

### 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



GMC Canyon AT4 OVERLANDX Concept

# 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

general motors

# Where are we headed

# gm

### 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



Silverado EV Trail Boss

general motors

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# Where are we headed

# gm

### 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?











