



## PRODUCT SPECIFICATION

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Product Name: **TRANSMOL UNIVERSAL HD 80W-90**

| PRIMARY TESTS                                 | METHOD                        | SPECIFICATION            |       |       |
|-----------------------------------------------|-------------------------------|--------------------------|-------|-------|
|                                               |                               | MIN                      | TYP   | MAX   |
| Appearance                                    | Visual                        | Clear and Bright         |       |       |
| Colour                                        | ASTM D1500 / TS 1713 ISO 2049 | 3                        | 4     | 5     |
| Density 15 °C, g/ml                           | ASTM D4052 / TS EN ISO 12185  | 0.890                    | 0.900 | 0.920 |
| Viscosity 100 °C, mm <sup>2</sup> /s          | ASTM D445 / TS EN ISO 3104    | 15                       | 19    | 23    |
| Viscosity 40 °C, mm <sup>2</sup> /s           | ASTM D445 / TS EN ISO 3104    | 140                      | 210   | 260   |
| Viscosity Index                               | ASTM D2270 / TS ISO 2909      | 92                       | 95    |       |
| Foaming Characteristic (I, II, III Kd.) ml/ml | ASTM D892 / TS 1834 ISO 6247  | (100/10, 100/10, 100/10) |       |       |

| SECONDARY TESTS                    | METHOD                          | SPECIFICATION |      |     |
|------------------------------------|---------------------------------|---------------|------|-----|
| Pour Point, °C                     | ASTM D97 / TS EN ISO 3016       |               |      | -21 |
| Flash Point, °C (COC)              | ASTM D92 / TS EN ISO 2592       | 220           |      |     |
| Copper Corrosion (100 °C, 3 hours) | ASTM D130 / TS 2741 EN ISO 2160 |               |      | 1b  |
| Rust Test                          | ASTM D665 / TS 6830 ISO 7120    |               | Pass |     |

**PERFORMANCE LEVELS:** API : GL-5, MIL-L-2105D, ZF TE-ML 04G / 07A / 08

| Document Code | Revision No/Date | Page No | Prepared                    | Checked                   | Approved        |
|---------------|------------------|---------|-----------------------------|---------------------------|-----------------|
| KG-ÜS-027     | 11/29.05.2021    | 1/1     | FACTORY HSEQ & LAB. MANAGER | MANAGEMENT REPRESENTATIVE | FACTORY MANAGER |

\* As the defined values are typical values, there can be some little changes according to the production. M Oil keeps all the rights to update and change the formulations of products without making any announcements. For the updated informations and technical data about the products and product packagings, please contact with M Oil.