The Future of GM Fluid Specifications

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**Dexos Gen 3**

Important dates to remember

- Sept 1, 2022 Gen 3 change over date
  - All product produced after this date must be Gen 3
  - All labels must be Gen 3 labels
- August 31, 2023
  - End of sell down period for Gen 2 product
- 2024 convert all dexos 2 to dexos D products
Where we are headed

Dexos Gen 4

- Targeting 2027
- New OEE test for improved fuel economy
- Investigating impacts of gas particulate filters
- SPI test
- GMOD test
- Aeration
- Turbo-coking

2023 Corvette Z06
Where are we headed

EV drive unit fluids

• Efficiency improvements
• Electrical conductivity
• Thermal conductivity
• Copper corrosion
• Wear improvements
• Extended fluid life
• Aeration/Foaming

2022 Hummer EV
Where are we headed

EV Battery Cooling

• New battery cell designs require a new cooling methods and fluids
• Immersive cooling vs. cooling plates
• Fluid thermal conductivity
• Controlling thermal propagation
• Off gassing of by products
Where are we headed

Fuel Cell

• New designs require new coolant technology
• New grease technologies
• Assumptions to drive cycles for fuel cells
  – Long Haul Trucking
  – Locomotive
  – Military
Expanding Electrification

GM has a clear vision for how its position as a platform innovator will include EV hardware components and software solutions that reach far beyond automotive applications. From the aerospace industry to aftermarket, GM is invested in a wide range of opportunities which extend its zero tailpipe emissions mission beyond its own products and services.

Aerospace
GM's deal with Textron and PCS will help produce electrified ground support equipment for airports globally and at scale beginning with baggage tractors and belt loaders.

Rail
Alternative energy powered freight locomotives that are being developed and commercialized through a collaboration with Wabtec.

Marine
Bringing EV technology to marine applications through GM Marine and also in collaboration with Pure Watercraft.

Fleet
From the BrightDrop brand's delivery ecosystem to Ultium Charge 360, GM is bringing solutions, not just vehicles, to commercial transportation.

Aftermarket
Chevy Performance’s concept Electric Connect and Cruise eCrate package would allow enthusiasts to convert their vehicles into fully operational EVs, demonstrated by Lingenfelter Performance Engineering’s recent concept El Camino install.
Thank you for your participation in the dexos program.
Questions?