

Technical information

**LIQUI
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GM (Opel) works standard specification dexos1™ Gen 2



Background

With the introduction of the EURO 6 emission standard, GM also placed stricter requirements on the motor oils that the old works standard specifications dexos1™ and dexos2™ could no longer cover.

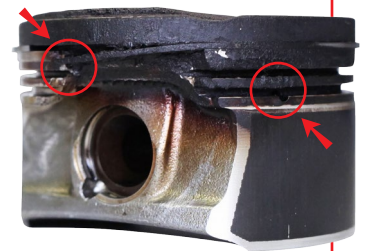
The new works standard specifications are officially called **dexos® 1:2015** and **dexos® 2:2016** and are referred to on the market as **dexos1™ Gen 2** and **dexos2™ Gen 2**. The abbreviation "Gen" stands for generation.

Only the works standard specification dexos® 1:2015 has already been published. dexos® 2:2016 is currently still in the development phase.

Reason for the new standards

In addition to the constant optimization of the fuel savings, the actual reason for the new works standard specifications is decreasing the so-called **LSPI effect**.

The LSPI (Low Speed Pre-Ignition) problem, also called SPI (Stochastic Pre-Ignition), describes the stochastically occurring, undesirable pre-ignition in the combustion chamber that results in engine knocking at high load and low engine speed and also leads to significant piston damage on modern turbocharged gasoline engines with direct injection. LSPI differs from the classic engine knocking that occurs at high load and high engine speed.



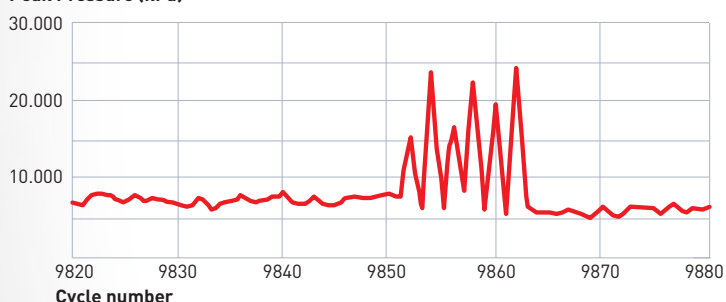
Cause of LSPI (Low Speed Pre-Ignition)

The cause of LSPI has not been investigated yet but presumably lies with the tiny amounts of motor oil that enter the combustion chamber and are ignited during the compression process like in the diesel engine. The combustion flashes over to the fuel/air mixture and results in heavy engine knocking. LSPI events can quickly lead to **serious engine damage**.

GM/Opel reacted to this with a new works standard specification **dexos® 1:2015**. This standard focuses on the reduction of LSPI events in particular. Only motor oils that offer the highest engine cleanliness, ideally protect against wear and ensure excellent fuel savings will receive dexos1™ Gen 2 approval.



Peak Pressure (kPa)



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Based on the previous findings, GM/Opel stipulates the use of a motor oil with dexos® 1:2015 (dexos1™ Gen 2) in all affected gasoline engines with direct injection and turbocharging (primarily from model year 2014).

At the next oil change, the affected vehicles must be filled with the new motor oil. The new works standard specification from GM is valid for the following vehicle models and engines:



The solution from LIQUI MOLY:

Special Tec DX1 5W-30 or Special Tec DX1G 5W-30

High-tech low-friction motor oil based on synthetic technology. Optimizes fuel consumption. Ensures excellent cold-start behavior, optimum wear protection and outstanding engine cleanliness. The innovative additive technology minimizes low-speed pre-ignition (LSPI) and thereby ensures a longer engine life. Ideally suited for extended oil change intervals and extreme demands on the engine.

Specially developed for the requirements of GM and Opel vehicles with gasoline engine. Other vehicle manufacturers such as Chrysler, Ford, Kia, Honda, Hyundai, Mazda, Nissan, Toyota, etc. also sometimes require a lubricant with this specification for various types of vehicles.

Special Tec DX1 5W-30: This product is only available in countries within the GM domains of Europe, Asia, the Pacific and India.

Model	Engine	Model year
ADAM	B10XFT (LE1)	from 2015
ADAM	B14NEH (LUJ)	from 2015
Astra J	A/B14NET/L/LPG (LUJ)	from 2010
Astra K	B10XFT (LE1)	from 2016
Astra K	B14XFL/T (LE2)	from 2016
Cascada	A/B14NET/L (LUJ)	from 2013
Corsa D	A14NEL (LUH)	from 2013
Corsa E	B10XFL/T (LE1)	from 2015
Corsa E	B14NEH/J (LUJ)	from 2015
Crossland X	all gasoline engines (LEG, LES, LEZ)	from 2017
Grandland X	all gasoline engines (LES, LHI)	from 2018
Insignia A	B20NHT (LTG)	from 2014
Insignia A	A/B14NET/LPG (LUJ)	from 2012
Insignia B	B20NHT (LTG)	from 2018
Insignia B	B15XFT (LFV)	from 2018
Meriva B	A/B14NET (LUJ)	from 2010
Meriva B	A/B14NEL/LPG (LUH)	from 2010
Mokka X	B14XFL/T (LE2)	from 2017
Mokka, Mokka X	A14NET/LPG (LUJ)	from 2013
Zafira C	A/B14NET/L/LPG (LUJ)	from 2012

Important: For all additional models, please compare using the manufacturer's specifications!

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