उत्पाद मानुयल
धातु पालिश, तरल - विशिष्टि
5487 : 1992के अनुसार
PRODUCT MANUAL FOR
METAL POLISH, LIQUID- SPECIFICATION
According to IS 5487:1992

भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम 2018 की स्कीम-I के तहत यह उत्पाद मानुयल प्रमाणीकरणके प्रचलन मे रीति और पारदर्शिता के सुसंगता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों एवं लाइसेन्स धारियों द्वारा संदर्भ सामग्री के रूप मे 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 5487 :1992
	शीर्षक **Title**	:	**धातुपालिश, तरल - विशिष्टि** METAL POLISH, LIQUID- SPECIFICATION
	संशोधन संख्या **No. of Amendments**	:	NIL
2.	**नमुनाकरण दिशा निर्देश** **Sampling Guidelines:**		
a)	**कच्चा माल** Raw material	:	कच्चेमालकेलिएकोईविशेषआवश्यकतानहीं No specific requirement for raw material
b)	**समूहिकरण दिशा निर्देश** Grouping guidelines	:	**लागूनहीं** Not applicable
c)	**नमूनेका परिमाण**	:	2x4x250 mL

	Sample Size		
3.	**परीक्षण उपकरणो की सूची** **List of Test Equipment**	:	कृपया Annex-एदेखें Please see Annex – A
4.	**निरीक्षण व परीक्षण स्कीम** **Scheme of Inspection and Testing**	:	कृपया Annex-Bदेखें Please see Annex – B
5.	**एक दिन में संभावित परीक्षण** **Possible tests in a day :**		
	All tests are possible to be carried out in a day		
6.	**लाइसेन्स का कार्यक्षेत्र/Scope of the Licence**:		
	IS 5487: 1992 के अनुसार मानक मुहर का उपयोग करने के लिए लाइसेन्स निम्नलिखित कार्यक्षेत्रके लिए प्रदान किया जाता है "Licence is granted to use Standard Mark as per 5487: 1992 with the following scope:		
	उत्पाद का नाम Name of the product	**धातु पालिश, तरल - विशिष्टि** Metal Polish, Liquid	

ANNEX – A

TO THE PRODUCT MANUAL FOR

METAL POLISH, LIQUID-SPECIFICATION AS PER IS 5487:1992

List of test equipment

Sr. No.	Tests used in with Clause Reference	Test equipment
1.	Consistency Cl. 4.3	Container for filling metal polish, liquid Stop Watch Glass Bottle Metal Rod
2.	Stability Cl. 4.4	100 mL stoppered graduated cylinder Stop Watch
3.	Polishing Property Cl. 4.5	Polished Brass Plate Conc. Ammonia Liquor (0.896 Sp. Gr.) Stop Watch Soft Cotton Cloth
4.	Acidity of the aqueous extract Cl. 4.6	Weighing Balance Distilled Water Blue Litmus Paper
5.	Total Solids (excluding oils and fatty matter) Cl. 4.8	Weighing Balance Centrifuge Tube Petroleum Hydrocarbon Solvent 60/80 Xylene or Toluene Acetone Stop Watch Oven
6.	Total Ammonia (as NH_3) Cl. 4.8	**A. DISTILLATION METHOD** Weighing Balance Distillation Assembly Khejdalh Flask Sulphuric Acid Conical Flask Porcelain Pieces Paraffin Wax Distilled Water Sodium Hydroxide Solution Burner Methyl Orange

		B. TITRIMETRIC METHOD Calibrated stoppered cylinder of 200mL capacity Boric Acid Sulphuric Acid Methyl Red Methylene Blue Alcohol
7.	Residue on 75-micron IS Sieve Cl. 4.8	Weighing Balance 250mL beaker Petroleum Hydrocarbon Solvent (Mineral Terpentine) 75-micron IS Sieve Wash Bottle
8.	Cyanides Cl. 4.8	Test Tube Sodium Hydroxide Solution Ferrous Sulphate Solution Ferric Chloride Solution Stop Watch Water Bath Dilute Hydrochloric Acid
9.	Flash Point (Abel) Cl. 4.8	Cleaning solvent Abel Flash point apparatus as per IS 1448 (Part 20) Thermometers as per IS 1448 (Part 20) Timing device, stopwatch or electronic timer Barometer, absolute pressure reading, accurate to 0.5 kPa External cooling bath (optional) CRM of known flash point Lubricant (optional), Ignitor& Pilot Light Gas Test cup thermal insulating cap (optional)
10.	Oleic Acid Content Cl. 4.8	Measuring Cylinder Ethanol or methylated spirit Beaker Phenolphthalein-thymol blue indicator solution Water Bath Burner Weighing Balance Sodium Hydroxide Solution Titration Assembly

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

ANNEX B
TO THE PRODUCT MANUAL FOR
METAL POLISH, LIQUID-SPECIFICATION AS PER IS 5487:1992

Scheme of Inspection And Testing

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 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. LABELLING AND MARKING- The material shall be packed as per clause 5.1 of IS 5487.

3.1 The Standard Mark as given in the schedule of the licence shall be printed on each container or on the label applied to the container; provided always that the material in each container to which this mark is thus applied conforms to every requirement of the specification.

3.2 In addition, the following information shall be given on each container or on the label applied to it:

a) Manufacture's name and his recognized trade mark, if any;
b) Net volume of the material when packed;
c) The words "Metal Polish for Brass, Copper, Bronze, Zinc and Steel;
d) Directions for use;
e) Control unit number;
f) Month and year of manufacture;
g) Safety precautions, if any and
h) Any other marking required under Weights and Measures (Packaged Commodities) Regulations, 1977.

4. CONTROL UNIT –For the purpose of this scheme. the total quantity of metal polish filled in containers from a day's production shall constitute a control unit.

4.1 The control unit shall be considered fit for the purpose of marking, if sample taken from the control unit and tested as in Table 1 of this scheme is found to conform to the relevant requirements of the specification.

4.3 In case of failure of the sample from a control unit to conform to any of the requirements laid

down in the specification. The entire material in the control unit shall be considered unfit for the application of the mark. The material of such control unit may be reprocesses, if possible, and marked if the sample drawn from the reprocessed control unit meets all the requirements of the specification.

4.4 Routine analysis of each consignment of the raw material received in the factory shall be carried out and appropriate records maintained. Alternatively, each consignment of raw material received shall be covered by the test certificate giving details of the quantity and quality and records of all these test certificates shall be maintained.

4.5 In respect of all other clauses of the specification, the factory shall maintain appropriate controls and checks to ensure that their product conforms to the various requirements of the specification.

5. LEVELS OF CONTROL - The tests as indicated in column 1 of Table 1and 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 of 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**				
4.1	Composition	4.1 & 4.2	IS 5487	R	One	Each Control Unit	If the sample is not conforming, the control unit shall not be marked.
4.3	Consistency	Annex A-1	IS 5487	R	One	Each Control Unit	
4.4	Stability	Annex A-2	IS 5487	R	One	Each Control Unit	
4.5	Polishing Property	Annex A-3 & 4.5.1	IS 5487	R	One	Each Control Unit	
4.6	Acidity of aqueous extract	Annex A-4	IS 5487	R	One	Each Control Unit	
4.7	Keeping Quality	4.7	IS 5487	R	One	-	Sample to be stored after every six months and tested after the period specified in the clause
4.8& Table 1	Total Solids, percent by mass	Annex A-5	IS 5487	R	One	Each Control Unit	If the sample is not conforming, the control unit shall not be marked.
-do-	Total Ammonia, percent by mass	Annex A-6	IS 5487	R	One	Each Control Unit	
-do-	Residue on 75-micron IS sieve	Annex A-7	IS 5487	R	One	Each Control Unit	
-do-	Cyanides	Annex A-8	IS 5487	R	One	Each Control Unit	
-do-	Oleic Acid Content, percent by mass	Annex A-9	IS 5487	R	One	Each Control Unit	
-do-	Flash Point (abel), °C	----	IS 1448 (Part 20)	R	One	Each Control Unit	

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 empanelled 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 justificationfor approval by BO Head.