BRB

A Subsidiary of PETRONAS Chemicals Group

Viscotech® Viscosity Modifiers

Flowing your way

Contents

Tailored solutions

The Viscotech® line-up

From olefin copolymers (OCP) to styrene-based viscosity modifiers, our products deliver the performance profile your formulation needs for smooth operation over a wide range of temperatures. In line with our innovation strategy of not only addressing the challenges our customers face, but also anticipating their future needs, BRB Lube Oil Additives & Chemicals never stands still. We continue to develop the Viscotech® line-up to meet the growing need for resource efficiency.

The Viscotech® range is designed to optimise both shear stability and thickening efficiency in balance to deliver the best properties in each specific application. By balancing shear stability index (SSI) and thickening efficiency (TE), our solutions enable treat rate optimisation that improves engine performance, durability and fuel economy. A family of advanced non-dispersant OCP VMs, the Viscotech® 6-series is designed for multi-grade engine oils and industrial lubricants. The Viscotech® styrene-based 4- and 5-series VMs are suitable for top-tier multi-grade oils.

Viscotech® 6540 and 6540L

Versatile OCP viscosity modifiers

For automotive and industrial lubes

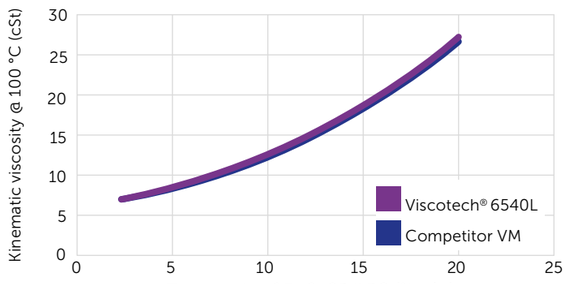
The advanced non-dispersant OCP viscosity modifiers in the Viscotech® 6-series include solid variants (6540) and liquid options (6540L) dissolved in GR II base oil. They are designed for use in multi-grade engine oils and industrial lubricants. The versatile additives deliver excellent low-temperature results and can be used with selected pour point depressants (PPDs), such as Petrolad® 7072, in a package solution. In addition, they can be customised to achieve various viscosities that are in high demand.

Also available in high quality re-refined base oils.

Benefits:

- Excellent low-temperature properties, including in combination with high-paraffin base oils
- Cost-effectiveness thanks to a favourable treat rate and suitability for multiple applications
- Outstanding compatibility with GR I, II and III base stocks

Thickening efficiency of Viscotech® 6540L



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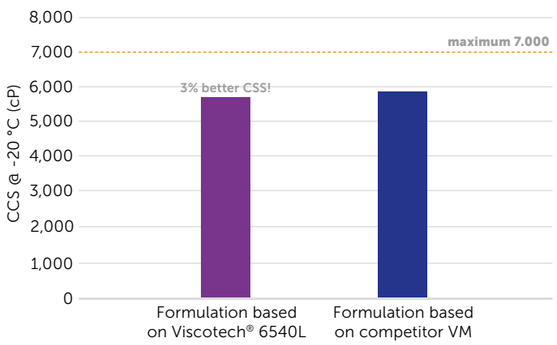
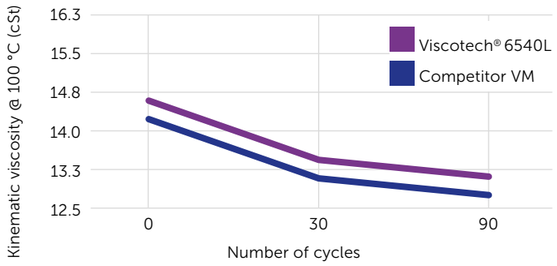


Shear stability performance after 30 and 90 cycles, SAE 15W40, 12.5–16.3 cSt, ASTM D7109



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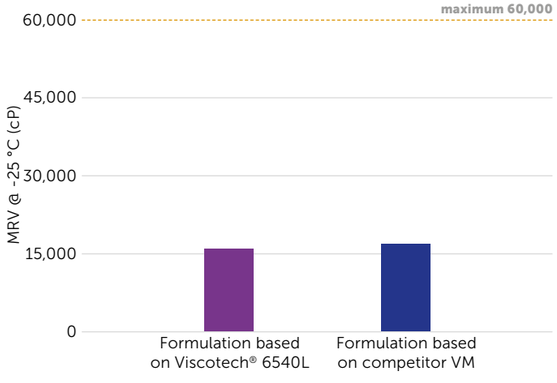

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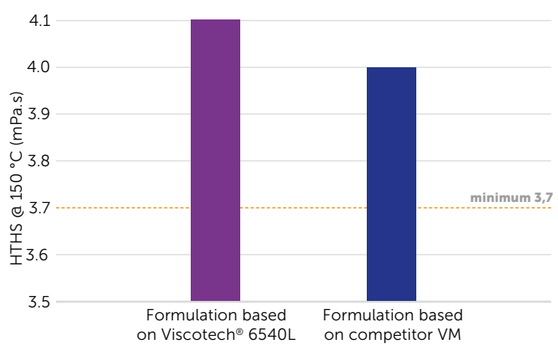


Viscotech® 6073LR

OCP viscosity modifier dissolved in re-refined base oil

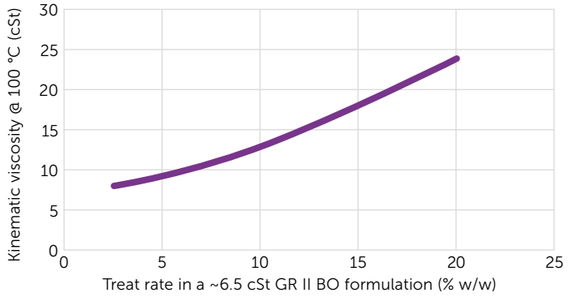
For chain oils

The liquid viscosity modifier Viscotech® 6073LR, with a shear stability index (SSI) of 70, is suitable for use in oils that prevent severe wear and can withstand high loads in moving chains across specific industrial segment environmental sustainability trends, while offering cost-effectiveness and outstanding performance.

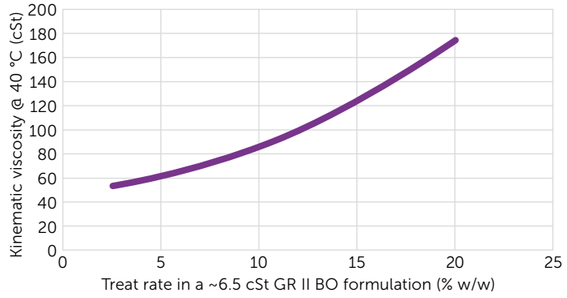
Benefits:

- A contribution to environmental sustainability through circular economy
- Performance equivalent to traditionally dissolved OCP viscosity modifiers
- Economical treat rate

Thickening efficiency of Viscotech® 6073LR



Thickening efficiency of Viscotech® 6073LR



Viscotech® 494L

Premium styrenic viscosity modifier

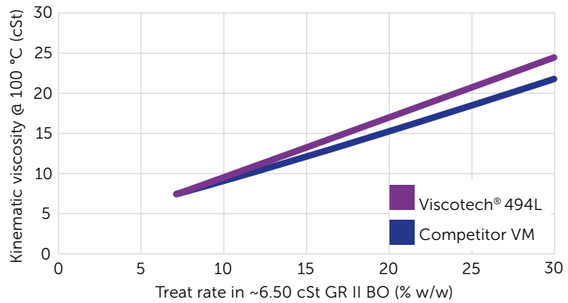
High performance in engine oils

A liquid styrenic solution that offers excellent shear stability (7 SSI) that is dissolved in GR III base oil. Viscotech® 494L is a premium product designed for formulations like top-tier, multi-grade oils to meet the demands of today's top-quality diesel and gasoline engine oils. A proven solution used by many of the largest lubricant manufacturers worldwide, it offers long-term stability coupled with a broad thermal coverage.

Benefits:

- Excellent SSI for long-term lubricant durability in multi-grade systems
- Outstanding thickening efficiency (TE)
- Enhanced performance at low and high temperatures throughout its service life
- Trusted by major oil blenders

Thickening efficiency of Viscotech® 494L



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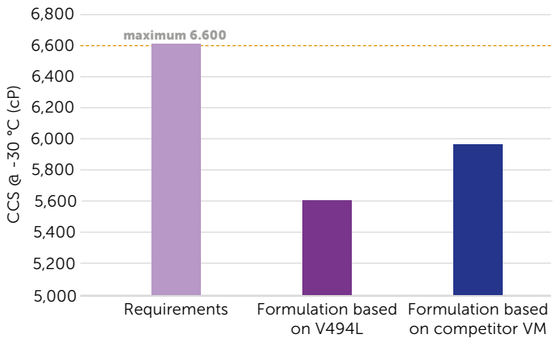
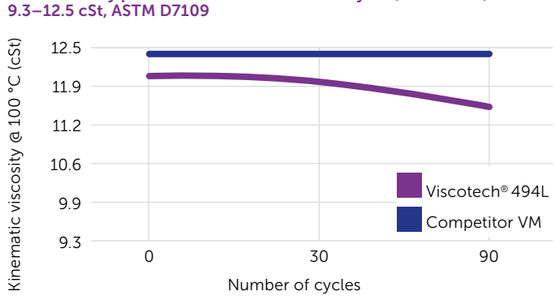


Shear stability performance after 30 and 90 cycles, SAE 5W40, 9.3–12.5 cSt, ASTM D7109



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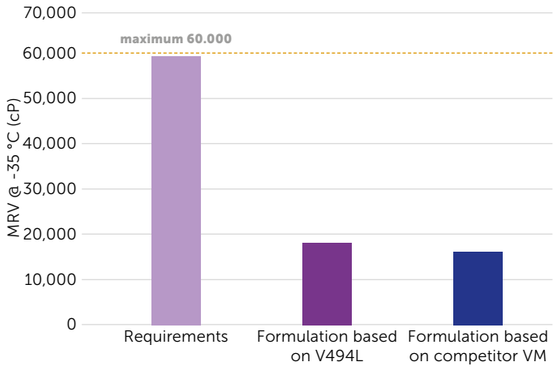

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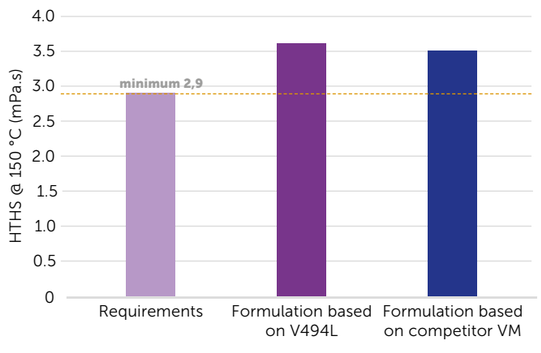


Viscotech® 533L

Multi-purpose liquid styrenic viscosity modifier

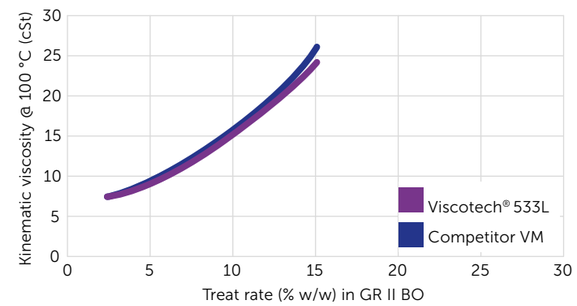
Future-oriented liquid solutions

The liquid VM possesses high shear stability (3 SSI) thanks to its special solid star-shaped styrenic polymer. Viscotech® 533L 1600 cSt dissolves well in GR II base oils. It delivers outstanding performance in multi-grade formulations and meets the exacting specifications and performance demands of today's diesel and gasoline engine oils. The star-shaped architecture enables exceptional versatility: in addition to automotive applications, it's a good alternative to PMA solutions in certain viscosity grades of hydraulic fluids.

Benefits:

- Support clean and fuel-efficient operation of diesel and gasoline engines
- Lasting excellent SSI in automotive and hydraulic systems
- Superior filterability and lower degradation for an extended service life
- Broad thermal coverage

Thickening efficiency of Viscotech® 533L



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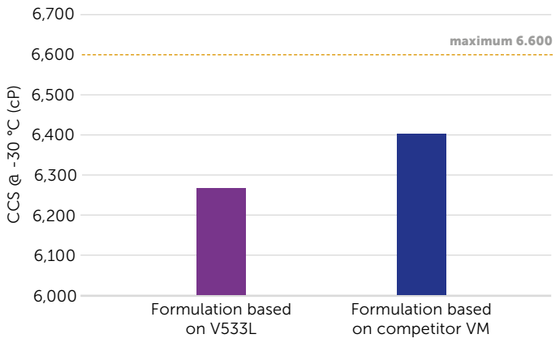
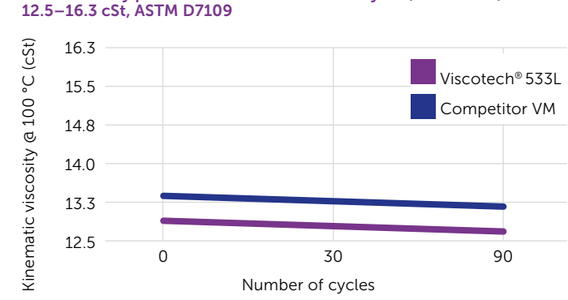


Shear stability performance after 30 and 90 cycles, SAE 5W40, 12.5–16.3 cSt, ASTM D7109



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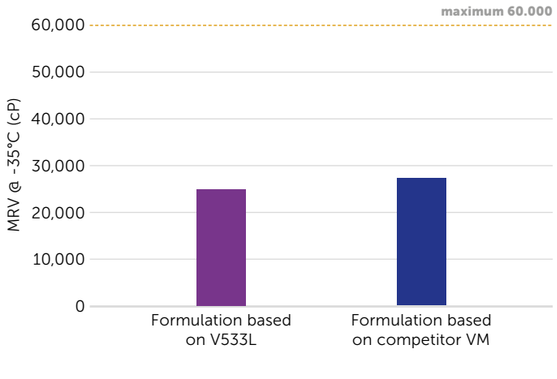

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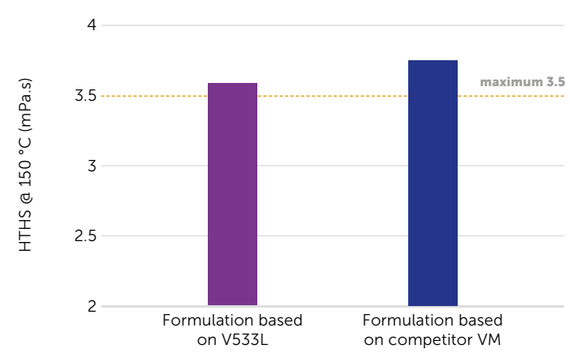


Viscotech® 535L

Multi-purpose liquid styrenic viscosity modifier

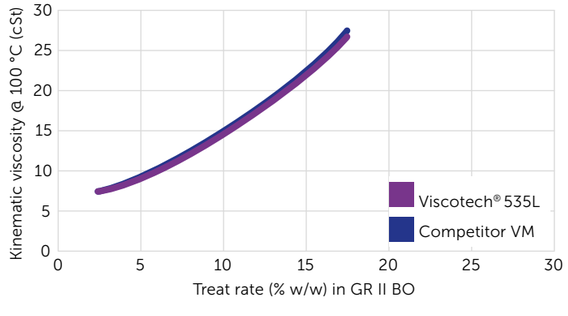
Forward-looking liquid solutions

Like Viscotech® 533L, the liquid VM possesses high shear stability (3 SSI) thanks to its special solid star-shaped styrenic polymer. Viscotech® 535L is readily soluble in GR III base oils and is also suitable for next-generation engine lubes – for example, in low-viscosity grades like 0W-XX. It offers outstanding performance in multi-grade formulations and meets the demanding specifications and performance demands of today's diesel and gasoline engine oils. The star-shaped architecture enables exceptional versatility: in addition to automotive applications, the additive is a good alternative to PMA solutions in certain viscosity grades of hydraulic fluids.

Benefits:

- Support clean and fuel-efficient operation of diesel and gasoline engines
- Lasting excellent SSI in automotive and hydraulic systems
- Superior filterability and lower degradation for an extended service life
- Broad thermal coverage
- 535L meets the stringent demands of ever-lower viscosity grades – 5W-XX and even 0W-XX

Thickening efficiency of Viscotech® 535L



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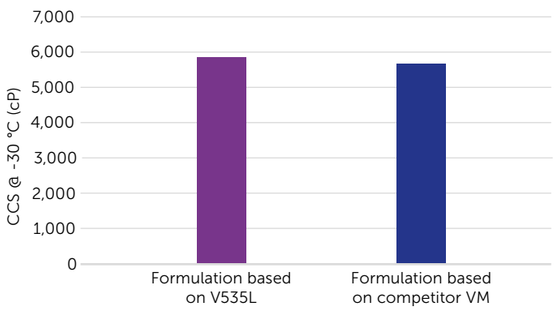
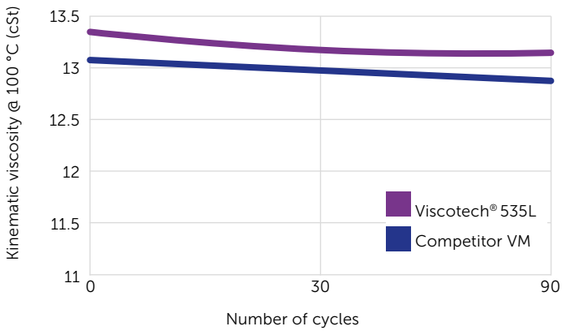
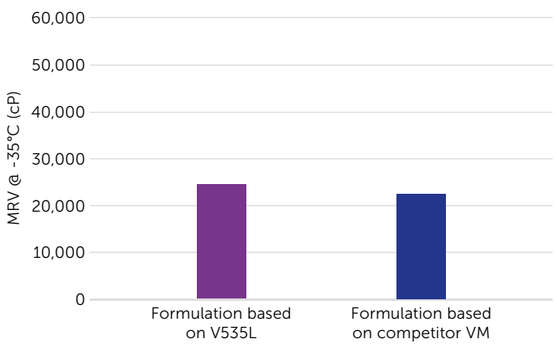


Shear stability performance after 30 and 90 cycles, SAE 5W40, ASTM D7109



MRV SAE 5W40, SM/CF



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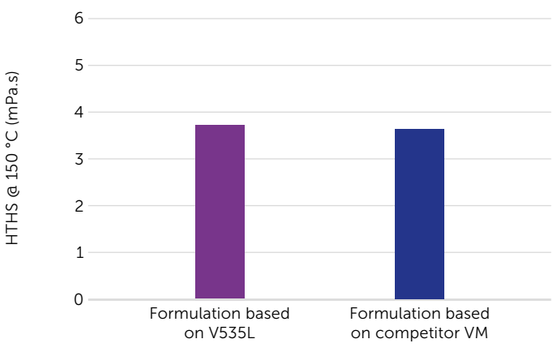


Viscotech® 483L 1200 cSt

High-quality styrenic viscosity modifier

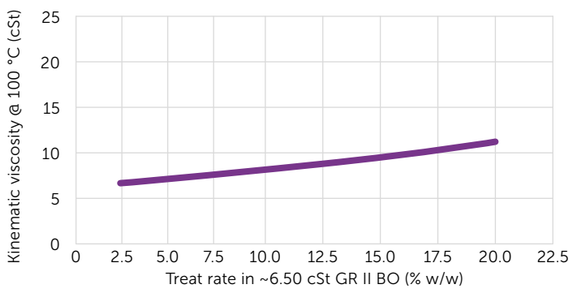
Proven outstanding performance and wide thermal coverage

A highly shear-stable, liquid styrenic VM (10 SSI), Viscotech® 483L 1200 cSt is soluble in GR II base oils. The high-quality solution is designed for modern, multi-grade diesel and gasoline engine oil systems that must meet the most stringent performance requirements. Its excellent properties throughout a wide thermal range have been proven by major European automotive customers.

Benefits:

- Excellent shear stability (10 SSI) due to its solid polymer
- Superb low-temperature properties
- Supports optimal high-temperature viscosity throughout the oil's lifespan
- Proven automotive performance with major European customers

Thickening efficiency of Viscotech® 483L 1200 cST



Viscotech®*

Viscosity modifiers		
Olefin copolymer (OCP) types	Solid	Viscotech® 6540
		Viscotech® 6640
		Viscotech® 6545
		Viscotech® 6550
		Viscotech® 6073
	Liquid VIRG BO	Viscotech® 6540L
		Viscotech® 6540LP
		Viscotech® 6545L
	Liquid RR BO	Viscotech® 6540LR
		Viscotech® 6640LR
		Viscotech® 6073LR
Styrenic types	Solid	Viscotech® 483
		Viscotech® 593
	Liquid VIRG BO	Viscotech® 483L
		Viscotech® 494L
		Viscotech® 494LD
		Viscotech® 533L
		Viscotech® 535L
		Viscotech® 536L
		Viscotech® 593L

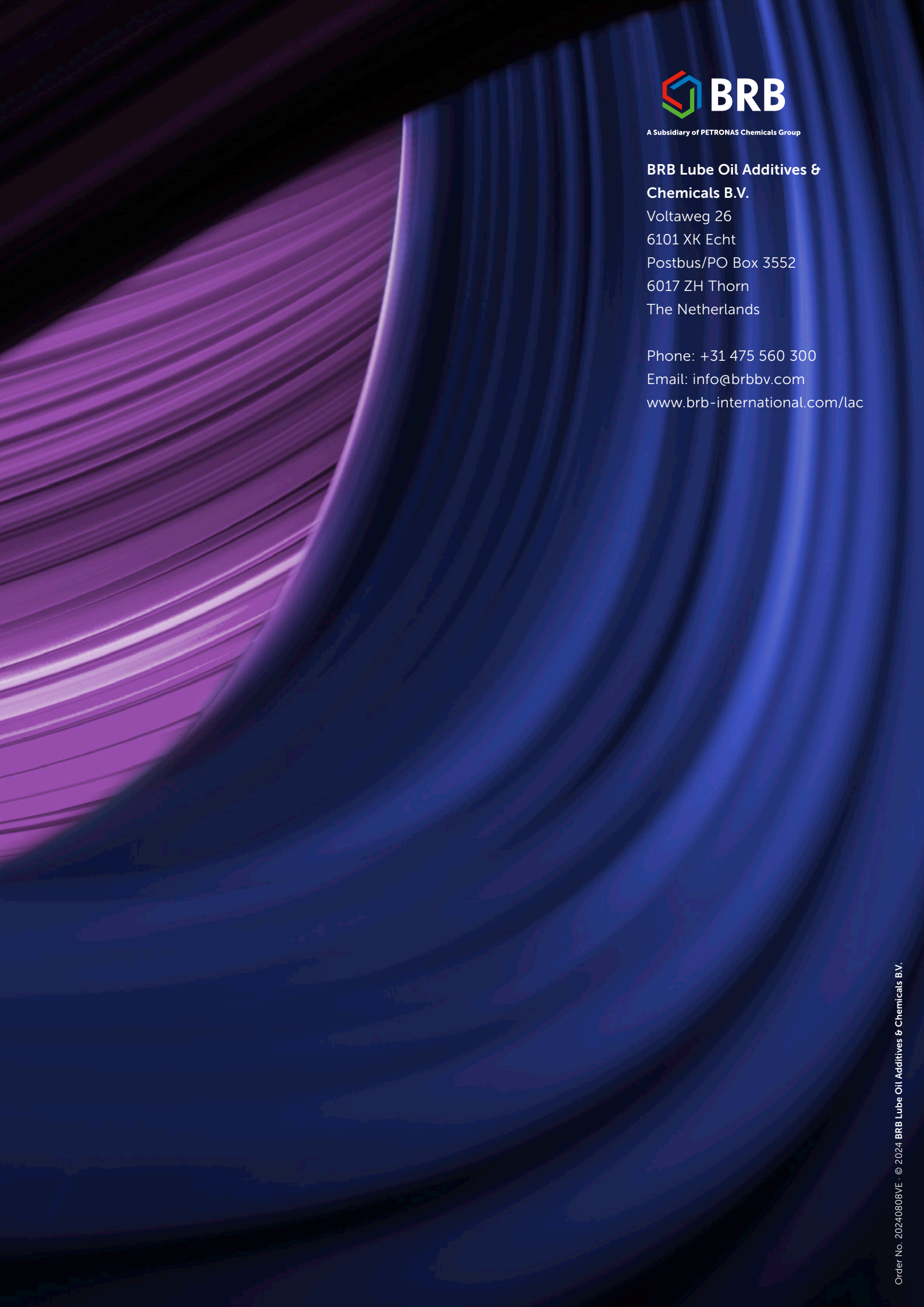
Petrolad®*

Engine oil additives	
Passenger car motor oils (PCMO) and heavy-duty diesel oils (HDDO)	Petrolad® 8770
	Petrolad® 8771SC
Passenger car motor oils (PCMO)	Petrolad® 9200(G)
Driveline additives	
Gear oil	Petrolad® 336
	Petrolad® 336EP
	Petrolad® 339
	Petrolad® 133LS
Automatic transmission fluids (ATF)	Petrolad® 743EU
	Petrolad® 750
Off-road	
Universal tractor transmission oil (UTTO)	Petrolad® 5101
Super tractor universal (STOU)	Petrolad® 5201
Hydraulic additives	
Ashless	Petrolad® 1846
Zinc-containing	Petrolad® 9530
	Petrolad® 9533
Sulphonates	
Overbased calcium sulphonate detergent	Petrolad® 6779(A)
Coolants	
	Petrolad® 3550
	BRB Long life coolant

*Please note that this is an excerpt only.
To find out more, visit our Website www.brb-international.com/lac

Abbreviations

BO = base oil
CCS = cold-cranking simulator
HTHS = high-temperature, high-shear
KV = kinematic viscosity
PPD = pour point depressant
RR = re-refined
SSI = shear stability index
TE = thickening efficiency
TR = treat rate (referring to additive dosages)
VG = viscosity grade
VI = viscosity index
VIRG = virgin



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