BRITISH STANDARD

BS EN
12944-2:2000

Fertilizers and liming materials and soil improvers — Vocabulary —

Part 2: Terms relating to fertilizers

The European Standard EN 12944-2:1999 has the status of a British Standard

ICS 01.040.65; 65.080

National foreword

This British Standard is the English language version of EN 12944-2:1999. Together with BS EN 12944-1:1999, it supersedes BS 5551:Section 1.2:1986 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee CII/37, Fertilizers and related chemicals, which has the responsibility to:

— aid enquirers to understand the text;

— present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;

— monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 9, an inside back cover and a back cover.

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Engrais et amendements calciques et/ou magnésiens - Vocabulaire - Partie 2: Termes relatifs aux engrais

Düngemittel und Calcium-/Magnesium-Bodenverbesserungsmittel - Wörterbuch - Teil 2: Begriffe für Düngemittel

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 260, Fertilizers and liming materials, the Secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2000, and conflicting national standards shall be withdrawn at the latest by May 2000.

This Standard is in 3 parts:

- *Part 1: General terms*
- *Part 2: Terms relating to fertilizers*
- *Part 3: Terms relating to liming materials*

These definitions may not necessarily correspond with those used in national legislation.

NOTE 1 Attention is drawn to EN 13535, *Fertilizers and liming materials - Classification*.

NOTE 2 A general index is incorporated in Part 3.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard defines terms relating to fertilizers.

An index of all terms defined in this part of EN 12944, with their French and German equivalents, is given in annex A.

2 Definitions

2.1 Terms relating to products

2.1.1
basic slag
product obtained in iron-smelting by treatment of phosphorus-containing melts and with calcium silico-phosphates as essential ingredients

NOTE The terms "Thomas phosphate" and "Thomas slag" are used in some countries to describe basic slag.

2.1.2
blood meal
dried blood
blood which has been dried and to which no other material has been added

2.1.3
bone meal
degreased bone which may be degelatinized and which has been ground or crushed to pass a sieve of specified aperture size

2.1.4
dung
semi-solid excrements of animals used as fertilizers and soil improvers

2.1.5
fish compost
product obtained by grinding and composting fish or fish waste and to which no addition has been made

NOTE The term "fish guano" is also used but "fish compost" is preferred.

2.1.6
fish meal
product obtained by drying and grinding fish or fish waste and to which no addition has been made

2.1.7
guano
fresh or weathered excrement and remains of any birds, except poultry, containing nitrogen, phosphorus and potassium, prepared for use by screening, if necessary, and to which no addition has been made

2.1.8
leather waste
waste in a form of pieces or powder resulting from the manufacture of leather goods

2.1.9
liquid manure
liquid arising from animal urine and litter juices or from a dung heap

2.1.10
manure
mixture of litter and dung in process of biological change

2.1.11
meat meal
product obtained by drying and grinding, or otherwise treating, flesh or flesh fibre and to which no addition has been made

2.1.12
methylene urea
urea formaldehyde
slow-release nitrogenous fertilizer produced by the reaction between urea and formaldehyde to produce polymethylene ureas of the general formula NH_2-CO-$(NHCH_2NHCO)_nNH_2$ with low relative molecular mass and a relatively quick mineralization

2.1.13
oil cake
residue remaining after the removal of the oil from oilseeds

2.1.14
peat
residual matter from certain plants grown and decayed in almost permanently waterlogged conditions and which may contain a limited quantity of naturally occurring mineral material

2.1.15
slurry
semi-liquid arising from livestock, consisting of urine and faeces, possibly diluted with water

NOTE In English, the term "slurry" has many meanings but, for the purpose of this European Standard, only the above meaning is used.

2.1.16
urea condensate
product of reaction between urea and aldehyde(s) which produce a slow-release nitrogenous fertilizer

NOTE Examples of urea condensates are methylene urea (MU) or urea formaldehyde (UF), crotonylidene diurea (CDU) and isobutylidene diurea (IBDU).

2.2 Terms relating to physical and physico-chemical properties

2.2.1
apparent density
mass per unit volume of the material included within the surface of the particles

2.2.2
bulk density (loose)
mass per unit volume of a material after it has been tipped freely into a container under clearly specified conditions

2.2.3
bulk density (tapped)
mass per unit volume of a material tipped into a container and compacted under clearly specified conditions

2.2.4
particle size analysis by sieving
granulometry by sieving
division of a sample by sieving into size fractions

2.2.5
sieving
process of separating a mixture of particles according to their sizes by one or more sieves

2.2.6
undersize
that portion of the charge which passes through a sieve of specified aperture size

2.2.7
oversize
that portion of the charge which does not pass through a sieve of specified aperture size

2.2.8
crushing strength
force required to crush individual particles

2.2.9
caking
formation of a coherent mass from individual particles

2.2.10
anti-caking agent
substance incorporated in or applied to the surface of a solid fertilizer to prevent caking

2.2.11
saturation temperature
temperature below which crystallization of dissolved constituents begins and above which the last crystals dissolve

NOTE This is sometimes referred to as salting-out temperature or crystallization temperature.

2.2.12
gel strength
force required to break a gel

NOTE This is sometimes referred to as yield stress which is the strength corresponding to a "yield point" where there is a transition from elastic to plastic deformation.

2.2.13
pourability
extent to which a fluid fertilizer can be drained from its container by gravity as determined by an empirical procedure

2.2.14
sedimentation
process of particles settling in a fluid medium as a result of gravitational or other applied force

2.2.15
flow rate
mass flow of a material flowing freely through the outlet of a specified calibrated funnel

NOTE The term "flowability" is sometimes used but "flow rate" is preferred.

2.2.16
free flowing
description applied to a fertilizer which flows easily

2.2.17
segregation
differential movement of particles within a mixture due to differences in their size, shape or density

2.2.18
sphericity
degree to which the shape of a fertilizer particle approaches that of a sphere

2.2.19
moisture
water extracted from a fertilizer by using a specified method

NOTE The moisture content, as determined, may not include all the water present in the fertilizer.

2.2.20
porosity
volume fraction of the pores in a fertilizer

Annex A
(informative)

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