National Accreditation Board for Testing and Calibration Laboratories

SCOPE OF ACCREDITATION

Laboratory Name : SWASTIK OIL PRODUCTS MANUFACTURING NAVSARI PRIVATE LIMITED, PLOT NO. 251, VILL-UNN, P.O: KHADSUPA BOARDING, NAVSARI, GUJARAT, INDIA

Accreditation Standard ISO/IEC 17025:2017

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Validity 30/12/2021 to 14/09/2023 **Last Amended on** -

S.No	Discipline / Group	Materials or Products tested	Component, parameter or characteristic tested / Specific Test Performed / Tests or type of tests performed	Test Method Specification against which tests are performed and / or the techniques / equipment used
Permanent Facility				
1	CHEMICAL- LUBRICANTS	Brake Fluid	Appearance	FMVSS 116
2	CHEMICAL- LUBRICANTS	Brake Fluid	Brake Fluid Chemical stability	FMVSS 116 (Sr No.5.1.5.2)
3	CHEMICAL- LUBRICANTS	Brake Fluid	Brake Fluid High Temperature stability	FMVSS 116 (S5.1.5.1)
4	CHEMICAL- LUBRICANTS	Brake Fluid	Color	FMVSS 116
5	CHEMICAL- LUBRICANTS	Brake Fluid	Compatibility at -40°C±2°C for 24±2 hours. (Appearance)	FMVSS 116 (Sr No.5.1.10)
6	CHEMICAL- LUBRICANTS	Brake Fluid	Compatibility at -40°C±2°C for 24±2 hours. (Stratification)	FMVSS 116 (Sr No.5.1.10)
7	CHEMICAL- LUBRICANTS	Brake Fluid	Compatibility at 60°C±2°C for 24±2hrs (Sediments)	FMVSS 116 (Sr. No.5.1.10)
8	CHEMICAL- LUBRICANTS	Brake Fluid	Compatibility at 60°C±2°C for 24±2hrs (Stratification)	FMVSS 116 (Sr. No.5.1.10)
9	CHEMICAL- LUBRICANTS	Brake Fluid	Corrosion at 100°C ±2°C for 120 ±2 hrs (Effects on Rubber cup (SBR) - Appearance)	FMVSS 116 (Sr. No.5.1.6)
10	CHEMICAL- LUBRICANTS	Brake Fluid	Corrosion at 100°C ±2°C for 120 ±2 hrs (Effects on Rubber cup (SBR) - Base Dia Increase)	FMVSS 116 (Sr. No.5.1.6)
11	CHEMICAL- LUBRICANTS	Brake Fluid	Corrosion at 100°C ±2°C for 120 ±2 hrs (Mass change - Brass Strip)	FMVSS 116 (Sr. No.5.1.6)
12	CHEMICAL- LUBRICANTS	Brake Fluid	Corrosion at 100°C ±2°C for 120 ±2 hrs (Mass change - Cast Iron Strip)	FMVSS 116 (Sr. No.5.1.6)
13	CHEMICAL- LUBRICANTS	Brake Fluid	Corrosion at 100°C ±2°C for 120 ±2 hrs (Mass change - Copper Strip)	FMVSS 116 (Sr. No.5.1.6)
14	CHEMICAL- LUBRICANTS	Brake Fluid	Corrosion at 100°C ±2°C for 120 ±2 hrs (Mass change - Steel Strip)	FMVSS 116 (Sr. No.5.1.6)
15	CHEMICAL- LUBRICANTS	Brake Fluid	Corrosion at 100°C ±2°C for 120 ±2 hrs (Mass change - Tinned Iron Strip)	FMVSS 116 (Sr. No.5.1.6)
16	CHEMICAL- LUBRICANTS	Brake Fluid	Corrosion at 100°C ±2°C for 120 ±2 hrs (Sediments)	FMVSS 116 (Sr. No.5.1.6)

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17	CHEMICAL- LUBRICANTS	Brake Fluid	Corrosion at 100°C ±2°C for 120±2 hrs (Mass change - Aluminium)	FMVSS 116 (Sr. No.5.1.6)
18	CHEMICAL- LUBRICANTS	Brake Fluid	Corrosion at 100°C±2°C for 120 ±2 hrs (Condition of Metal Strips)	FMVSS 116 (Sr. No. 5.1.6)
19	CHEMICAL- LUBRICANTS	Brake Fluid	Corrosion at 100°C±2°C for 120 ±2 hrs (Crystalline deposit on the walls of jar and metal strips)	FMVSS 116 (Sr. No.5.1.6)
20	CHEMICAL- LUBRICANTS	Brake Fluid	Corrosion at 100°C±2°C for 120 ±2 hrs (pH of the test fluid)	FMVSS 116 (Sr. No.5.1.6)
21	CHEMICAL- LUBRICANTS	Brake Fluid	Corrosion at 100°C±2°C for 120±2 hrs (Effects on Rubber cup - SBR - Hardness)	FMVSS 116 (Sr. No.5.1.6)
22	CHEMICAL- LUBRICANTS	Brake Fluid	Corrosion at 100°C±2°C for 120±2 hrs (Appearance of test fluid in jar at 23 ± 5°C)	FMVSS 116 (Sr. No.5.1.6)
23	CHEMICAL- LUBRICANTS	Brake Fluid	Effects on Rubber (SBR) at 120°C ±2°C for 70 ±2 hrs (Appearance)	FMVSS 116 (Sr. No.5.1.12)
24	CHEMICAL- LUBRICANTS	Brake Fluid	Effects on Rubber (SBR) at 120°C ±2°C for 70 ±2 hrs (Hardness Increase -IRHD)	FMVSS 116 (Sr. No.5.1.12)
25	CHEMICAL- LUBRICANTS	Brake Fluid	Effects on Rubber (SBR) at 120°C ±2°C for 70 ±2hrs (Base Diameter increase)	FMVSS 116 (Sr. No.5.1.12)
26	CHEMICAL- LUBRICANTS	Brake Fluid	Effects on Rubber (SBR) at 70°C ±2°C for 70 ±2 hrs (Appearance)	FMVSS 116 (Sr. No.5.1.12)
27	CHEMICAL- LUBRICANTS	Brake Fluid	Effects on Rubber (SBR) at 70°C ±2°C for 70 ±2 hrs (Base diameter increase)	FMVSS 116 (Sr. No.5.1.12)
28	CHEMICAL- LUBRICANTS	Brake Fluid	Effects on Rubber (SBR) at 70°C ±2°C for 70 ±2 hrs (Hardness decrease -IRHD)	FMVSS 116 (Sr. No.5.1.12)
29	CHEMICAL- LUBRICANTS	Brake Fluid	Equilibrium reflux Boiling point - ERBP	FMVSS 116 (Sr. No.5.1.1)
30	CHEMICAL- LUBRICANTS	Brake Fluid	Evaporation at 100°C (Pour point of Residue)	FMVSS 116 (Sr. No.5.1.8)

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31	CHEMICAL- LUBRICANTS	Brake Fluid	Evaporation at 100°C ± 2°C (Abrasiveness or grittiness)	FMVSS 116 (Sr. No.5.1.8)
32	CHEMICAL- LUBRICANTS	Brake Fluid	Evaporation at 100°C ± 2°C (Loss in mass percent)	FMVSS 116 (Sr. No.5.1.8)
33	CHEMICAL- LUBRICANTS	Brake Fluid	Fluidity and Appearance at Low Temperature (-40°C ±2°C for 144 ±2 hrs) - Bubble flow time	FMVSS 116 (Sr. No.5.1.7)
34	CHEMICAL- LUBRICANTS	Brake Fluid	Fluidity and Appearance at Low Temperature (-40°C ±2°C for 144 ±2 hrs) (Sludging, Sedimentation Crystallization or Stratification)	FMVSS 116 (Sr. No.5.1.7)
35	CHEMICAL- LUBRICANTS	Brake Fluid	Fluidity and Appearance at Low Temperature (-50°C ±2°C for 6 ± 0.2 hrs) (Bubble Flow Time)	FMVSS 116 (Sr. No.5.1.7)
36	CHEMICAL- LUBRICANTS	Brake Fluid	Fluidity and Appearance at Low Temperature (-50°C ±2°C for 6 ± 0.2 hrs) (Sludging, Sedimentation Crystallization or Stratification)	FMVSS 116 (Sr. No.5.1.7)
37	CHEMICAL- LUBRICANTS	Brake Fluid	pH Value	FMVSS 116 (Sr. No.5.1.4)
38	CHEMICAL- LUBRICANTS	Brake Fluid	Resistance to Oxidation (Change in mass – Aluminium)	FMVSS 116 (Sr. No.5.1.11)
39	CHEMICAL- LUBRICANTS	Brake Fluid	Resistance to Oxidation (Change in mass - Cast Iron)	FMVSS 116 (Sr. No.5.1.11)
40	CHEMICAL- LUBRICANTS	Brake Fluid	Resistance to Oxidation (Condition of metal Strips)	FMVSS 116 (Sr. No.5.1.11)
41	CHEMICAL- LUBRICANTS	Brake Fluid	Water Tolerance at -40°C ±2°C for 120 ±2 hrs (Sludging, Sedimentation Stratification, or Crystallization)	FMVSS 116 (Sr. No.5.1.9)
42	CHEMICAL- LUBRICANTS	Brake Fluid	Water Tolerance at -40°C ±2°C for 120 ±2 hrs (Bubble Flow Time)	FMVSS 116 (Sr. No.5.1.9)
43	CHEMICAL- LUBRICANTS	Brake Fluid	Water Tolerance at -40°C ±2°C for 120 ±2 hrs (Cloudiness developed then appearance on warming/heating to room temperature)	FMVSS 116 (Sr. No.5.1.9)
44	CHEMICAL- LUBRICANTS	Brake Fluid	Water Tolerance at 60°C ±2°C for 24 ±2 hrs (Stratification)	FMVSS 116 (Sr. No.5.1.9)

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45	CHEMICAL- LUBRICANTS	Brake Fluid	Water Tolerance at 60°C ±2°C for 24 ±2 hrs. (Sediments)	FMVSS 116 (Sr. No.5.1.9)
46	CHEMICAL- LUBRICANTS	Brake Fluid	Wet Equilibrium Reflux Boiling Point	FMVSS 116 (Sr. No.5.1.2)