

**केन्द्रीय मुहर विभाग-2**

हमारा संदर्भ : के.वि.मु.-2/16: 8654

26 08 2019

**विषय: संशोधित IS 8654:2019 (Automotive Hydraulic Brake Fluid, Heavy Duty – Specification) के अनुसार Scheme of Inspection and Testing (SIT)**

उपरोक्त विषय पर सक्षम प्राधिकारी द्वारा अनुमोदित परिपत्र अनुपालन हेतु संलग्न है।

(आदित्य दास)  
वैज्ञानिक-सी

**प्रमुख (के मु वि-2)**

सभी क्षेत्रीय/शाखा कार्यालयों को परिचालित

प्रतिलिपि:

आई टी एस विभाग बीआईएस इंटरनेट पर अपलोड करने -के लिए

**CENTRAL MARKS DEPARTMENT-2**

Our Ref: CMD-2/16: 8654

26 08 2019

**Subject: Scheme of Inspection and Testing (SIT) for Revised IS 8654:2019 (Automotive Hydraulic Brake Fluid, Heavy Duty – Specification)**

Please find enclosed circular on the above subject, duly approved by the Competent Authority, for implementation.

(Aditya Das)  
Sc. 'C' (CMD-2)

**Head (CMD-2)**

**Circulated to all ROs/BOs**

**Copy to: ITS for hosting on BIS Intranet**

**SCHEME OF INSPECTION AND TESTING FOR  
AUTOMOTIVE HYDRAULIC BRAKE FLUID, HEAVY DUTY –  
SPECIFICATION (THIRD REVISION)  
AS PER IS 8654:2019**

**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. PACKING AND MARKING** –The Standard Mark, as given in the Schedule of the license shall be incorporated on each container of the product provided that the product contained in the container thus marked conforms to the requirement of the specification.

3.1 Packing and marking shall be done as per the provisions of the Indian Standard.

3.2 In addition following details shall be marked on each container:

- i) BIS Licence Number CM/L—
- ii) BIS website details as follows “For details of BIS certification please visit [www.bis.gov.in](http://www.bis.gov.in)”

**4. CONTROL UNIT** – For the purpose of this scheme the entire quantity of the material mixed homogenously in one operation shall constitute a control unit.

**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.

**7. 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**

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or)S: Sub-contracting permitted	Levels of Control		
Cl.	Requirement	Clause	Test method		No. of Sample	Frequency	Remarks
4.1	Appearance	4.1	IS 8654:2019	R	One	Each control unit	See Notes
4.2	Colour	4.2	IS 8654:2019	R	One	-do-	-do-
4.3 & Table 1	i) Equilibrium reflux boiling point (ERBP)	Annex-A	IS 8654:2019	R	One	-do-	-do-
-do-	Wet Equilibrium reflux boiling point	Annex-B	-do-	R	One	Every Tenth control unit	-do-
-do-	Kinematic viscosity		IS 1448 (P:25/Sec 1)/ASTM D 7042	R	One	Each control unit	-do-
-do-	pH value	Annex-C	IS 8654:2019	R	One	-do-	-do-
-do-	Brake fluid stability	Annex-D	-do-	R	One	Every tenth control unit	-do-
-do-	Corrosion test	Annex-E	-do-	R	One	-do-	-do-
-do-	Fluidity and appearance at low temperatures	Annex-F	-do-	R	One	-do-	-do-
-do-	Evaporation test at 100±2°C	Annex-G	-do-	R	One	-do-	-do-
-do-	Water tolerance test	Annex-H	-do-	R	One	-do-	-do-

-do-	Compatibility test	Annex-J	-do-	R	One	-do-	-do-
-do-	Resistance to oxidation	Annex-K	-do-	R	One	-do-	-do-
-do-	Effect on rubber cups (SBR)	Annex-L	-do-	R	One	-do-	-do-
-do-	Simulated performance test (Stroking properties)	Annex-M	-do-	R	One	Once in 6 months	
4.4	Shelf Life (optional)	4.4	IS 8654:2019	R	One	Once in 12 months	

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 to BO Head.

Note-3: In case the sample fails in the tests with each control unit frequency, the entire quantity of the material in the control unit may be reprocessed if it is possible to rectify the defect. Such reprocessed material when tested again shall satisfy the relevant requirements before it is considered for marking.

Note- 4: In case the sample fails in the tests with every tenth control unit frequency, after taking corrective action, samples from each subsequent control unit shall be tested till samples from three consecutive control units shall satisfy the relevant requirements of the specification, whereupon the original frequency of testing may be resumed.