

**ETHIOPIAN
STANDARD**

ES 6806 :2021

First edition
xx-xx-2021

**Pesticides - Part 1: Cymoxanil Technical
Material (TC) - Specification**

ICS: 65.100.10

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Foreword

This Ethiopian Standard has been prepared under the direction of the Technical Committee for Pesticides (TC 19) and published by the Ethiopian Standards Agency (ESA).

The standard is developed of Ethiopian Standard ES 6806:2021 for "*Pesticides – Cymoxanil Part 1: Technical Material (TC) - Specifications*" to be published.

In preparing this Ethiopian Standard reference has been made to the following:

AGP:CP/243:1991, FAO specification for plant protection products, "Cymoxanil technical, FAO specification 419/TC/S(2006)", published by the Food and Agriculture Organization of the United Nations (FAO), Rome.

Acknowledgement is made for the use of information from the above publication.

Pesticides - Part 1: Cymoxanil Technical Material (TC) - Specification

1 Scope

This Ethiopian Standard specifies requirements, method of sampling and test for the Technical Material of Myclobutanil (for plant protection purpose).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ES 693, *Pesticides - Terminology.*

ES 694, *Pesticides - Methods of sampling.*

ES 695, *Pesticides - Packaging.*

ES 696, *Pesticides - Guidelines on good labelling practice.*

ES 697, *Pesticides - Guidelines for retail distribution, storage and handling.*

ES 700, *Pesticides - Guideline for the disposal of bulk quantities of obsolete pesticides.*

ES 737, *Pesticides - Determination of material insoluble in acetone.*

ES 749, *Pesticides - Determination of water content.*

ES 750, *Pesticides - Determination of free acidity or alkalinity.*

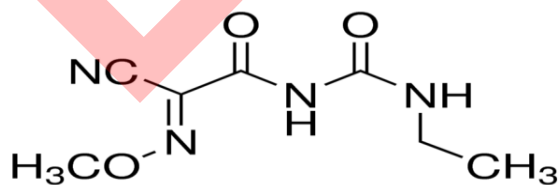
3 Definitions

For the purpose of this standard terms defined in ES 693 shall apply.

4 General information

COMMONNAME: *Cymoxanil*(ISO)

STRUCTURALFORMULA:



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EMPIRICAL FORMULA: C₇H₁₀N₄O₃

RMM: 198.2

CAS REGISTRY NUMBER: (57966-95-7)

CIPAC CODE NUMBER: 419

CHEMICAL NAMES:

IUPAC NAME 1-(2-cyano-2-methoxyiminoacetyl)-3-ethylurea

CA NAME 2-cyano-*N*-[(ethylamino)carbonyl]-2-(methoxyimino) acetamide

CHEMICALGROUP: Cyanoacetamide oxime

USECATEGORY: Fungicide

WHOCCLASS: ii

POSSIBLE FORMULATION TYPES: Wettable Powders, Water Dispersible Granules

5 Requirements

5.1 Description

The material shall consist of cymoxanil together with related manufacturing impurities. It shall be a white to peach-colored, homogeneous crystalline solid, free from visible extraneous matter and added modifying agents.

5.2 Active ingredient

5.3 Cymoxanil

The cymoxanil content shall be declared in g/kg (not less than 970 g/kg) and, the content obtained shall not differ from that declared by more than +/- 25 g.

6 Physical and Chemical Properties

A detailed chemical and physical characterization of the active ingredient is given in Table 1.

No	Parameters	Typical Value	Test method
1	Appearance	a white to peach-colored, homogeneous crystalline solid	visual
2	Solubility - In water at 20 °C (mg l ⁻¹)	0.88 g/l at 20°C at pH 4.0 0.78 g/l at 20°C at pH 7.0	EEC A6; OECD 105
3	Solubility - In organic solvents at 20 °C (mg l ⁻¹)	Soluble in most organic solvent	flask method
4	Melting point (°C)	162°C	OECD 105, OPPTS
5	Boiling point (°C)	Decompose before boiling	796.1840, EEC A.6
6	Flashpoint (°C)	Not expected to self ignite; Not highly flammable	EEC A1; OECD 102;
7	Specific gravity (g ml ⁻¹)	1.31g/ml at 25 ± 0.5°C	differential scanning calorimetry (DSC)
8	Stability	No data available	OECD 103, OPPTS

9	Henry's law constant at 25 °C (Pa m ³ mol ⁻¹)	3.30 X 10-05 (Non volatile)	830.7220, EEC A.2
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7 Handling

Pesticides shall be handled in accordance with ES 697.

8 Sampling

Samples shall be taken in accordance with ES 694.

9 Packaging

Products shall be packed in accordance with ES 695.

NOTE 1- Packing materials shall comply with pertinent national and international transport and safety regulations.

10 Labeling

Pesticides shall be labeled in accordance with ES 696.

11 Disposal

Disposal of bulk quantities of obsolete pesticides shall be in accordance with ES 700

Bibliography

WD¹⁾, *Pesticides – Determination of R-isomer in cymoxanil.*

WD²⁾, *Pesticides – Determination of acid chloride in cymoxani.*

WD³⁾, *Pesticides – Determination of acid + anhydride in cymoxani.*

WD⁴⁾, *Pesticides – Determination of optical rotation of cymoxanil*

WD⁵⁾, *Pesticides – Determination of cymoxanil melting point.*

DRAFT

Organization and Objectives

The Ethiopian Standards Agency (ESA) is the national standards body of Ethiopia established in 2010 based on regulation No. 193/2010. ESA is established due to the restructuring of Quality and Standards Authority of Ethiopia (QSAE) which was established in 1970.

ESA's objectives are:-

- ❖ Develop Ethiopian standards and establish a system that enable to check whether goods and services are in compliance with the required standards,
- ❖ Facilitate the country's technology transfer through the use of standards,
- ❖ Develop national standards for local products and services so as to make them competitive in the international market.

Ethiopian Standards

The Ethiopian Standards are developed by national technical committees which are composed of different stakeholders consisting of educational institutions, research institutes, government organizations, certification, inspection, and testing organizations, regulatory bodies, consumer association etc. The requirements and/or recommendations contained in Ethiopian Standards are consensus based that reflects the interest of the TC representatives and also of comments received from the public and other sources. Ethiopian Standards are approved by the National Standardization Council and are kept under continuous review after publication and updated regularly to take account of latest scientific and technological changes.

Orders for all Ethiopian Standards, International Standards and ASTM standards, including electronic versions, should be addressed to the Documentation and Publication Team at the Head office and Branch (Liaisons) offices. A catalogue of Ethiopian Standards is also available freely and can be accessed in from our website.

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