

5. उक्त नियमावली में, नियम 115 के अनुबंध IVयग के पश्चात्, निम्नलिखित नए अनुबंध IVयघ को अंतःस्थापित किया जाएगा, अर्थात्-

“अनुबंध IV-यघ

[नियम 115(18 (ii))देखें]

बीएस-IV वाहनों के लिए संदर्भ हाइड्रोजन ईंधन की तकनीकी विशेषताएं

अभिलक्षण	इकाई	सीमाएं		परीक्षण विधि
		न्यूनतम	अधिकतम	
हाइड्रोजन शुद्धता	% मोल	97	100	आईएसओ 14687-1
कुल हाइड्रोकार्बन	μमोल/मोल	0	100	आईएसओ 14687-1
जल <sup>1</sup>	μमोल/मोल	0	2	आईएसओ 14687-1
आक्सीजन	μमोल/मोल	0	2	आईएसओ 14687-1
आर्गन	μमोल/मोल	0	2	आईएसओ 14687-1
नाइट्रोजन	μमोल/मोल	0	2	आईएसओ 14687-1
कार्बन मोनो आक्साइड	μमोल/मोल	0	1	आईएसओ 14687-1
सल्फर	μमोल/मोल	0	2	आईएसओ 14687-1
स्थायी कण <sup>3</sup>				

(1)संघनित नहीं होना चाहिए

(2)जल, आक्सीजन, नाइट्रोजन, आर्गन संयुक्त रूप से: 1.900 μ मोल/मोल

(3) वाहन (इंजन) जिसमें ईंधन भरा जा रहा है, के हाइड्रोजन में ईंधन स्टेशन उपकरण को नुकसान पहुंचाने वाली मात्रा में धूल, रेत, गंदगी, गम्स, तेल या अन्य पदार्थ नहीं होने चाहिए”

[फा. सं. आरटी-11028/01/2022-एमवीएल]

महमूद अहमद, संयुक्त सचिव

टिप्पणी: मूल नियम, भारत के राजपत्र, असाधारण, भाग II, खंड 3, उपधारा (i) में अधिसूचना संख्या सा.का.नि. 590(अ), दिनांक 2 जून, 1989 के माध्यम से प्रकाशित किए गए थे और पिछली बार अधिसूचना संख्या सा.का.नि.....(अ), दिनांकित ..... द्वारा संशोधित किए गए थे।

## MINISTRY OF ROAD TRANSPORT AND HIGHWAYS

### NOTIFICATION

New Delhi, the 6th September, 2022

**G.S.R. 683(E).**—The following draft of certain rules further to amend the Central Motor Vehicles Rules, 1989, which the Central Government proposes to make in exercise of the powers conferred by Section 109, Section 110 of the Motor Vehicles Act, 1988 (59 of 1988), is hereby published as required by sub-section (1) of section 212 of the said Act for information of all persons likely to be affected thereby; and notice is hereby given that the said draft rules shall be taken into consideration after the expiry of thirty days from the date on which the copies of this notification as published in the Official Gazette, are made available to the public;

2. The objections or suggestions which may be received from any person with respect to the said draft rules before the expiry of the period aforesaid will be considered by the Central Government;

Csm

The Draft Rules may be circulated to all officers concerned for information and for furnishing observations/suggestions within the time limit. A copy may be made available in the official website also.

12/9/22

3. Objections and suggestions to these draft rules, if any, may be sent to the Joint Secretary (MVL), email: comments-morth@gov.in, Ministry of Road Transport and Highways, Transport Bhawan, Parliament Street, New Delhi-110 001.

### DRAFT RULES

**1. Short title and commencement** - (1) These rules may be called as the Central Motor Vehicles (.....Amendment) Rules, 2022.

(2) Save as otherwise provided in these rules, they shall come into force on the date of their final publication in the Official Gazette.

2. In the Central Motor Vehicle Rules, 1989 (herein after referred as the said rules), in rule 115, In sub-rule 18 (ii), for existing table 2, following table shall be substituted namely: -

**"Table 2**  
**APPLICABILITY OF TEST REQUIREMENTS FOR BS-VI**

	Positive-Ignition engines						Compression-Ignition engines			Dual Fuel Engines
	Gasoline <sup>(1)</sup> [(E5)/(E10)]	CNG/Bio-methane/Bio-Gas/LNG	LPG	E85	Hydrogen (ICE) <sup>(3)</sup> <sup>(4)</sup>	HCNG (Hydrogen+CNG)	Diesel (B7)	Ethanol (ED95)	Biodiesel blends up to 100% <sup>(1)</sup>	Diesel + (CNG/LNG)
Gaseous pollutants	Yes	Yes	Yes	Yes	Yes <sup>(5)</sup>	Yes	Yes	Yes	Yes	Yes <sup>(2)</sup>
Particulate Mass	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes <sup>(2)</sup>
PM Number	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes <sup>(2)</sup>
Durability	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes <sup>(2)</sup>
OBD	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes <sup>(2)</sup>
Off Cycle Emission (WNTE)	--	--	--	--	--	--	Yes	Yes	Yes	Yes <sup>(2)</sup>
PEMS Demonstration test at Type Approval	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes <sup>(2)</sup>
In-Service Conformity	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes <sup>(2)</sup>

(1) The vehicles / engines fuelled with bio diesel blends up to 7% shall be tested with reference diesel (B7) and vehicles fuelled with Bio diesel blends above 7% will be tested with respective blends.

(2) The test applicability requirements for dual fuel engine is depending on the Gas Energy Ratio (GER) measured over the hot part of the WHTC test-cycle. GER classification shall be as per AIS 137 and as amended from time to time.

(3) Reference Fuel is 'Hydrogen for BS-VI Positive Ignition Engine' as Specified in Annexure IV-W

(4) Reference Fuel is 'Hydrogen for BS-IV Positive Ignition Engine' as Specified in Annexure IV-ZD

(5) Only NOx emission shall be determined when the vehicle is running on Hydrogen"

3. In the said rules, in rule 115, In sub-rule 18 (ii), below table 2, in Notes, in Sr. No. 4, after item (g) following new item (h) and (i) shall be substituted namely:

"(h) BS-VI Hydrogen Fuel vehicles shall be tested with reference fuel specified in the Annexure IV-W to said rules.

(i) BS-IV Hydrogen Fuel vehicles shall be tested with reference fuel specified in the Annexure IV-ZD to said rules."

4. In the said rules, in rule 115, Annexure IV-W, for existing title of Annexure IV-W following title shall be substituted namely: -

"Technical Specification of Reference Hydrogen Fuel for BS- VI vehicles"

5. In the said rules, in rule 115, After Annexure IV- ZC, following new Annexure IV-ZD shall be inserted namely: -

**"ANNEXURE IV-ZD**

**[See rule 115(18 (ii))]**

**Technical Specification of Reference Hydrogen Fuel for BS-IV vehicles**

Characteristics	Units	Limits		Test Method
		Minimum	Maximum	
Hydrogen Purity	% mole	97	100	ISO 14687-1
Total Hydrocarbon	μmol/mol	0	100	ISO 14687-1
Water <sup>1</sup>	μmol/mol	0	2	ISO 14687-1
Oxygen	μmol/mol	0	2	ISO 14687-1
Argon	μmol/mol	0	2	ISO 14687-1
Nitrogen	μmol/mol	0	2	ISO 14687-1
CO	μmol/mol	0	1	ISO 14687-1
Sulphur	μmol/mol	0	2	ISO 14687-1
Permanent Particulates <sup>3</sup>				

<sup>(1)</sup>Not to be condensed

<sup>(2)</sup>Combined water, oxygen, nitrogen, argon: 1.900 μmol/mol.

<sup>(3)</sup>The hydrogen shall not contain dust, sand, dirt, gums, oils or other substances in an amount sufficient to damage the fuelling station equipment of the vehicle (engine) being fuelled."

[F. No. RT-11028/01/2022-MVL]  
MAHMOOD AHMED, Jt. Secy.

**Note.-** The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (i) vide notification number G.S.R. 590(E), dated the 2<sup>nd</sup> June, 1989 and last amended vide notification number G.S.R. ....(E) dated .....