power that new denominations of standards for the measurement of electricity agreeing with the fundamental electrical units specified in Part I of the schedule to this Order are required for use for trade:

And Whereas the said Minister has caused the denominations set out in Part II of the said schedule to be made and duly verified, and the coils and instruments referred to in the said Part II are deposited at the National Physical Laboratory at Teddington in the county of Middlesex:

And Whereas by the verification aforesaid it is established that the denominations aforesaid agree with the fundamental units aforesaid within the limits of accuracy attainable in the use of the said denominations, being the limits specified in Part III of the said schedule:

Now, therefore, His Majesty, in exercise of the powers conferred upon Him by section six of the Weights and Measures Act, 1889(**a**), and of all others powers Him enabling, is pleased, by and with the advice of His Privy Council, to order, and it is hereby ordered, as follows:—

1. The several denominations of standards set out in Part II of the schedule to this Order are hereby approved as Board of Trade standards for the measurement of electricity for the purposes of the Weights and Measures Acts 1878 to 1936.

2. The Order in Council made the tenth day of January, nineteen hundred and ten(**b**), legalising denominations of standards for the measurement of electricity as Board of Trade standards is hereby revoked.

3. This Order shall come into operation on the first day of October, nineteen hundred and forty-nine, and may be cited as the Weights and Measures (Electrical Standards) Order, 1949.

E. C. E. Leadbitter.

(**a**) 52 & 53 Vict. c. 21. (**b**) S.R. & O. 1910 (No. 72) p. 845.

SCHEDULE

PART I

Fundamental Units

The fundamental electrical units are the units agreed as such at an international conference on electrical units and standards held in London in October, 1908, (the magnitude thereof being determined on the electromagnetic system of measurement, with reference to the centimetre as the unit of length, the gram as the unit of mass and the second as the unit of time) and comprising:—

(*a*) the ohm, the unit of electrical resistance, the value thereof being one thousand million in terms of the centimetre and the second;

(*b*) the ampere, the unit of electrical current, the value thereof being one tenth in terms of the centimetre, the gram and the second;

(*c*) the volt, the unit of electromotive force, the value thereof being one hundred million in terms of the centimetre, the gram and the second.

PART II

Denominations of Standards

1. Electrical resistance; a standard of electrical resistance denominated one ohm, agreeing in value within the limits of accuracy specified in Part III with that of the fundamental unit in Part I (*a*), and being the resistance between the copper terminals of the instrument marked "Board of Trade Ohm Standard Verified 1894 and 1909" to the passage of an unvarying electrical current, when the coil of insulated wire forming part of the instrument aforesaid is in all parts at a temperature of fourteen decimal nine degrees centigrade.

2. Electrical current; a standard of electrical current denominated one ampere, agreeing in value within the limits aforesaid with that of the fundamental unit in Part I (*b*), and being the current which is passing in and through the coils of wire forming part of the instrument marked "Board of Trade Ampere Standard Verified 1894 and 1909" when, on reversing the current in the fixed coils, the change in the forces acting on the suspended coil in its sighted position is exactly balanced by the force exerted by gravity in Teddington upon the iridioplatinum weight marked "A" and forming part of the said instrument.

3. Electrical pressure; a standard of electrical pressure denominated one volt, agreeing in value within the limits aforesaid with that of the fundamental unit in Part I (*c*), and being one hundredth part of the pressure which, when applied between the terminals forming part of the instrument marked "Board of Trade Volt Standard Verified 1894 and 1909 and 1948", causes that rotation of the suspended portion of the instrument which is exactly measured by the coincidence of the sighting wire with the image of the fiducial mark A before and after the application of the pressure, and with that of the fiducial mark B during the application of the pressure, these images being produced by the suspended mirror and observed by means of the eye piece.

PART III

Limits of Accuracy

The limits of accuracy attainable in the use of the standards denominated in Part II are—

(*a*) for the ohm, within one hundredth part of one per cent.;

(*b*) for the ampere, within one tenth part of one per cent.;

(*c*) for the volt, within one tenth part of one per cent.

EXPLANATORY NOTE

(This Note is not part of this Order, but is intended to indicate its general purport.)

By an Order in Council, made 10th January, 1910, denominations of standards for the measurement of electricity were approved as Board of Trade standards for the purposes of the Weights and Measures Acts, which agreed in value with the International Electrical Units agreed at an international conference on electrical units and standards, held in London in October, 1908.

At a meeting of the International Committee of Weights and Measures held in Paris in October, 1946, it was agreed that denominations of standards for the measurement of electricity should agree in value, not with the International Units agreed at the 1908 conference, but with certain "fundamental units" which were also agreed at that conference.

This Order revokes the Order in Council of 1910, and approves as Board of Trade standards for the measurement of electricity, for the purposes of the Weights and Measures Acts, 1878 to 1936, denominations of standards which agree in value with the fundamental units.

The only change relates to the temperature of the insulated wire for the purpose of the measurement of the ohm, which is reduced from 16.4° C. to 14.9° C.

---

3. SALE OF FOOD

The Sale of Food (Weights and Measures: Variation of First Schedule) Regulations, 1949*

1949 No. 2381

Made - - - - 19*th December*, 1949
Coming into Operation 1*st August*, 1950

The Board of Trade, in exercise of the powers conferred upon them by paragraph (*a*) of Sub-section (1) of Section 9 of the Sale of Food (Weights and Measures) Act, 1926(a), hereby make the following Regulations:—

1. The following articles of food shall be added to the list of such articles set forth in the First Schedule to the Sale of Food (Weights and Measures) Act, 1926, namely:—

(*a*) in Part II of that Schedule—

"Compound cooking fat.";

(a) 16 & 17 Geo. 5. c. 63.

* In accordance with subsection (2) of section 9 of the Sale of Food (Weights and Measures) Act, 1926, this Order has been approved by a Resolution of each House of Parliament. The Resolution of the House of Lords was passed on the 15th December, 1949 and that of the House of Commons on the 14th December, 1949.