



उत्पाद मैनुअल
रेड फॉस्फोरस - विशिष्टि
IS 2012 : 2006 के अनुसार

**PRODUCT MANUAL FOR
RED PHOSPHORUS - SPECIFICATION
ACCORDING TO IS 2012 : 2006**

भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम 2018 की स्कीम-I के तहत यह उत्पाद मैनुअल प्रमाणीकरण की संचालन रीति में सुसंगतता और पारदर्शिता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों एवं लाइसेन्स धारियों द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस लाइसेन्स/प्रमाण पत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज़ का उपयोग किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification licence/certificate.

1.	उत्पाद Product	:	IS 2012 : 2006
	शीर्षक Title	:	रेड फॉस्फोरस - विशिष्टि Red Phosphorus - Specification
	संशोधनों की संख्या No. of Amendments	:	0 Nil
2.	नमूनाकरण दिशा निर्देश Sampling Guidelines:		
a)	कच्चा माल Raw material	:	No specific requirement
b)	समूहीकरण दिशा निर्देश Grouping guidelines	:	Both the grades (Except for Defence purposes/ for defence purposes) shall be drawn for testing to cover in the scope of the licence.
c)	नमूने का परिमाण Sample Size	:	250 g

3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	कृपया Annex-A देखें Please refer ANNEX -A
4.	निरीक्षण व परीक्षण स्कीम Scheme of Inspection and Testing	:	कृपया Annex-B देखें Please refer ANNEX -B
5.	एक दिन में संभावित परीक्षण Possible tests in a day :		
	a) Description (Clause 3.1) b) Free Moisture (Table 1, Sl. No. i)) c) Matter Soluble In water (Table 1, Sl No. ii)) d) Acidity (Table 1, Sl. No. iv)) e) White Phosphorus (Clause 3.3) f) Copper (Clause 3.4(a)) g) Iron (Clause 3.4(b))		
6.	लाइसेंस का कार्यक्षेत्र / Scope of the Licence:		
	IS 2012 : 2006 के अनुसार मानक मुहर का उपयोग करने के लिए लाइसेंस निम्नलिखित कार्यक्षेत्र के लिए प्रदान किया जाता है Licence is granted to use Standard Mark as per IS 2012 : 2006 with the following scope:		
	Name of the product	Red Phosphorus	
	Grade	Red Phosphorus, Except for Defence Purposes and/or Red Phosphorus, for Defence Purposes	

ANNEX A

**LIST OF TEST EQUIPMENTS
RED PHOSPHORUS - SPECIFICATION
ACCORDING TO IS 2012 : 2006**

Major Test Equipment required to test as per Indian Standard

Sl. No.	Tests used in with Clause Reference	Test Equipment
1.	Free Moisture (Clause 3.2, Table 1, Sl. No - i)	- Flat Bottomed Glass Dish - Vacuum Desiccator with phosphorus pentoxide as desiccant - Hot Air Oven - Weighing Balance (L.C- 0.1mg)
2.	Matter Soluble in Water (Clause 3.2, Table 1, Sl. No - ii)	- Weighing Balance - Beakers, Whatman No. 2 Filter Paper - Volumetric Flask, Pipettes, - Hot Plate, Hot Air Oven - Distilled Water
3.	Red Phosphorus (Clause 3.2, Table 1, Sl. No - iii)	- Iodine, Conc. Nitric Acid, Ammonium Citrate, Dil. Ammonium Hydroxide, Dil. HCl, Magnesia Mixture, Ammonium Hydroxide, Ammonium Nitrate Solution. - 2 litre Glass Stoppered Bottle, - Weighing Balance, Conical Flask, Pipettes, - Hot Plate, Filter paper, Measuring flask, Beakers, - Ashless Filter Paper, Porcelain Crucible, Muffle Furnace
4.	Acidity (Clause 3.2, Table 1, Sl. No - iv)	- Phenolphthalein Indicator, rectified spirit, Sodium Chloride, Sodium Hydroxide, - Weighing Balance, Conical Flasks, Beakers, Hot Plate - Buckner Funnel, Ice Bath.
5.	White Phosphorus (Clause 3.3)	- Stoppered Measuring Cylinder, - Carbon Disulphide, Copper Sulphate solution, Filter paper, - Hot Air Oven. - Weighing Balance
6.	Copper and Iron (Clause 3.4)	- Atomic Absorption Spectrophotometer - Standard Laboratory Glass Apparatus - Conc. Nitric Acid, Conc. Sulphuric Acid, Hydrochloric Acid, Pure Copper Granules, Hot plate, Pure Iron Granules. - Weighing Balance

The above list is indicative only and may not be treated as exhaustive.

ANNEX B
SCHEME OF INSPECTION AND TESTING
RED PHOSPHORUS - SPECIFICATION
ACCORDING TO IS 2012 : 2006

1. LABORATORY - A laboratory shall be maintained which shall be suitably equipped (as per the requirement given in column 2 of Table 1) and staffed, where different tests given in the specification shall be carried out in accordance with the methods given in the specification.

1.1 The manufacturer shall prepare and implement a calibration plan for the test equipments.

2. TEST RECORDS - The manufacturer shall maintain test records for the tests carried out to establish conformity.

3. PACKING AND MARKING – The Standard Mark, as given in the Schedule of the licence, shall be marked on each packing, provided always that the product thus marked conforms to every requirements of the specification.

3.1 Packing and marking shall be done as per clause 4 of the Indian Standard. In addition, the following details shall be marked on each packing :-

a) BIS Licence No. CM/L----- --.

b) BIS website details i.e. -“For details of BIS certification please visit www.bis.gov.in.

3.2 Caution label ‘Flammable’ with the appropriate symbol for labelling dangerous goods [see IS 1260 (Part 1)] shall be marked on the label of each container.

4. CONTROL UNIT – For the purpose of this scheme, a control-unit is defined as the entire quantity of Red Phosphorus of one grade (For Defence Purposes/ Except for Defence Purposes) manufactured under similar conditions in a single day.

5. LEVELS OF CONTROL - The tests as indicated in column 1 of Table 1 and the levels of control in column 3 of Table 1, shall be carried out on the whole production of the factory which is covered by this plan and appropriate records maintained in accordance with paragraph 2 above.

5.1 All the production which conforms to the Indian Standards and covered by the licence should be marked with Standard Mark.

6. REJECTIONS – Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1 : LEVELS OF CONTROL
(Para 5.0 of the Scheme of Inspection and Testing)

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Test Method			No. of Sample	Frequency	Remarks
		Clause	Reference				
3.1	Description	3.1	IS 2012	R	Two	Each Control Unit	
3.2, Table 1, SI No i	Free Moisture	A-2	IS 2012	R	Two	Each Control Unit	
3.2, Table 1, SI No ii	Matter Soluble in Water	A-3	IS 2012	R	Two	Each Control Unit	
3.2, Table 1, SI No iii	Red Phosphorus	A-4	IS 2012	R	Two	Each Control Unit	
3.2, Table 1, SI No iv	Acidity	A-6	IS 2012	R	Two	Each Control Unit	
3.3	White Phosphorus Content	A-5	IS 2012	R	Two	Each Control Unit	
3.4 (a)	Copper	A-7	IS 2012	R	One	Each Control Unit prepared for Defence purposes	Applicable only to Red Phosphorus for Defence Purposes.
3.4 (b)	Iron	A-7	IS 2012	R	One	Each Control Unit prepared for Defence purposes	Applicable only to Red Phosphorus for Defence Purposes.

Note-1: Whether test equipment is required or sub-contracting is permitted in column 2 shall be decided by the Bureau and shall be mandatory. Sub-contracting is permitted to a laboratory recognized by the Bureau or Government laboratories empaneled by the Bureau.

Note-2: Levels of control given in column 3 are only recommendatory in nature. The manufacturer may define the control unit/batch/lot and submit his own levels of control in column 3 with proper justification for approval to BO head.