

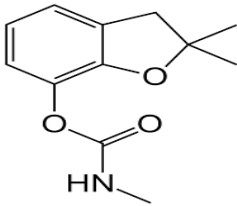
BUREAU OF INDIAN STANDARDS**DRAFT FOR COMMENTS ONLY***(Not to be reproduced without the permission of BIS or used as an Indian Standard)***भारतीय मानक मसौदा****कार्बोफ्यूरन, तकनीकी — विशिष्टि**
(आइ एस 11019 का पहला पुनरीक्षण)*Draft Indian Standard***CARBOFURAN, TECHNICAL — SPECIFICATION***(first Revision of IS 11019)***ICS 65.100.10**

Pesticides Sectional Committee, FAD 01

Last date of comments: 7 December 2024**FOREWORD***(Adoption clause will be added later)*

Carbofuran, technical is used for the preparation of formulations for the control of insect pests in the field of agriculture.

Carbofuran is the accepted common name by the International Organization for Standardization (ISO) for 2, 3-dihydro-2, 2-dimethyl benzofuran-7-yl methylcarbamate. The empirical end structural formulae and the molecular mass of this product are as given below:

<i>Empirical Formula</i>	<i>Structural Formula</i>	<i>Molecular Mass</i>
$C_{12}H_{15}NO_3$		221

This standard was published in 1984. In this revision, the standard has been brought out in the latest style and format of the Indian Standards, and references to Indian Standards wherever applicable have been updated.

In the preparation of this standard, due consideration has been given to the provisions of the *Insecticides Act*, 1968 and the Rules framed thereunder. However, this standard is subject to the restrictions imposed under these, wherever applicable.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 2022 'Rules for rounding off numerical values (*second revision*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1 SCOPE

This standard prescribes the requirements and methods of sampling and test for carbofuran, technical.

2 REFERENCES

The following standards contain provisions which through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below:

<i>IS No.</i>	<i>Title</i>
IS 1070 : 2023	Reagent grade water – Specification (<i>fourth revision</i>)
IS 6940 : 202X	Pesticides and their formulations – Test methods (<i>second revision</i>) [<i>Under preparation Doc: FAD 01(25870)WC</i>]
IS 8190 (Part 1) :1988	Requirements for packing of pesticides: Part 1 Solid pesticides (<i>second revision</i>)
IS 9360 : 2024	Carbofuran granules, encapsulated – Specification (<i>first revision</i>)
IS 10946 :1996	Methods of sampling for technical grade pesticides (<i>first revision</i>)

3 REQUIREMENTS

3.1 Description

The material shall be in the form of fine powder, off white in colour.

3.2 The material shall also comply with the requirements given in Table 1.

Table 1 Requirements for Carbofuran, Technical

(*Clause 3.2*)

SI No.	Characteristic	Requirement	Method of Test, Ref to
(1)	(2)	(3)	(4)
i)	Carbofuran content, percent by mass, <i>Min</i>	75.0	Annex A of IS 9360
ii)	Moisture content, percent by mass <i>Max</i>	3.0	IS 6940
iii)	Alkalinity (as NaOH), percent by mass, <i>Max</i>	0.05	IS 6940

4 PACKING

4.1 The material shall be packed in clean and dry containers made of fibre-board or mild steel with a polyethylene liner of thickness not less than 0.062 mm. The containers shall also comply with the general requirements as stipulated in IS 8190 (Part 1).

5 MARKING

5.1 The containers shall bear legibly and following information.

- a) Name of the material;
- b) Name and address of the manufacturer;
- c) Batch number;
- d) Date of manufacture;
- e) Date of expiry;
- f) Net quantity;
- g) Nominal carbofuran content, percent (*m/m*);
- h) Cautionary notice as worded in the *Insecticides Act, 1968*, and Rules framed thereunder; and
- j) Any other information required under the *Legal Metrology (Packaged Commodities) Rules, 2011*.

5.2 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act, 2016* and the Rules and Regulations framed thereunder, and the products may be marked with the Standard Mark.

6 SAMPLING

Represent samples of the material shall be drawn as prescribed in IS 10946.

7 TESTS

7.1 Test shall be carried out by the methods referred to in col 4 of Table 1.

7.2 Quality of Reagents — Unless specified otherwise, pure chemicals and distilled water (*see IS 1070*) shall be employed in tests.

NOTE — 'Pure chemicals' shall mean chemicals that do not contain impurities which affect the results of analysis.