

GM Dexron II-D Specification Requirements

| General Motors ATF Specification | | DEXRON ® II-D | |
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| Test | Method | Requirement | |
| Colour | ASTM D1500 | Not required | |
| Elemental Analysis | ASTM D4951 | Not required | |
| | ASTM D808 | Not required | |
| | ASTM D3228 | Not required | |
| | ASTM D129 OR D 4951 | Not required | |
| | ASTM D5185 | | |
| | UOP 975 | | |
| | ASTM D4927 | | |
| | ASTM D6443 | | |
| Infrared Spectrum | ASTM E168 | Not required | |
| Fluid Profile | GM Method | Not required | |
| Miscibility | FTM 791C, Method 3470.1 | No separation or color change at end of test | |
| Kinematic Viscosity | | | |
| | at 40°C | ASTM D445 | Not Required |
| | at 100°C | ASTM D445 | 5.5 cSt. min during and at end of oxidation and cycling tests |
| at 150°C | ASTM D445 | | |
| Viscosity Index | ASTM D2270 | Not required | |
| Flash Point | ASTM D92 | 160°C min. | |
| Fire Point | ASTM D92 | 175°C min. | |
| Brookfield Viscosity | ASTM D2983 | 4000 mPa.s (4.0 Pa.s) max. at -23.3°C | |
| | | 50,000 mPa.s (50.0 Pa.s) max. at -40°C | |
| Copper Strip Test | ASTM D130 Mod | No blackening with flaking | |
| Corrosion Test | ASTM D665 Procedure A | No rust on test pins | |
| Rust Protection | ASTM D 1748 Mod | No rust or corrosion on any test surface | |
| Vane Pump Wear Test | ASTM D2882 Mod | Not Required | |
| Cold Crank Simulation | ASTM D5293 | Not Required | |
| High Temp High Shear | ASTM D4683 | Not Required | |
| Noack Evap. | ASTM D5800 | Not Required | |
| Film Thickness | EHDPROC_11 at Imperial College | Not Required | |
| Tapered Roller Bearing S | CEC L-45-T-93 mod. | Not Required | |
| Foam Test | GM Method | No foam at 95°C | |
| | | 10 mm. max. at 135°C | |
| | | 23 s max. break-time at 135°C | |
| | ASTM D892 mod. New and Used fluid from Cybling test | Not Required | |
| | | | |
| Fluid Effect on Seals | GM Method | Elastomers | |
| | | Nitrile | |
| | | Polyacrylate | |
| | | Silicone | |
| | | The limits are assigned by GM for each batch of elastomer | |
| Saginaw Power Steering Pump Test | GM Method | Parts condition to be equal to or better than that obtained with reference fluid | |

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| HEFCAD - Plate Clutch Test | GM Method DEXRON ® II uses SD-715 Clutch Plates DEXRON ® IIE uses SD-1777 Clutch Plates DEXRON ® III uses SD-1777 Clutch Plates DEXRON ® VI uses BW-4239 Clutch Plates | Satisfactory operation for 100 hrs. |
| | | No unusual clutch plate wear or flaking |
| | | Between 24 and 100 hrs. of operation |
| | | 115Nm < Midpoint Dynamic Torque < 175Nm. |
| | | Delta Torque < 14Nm. |
| | | 0.45s < EngagementTime < 0.75s |
| Band Clutch Test | GM Method Uses 3T40 Band & Drum | Not Required |
| THOT - OxidationTest | GM Method DEXRON ® II uses THM-350 Transmission DEXRON ® IIE and III use Hydra-matic 4L60 Transmission | Satisfactory operation for 300 hrs. |
| | | Transmission parts cleanliness and physical condition must be equal to or better than that obtained with Reference Fluid |
| | | Total Acid Number Increase, 7.0 max. |
| | | Carbonyl Absorbance Increase, 0.8 max. |
| | | Min. O2 content of effluent gas 2% |
| | | Used Fluid Viscosity at - 23.3°C < 6000mPa.s; - 40°C Report |
| | | Used Fluid Viscosity at 100°C > 5.5 mm ² /s |
| | | Cooler braze alloy condition shall be acceptable |
| THCT - Cycling Test | GM Method DEXRON ® II uses THM-350 Transmission DEXRON ® IIE and III use Hydra-matic 4L60 Transmission | Satisfactory operation for 20,000 cycles |
| | | Transmission parts cleanliness and physical condition must be equal to or better than that obtained with Reference Fluid |
| | | Total Acid Number Increase < 6.0 |
| | | Carbonyl Absorbance Increase < 0.7 |
| | | 1-2 Shift Time between 0.35 and 0.70s |
| | | 2-3 Shift Time between 0.20 and 0.55s |
| | | Used Fluid Viscosity at 100°C > 5.5 mm ² /s during and at end of test |
| | | |
| Vehicle Performance Test | GM Method | Shift performance essentially equal to that obtained with the Reference Fluid |
| ECCC Vehicle Performance Test | GM Method | Not Required |
| Sprag Wear Test | GM Method | Not Required |
| LS Friction Test | GM Method | Not Required |
| Aeration Test | GM Method | Not Required |