

### **SAMIC EXCEL SUPREME SP** series

SAMIC EXCEL SUPREME SP series are advanced technology engine oils blended in high performance fully synthetic (PAO  $polyal phaole fin)\ bases to cks\ for tified\ with\ precisely\ balanced\ additive\ system,\ specifically\ to\ help\ deliver\ high\ level\ of\ performance\ and\ performance\ performan$ 

Samic Excel Supreme	Test Method	Units	0W-16	0W-20	0W-30
Density @ 15 °C	ASTM D 4052	gm/cc	0.840	0.840	0.845
Viscosity @ 100 °C	ASTM D 445	cSt	7.45	8.6	10.4
Viscosity @ 40 °C	ASTM D 445	cSt	38.25	44.8	58.0
Viscosity Index	ASTM D 2270	-	165	173	171
Pour Point	ASTM D 97	°C	-42	-42	-42
Flash Point (COC)	ASTM D 92	°C	220	220	225
Total Base Number	ASTM D 2896	mg KOH/g	7.2	7.2	7.2
Phosphorous	ASTM D 4951	% wt	0.077	0.077	0.077
CCS Viscosity	ASTM D 5293	cР	5060 @ -35 °C	5560 @ -35 °C	5600 @ -35 °C

- API SP, SN Plus, SN, SM, SL, SJ ILSAC GF-6A, HONDA, TOYOTA, MITSUBISHI Ford WSS-M2C947-A/B1, WSS-M2C962-A1 General Motors dexos1 Gen2

outstanding protection during long service intervals. It is suitable for the latest downsized engines equipped with stop & start technologies and hybrid engines requiring an API SP specification, where very high viscosity index oils are preferred to provide longer oil drain intervals in modern engines. It provides maximum protection in the latest engine designs operating under severe conditions and protects against the potential for pre-ignition (LSPI) in these engines, including high-performance turbo-charged gasoline direct injection TGDI) and non TGDI designs, supercharged gasoline and certain diesel multi-valve fuel injected systems.



# **SAMIC EXCEL JADE XFE SN Plus series**

SAMIC EXCEL JADE XFE SN Plus series are advanced technology engine oils blended in high performance fully synthetic (PAO polyalphaolefin) basestocks fortified with precisely balanced additive system, specifically to help deliver high level of performance and outstanding protection during long service intervals. It is suitable for the latest downsized engines equipped with stop & start technologies and hybrid engines requiring an API SN+ specification, where very high viscosity index oils are

Samic Excel Jade XFE	Test Method	Units	0W-20	0W-30
Density @ 15 °C	ASTM D 4052	gm/cc	0.840	0.845
Viscosity @ 100 °C	ASTM D 445	cSt	8.6	10.4
Viscosity @ 40 °C	ASTM D 445	cSt	44.8	58.0
Viscosity Index	ASTM D 2270	-	173	171
Pour Point	ASTM D 97	°C	-42	-42
Flash Point (COC)	ASTM D 92	°C	220	225
Total Base Number	ASTM D 2896	mg KOH/g	8.0	8.0
Phosphorous	ASTM D 4951	% wt	0.078	0.078
CCS Viscosity	ASTM D 5293	cР	5560 @ -35 °C	5600 @ -35 °C

preferred to provide longer oil drain intervals in modern engines. It provides maximum protection in engines operating under severe conditions, including high-performance turbo-charged (including latest TGDI), supercharged gasoline and certain diesel multi-valve fuel injected systems.

- API SN Plus, SN, SM, SL, SJ
  General Motors dexos1 Gen2
  ILSAC GF-5, HONDA, TOYOTA, MITSUBISHI
  Ford WSS-M2C947-A/B1



## SAMIC EXCEL JADE FE SN series

SAMIC EXCEL JADE FE SN series is a range of advanced technology engine oils blended in high-performance fully synthetic (PAO polyalphaolefin) base stocks fortified with precisely balanced additive system, specifically formulated to help deliver high level of

Samic Excel Jade FE	Test Method	Units	0W-20	0W-30
Density @ 15 °C	ASTM D 4052	gm/cc	0.840	0.845
Viscosity @ 100 °C	ASTM D 445	cSt	8.6	10.4
Viscosity @ 40 °C	ASTM D 445	cSt	44.8	58.0
Viscosity Index	ASTM D 2270	-	173	171
Pour Point	ASTM D 97	°C	-42	-42
Flash Point (COC)	ASTM D 92	°C	220	225
Total Base Number	ASTM D 2896	mg KOH/g	8.0	8.0
Phosphorous	ASTM D 4951	% wt	0.078	0.078
CCS Viscosity	ASTM D 5293	cР	5560 @ -35 °C	5600 @ -35 °C

- API SN, SM, SL, SJ
   ILSAC GF-5, HONDA, TOYOTA, MITSUBISHI
   ACEA A1/B1

- Ford WSS-M2C947-A/B1
- General Motors dexos1

performance and outstanding protection during long service intervals, to provide very high level of engine protection an perfor-mance It is suitable for higher mileage gasoline and diesel fueled automobiles and light duty trucks requiring an API SN specification where very high viscosity index oils are preferred to provide longer oil drain intervals in modern engines. It provides maximum protection in engines operating under severe conditions, including high performance turbo charged, supercharged gasoline and certain diesel multi-valve fuel injected systems.



### SAMIC EXCEL JADE SN series

SAMIC EXCEL JADE SN series is formulated with fully synthetic (PAO – polyalphaolefin) base stocks and advanced technology additive system to provide extra high level of engine protection and performance. It is suitable for higher mileage gasoline and

Samic Excel Jade	Test Method	Units	0W-30	0W-40	0W-60
Density @ 15 °C	ASTM D 4052	gm/cc	0.840	0.845	0.850
Viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.30	22.50
Viscosity @ 40 °C	ASTM D 445	cSt	54.2	80.9	144.75
Viscosity Index	ASTM D 2270	-	185	185	185
Pour Point	ASTM D 97	°C	-48	-48	-48
Flash Point (COC)	ASTM D 92	°C	228	236	245
Total Base Number	ASTM D 2896	mg KOH/g	10.2	10.2	10.2
Phosphorous	ASTM D 4951	% wt	0.1	0.1	0.1
CCS Viscosity	ASTM D 5293	cР	4050 @ -35 °C	4180 @ -35 °C	5550 @ -35 °C

diesel powered modern automobiles requiring an API SN specification, where very high viscosity index oils are preferred to provide longer oil drain intervals & fuel efficiency in modern engines. It provides maximum protection in engines operating under severe conditions, including high-performance turbo-charged, supercharged gasoline and certain diesel multivalve fuel injected systems.

- API SN, SM, SL, SJ, CF
- ACEA A3/B3, A3/B4
- BMW Long Life- 01
   Renault RN 0700/0710
- VW 502 00/505 00
- MB 229.3/ 229.5



#### SAMIC EXCEL IVORY SM series

SAMIC EXCEL IVORY SM/CF series is designed with fully synthetic base stocks and advanced technology additive system to provide extra high level of engine protection and performance. It is suitable for higher mileage gasoline and diesel powered

Samic Excel Ivory	Test Method	Units	0W-30	0W-40
Density @ 15 °C	ASTM D 4052	gm/cc	0.840	0.845
Viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.30
Viscosity @ 40 °C	ASTM D 445	cSt	54.2	80.9
Viscosity Index	ASTM D 2270	-	185	185
Pour Point	ASTM D 97	°C	-48	-48
Flash Point (COC)	ASTM D 92	°C	228	236
Total Base Number	ASTM D 2896	mg KOH/g	8.4	8.4
Phosphorous	ASTM D 4951	% wt	0.098	0.098
CCS Viscosity	ASTM D 5293	cР	4050 @ -35 °C	4180 @ -35 °C

modern automobiles requiring an API SM/CF specification, where very high viscosity index oils are preferred to provide much longer oil drain intervals in modern engines. It provides maximum protection in engines operating under severe conditions, including high-performance turbo-charged, supercharged gasoline and certain diesel multi-valve fuel injected systems.

- API SM, SL, SJ,CF
  ACEA A3/B3, A3/B4
  MB 229.3/ 229.5
- VW 502.00/505.00
  BMW Long life- 01
  Porsche A40

SAMIC VITAL JADE SN series
SAMIC VITAL JADE SN series is formulated with fully synthetic base stocks and advanced technology additive system to provide very high level of engine protection and performance. It is suitable for higher mileage gasoline and diesel fueled automobiles and light

Samic Vital Jade	Test Method	Units	5W-30	5W-40	5W-50
Density @ 15 °C	ASTM D 4052	gm/cc	0.848	0.850	0.855
Viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.30	20.50
Viscosity @ 40 °C	ASTM D 445	cSt	58.65	88.6	140.55
Viscosity Index	ASTM D 2270	-	169	168	170
Pour Point	ASTM D 97	°C	-42	-42	-42
Flash Point (COC)	ASTM D 92	°C	220	228	230
Total Base Number	ASTM D 2896	mg KOH/g	10.2	10.2	10.2
Phosphorous	ASTM D 4951	% wt	0.1	0.1	0.1
CCS Viscosity	ASTM D 5293	cP	4560 @ -30 °C	4650 @ -30 °C	4850 @ -30 °C

SAMIC VITAL JADE C3 SN series are fully synthetic advanced performance engine oils blended in high performance synthetic basestocks fortified with advanced technology additive system, specifically formulated to provide exceptional cleaning power,

Samic Vital Jade C3	Test Method	Units	5W-30	5W-40
Density @ 15 °C	ASTM D 4052	gm/cc	0.848	0.850
Viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.30
Viscosity @ 40 °C	ASTM D 445	cSt	58.65	88.6
Viscosity Index	ASTM D 2270	-	169	168
Pour Point	ASTM D 97	°C	-42	-42
Flash Point (COC)	ASTM D 92	°C	220	228
Total Base Number	ASTM D 2896	mg KOH/g	7.6	7.6
Phosphorous	ASTM D 4951	% wt	0.078	0.078
CCS Viscosity	ASTM D 5293	сР	4560 @ -30 °C	4650 @ -30 °C

- API SN, CFACEA C3/C2 BMW Longlife-04 VW 502/505

wear protection and overall performance. It helps prolong the life and maintain the efficiency of Car Emission Reduction Systems in both diesel and gasoline powered automobile engines, with recent multi valve engines equipped with turbochargers and direct injection fuel systems. Low content in Sulphated Ash, Phosphorus and Sulphur reduces particulate build up in Diesel Particulate Filters (DPF's) and a voids poisoning of Gasoline Catalytic Converters (CAT's).

basestocks fortified with advanced technology additive system, specifically formulated to provide exceptional cleaning power, wear protection and overall performance. It helps prolong the life and maintain the efficiency of

exhaust gas after treatment systems in both diesel and gasoline powered automobile engines, with recent multi-valve engines equipped with turbochargers and direct injection fuel systems. Mid SAPS (Sulphated Ash, Phosphorus and Sulphur) reduces

particulate build up in Diesel Particulate Filters

(DPF's) and avoids poisoning of Gasoline

protection during long service intervals, to provide very high level of engine protection and performance. It is suitable for higher mileage

Catalytic Converters (CAT's).



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#### /ITAL JADE

SAMIC VITAL JADE C2 SN series are fully synthetic advanced performance engine oils blended in high performance synthetic

Samic Vital Jade C2	Test Method	Units	5W-20	5W-30
Density @ 15 °C	ASTM D 4052	gm/cc	0.845	0.848
Viscosity @ 100 °C	ASTM D 445	cSt	8.9	10.4
Viscosity @ 40 °C	ASTM D 445	cSt	49.5	58.65
Viscosity Index	ASTM D 2270	-	161	169
Pour Point	ASTM D 97	°C	-39	-39
Flash Point (COC)	ASTM D 92	°C	215	220
Total Base Number	ASTM D 2896	mg KOH/g	7.8	7.8
Phosphorous	ASTM D 4951	% wt	0.080	0.080
CCS Viscosity	ASTM D 5293	cР	4560 @ -30 °C	4560 @ -30 °C

- API SN, CF ACEA C2-12
- PSA B71 2290 FIAT 955535-S1
  - Renault RN 0700



SAMIC VITAL JADE FE SN series are advanced technology engine oils blended in high performance fully synthetic base stocks fortified with balanced additive system, specifically formulated to help deliver very high level of performance and outstanding

Samic Vital Jade FE	Test Method	Units	5W-20	5W-30
Density @ 15 °C	ASTM D 4052	gm/cc	0.848	0.848
Viscosity @ 100 °C	ASTM D 445	cSt	8.9	10.4
Viscosity @ 40 °C	ASTM D 445	cSt	49.5	58.65
Viscosity Index	ASTM D 2270	-	161	169
Pour Point	ASTM D 97	°C	-39	-39
Flash Point (COC)	ASTM D 92	°C	215	220
Total Base Number	ASTM D 2896	mg KOH/g	8.0	8.0
Phosphorous	ASTM D 4951	% wt	0.078	0.078
CCC Vissositus	ACTNA D F202	aD.	4FC0 @ 20 °C	4FC0 @ 30 °C

- API SN, SM, SL, SJ ILSAC GF-5, HONDA, TOYOTA, MITSUBISHI Ford WSS-M2C945-A/WSS-M2C930-A (5W-30) Ford WSS-M2C946-A/B1, WSS-M2C929-A (5W-30)
  - General Motors dexos1

gasoline and diesel fueled automobiles and light duty trucks requiring an API SN specification, where very high viscosity index oils are preferred to provide longer oil drain intervals in modern engines. It provides maximum protection in engines operating under severe conditions, including high performance turbocharged, supercharged gasoline and certain diesel multi-valve fuel injected systems.



SAMIC VITAL IVORY SM series is designed with fully synthetic base stocks and advanced technology additive system to provide very high level of engine protection and performance. It is suitable for higher mileage gasoline and diesel fueled automobiles and light duty trucks requiring an API SM specification,

Samic Vital Ivory SM	Test Method	Units	5W-30	5W-40
Density @ 15 °C	ASTM D 4052	gm/cc	0.848	0.850
Viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.30
Viscosity @ 40 °C	ASTM D 445	cSt	58.65	88.6
Viscosity Index	ASTM D 2270	-	169	168
Pour Point	ASTM D 97	°C	-39	-39
Flash Point (COC)	ASTM D 92	°C	220	228
Phosphorous	ASTM D 4951	% wt	0.072	0.072
CCS Viscosity	ASTM D 5293	cР	4560 @ -30 °C	4650 @ -30 °C



#### MMIC VITAL TOPA7

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Samic Vital Topaz	Test Method	Units	5W-30	5W-40
Density @ 15 °C	ASTM D 4052	gm/cc	0.848	0.850
Viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.30
Viscosity @ 40 °C	ASTM D 445	cSt	58.65	88.6
Viscosity Index	ASTM D 2270	-	169	168
Pour Point	ASTM D 97	°C	-42	-42
Flash Point (COC)	ASTM D 92	°C	220	228
Total Base Number	ASTM D 2896	mg KOH/g	8.0	8.0
Phosphorous	ASTM D 4951	% wt	0.098	0.098
CCS Viscosity	ASTM D 5293	cP	4560 @ -30 °C	4650 @ -30 °C



modern engines. It provides maximum protection in engines operating under severe conditions, Including high performance turbocharged, supercharged gasoline and certain diesel multi-valve fuel injected systems. • API SM, SL, SJ SAMIC VITAL TOPAZ SL series are designed with fully synthetic base stocks and advanced technology additive system to provide very high level of engine protection

where very high viscosity index oils are preferred to provide longer oil drain intervals in

performance. It is suitable for higher mileage gasoline fueled automobiles and light duty trucks requiring an API SL specification where specification, where very high viscosity index oils are preferred to provide longer oi drain intervals in modern engines and better oil consumption control in older vehicles where oil usage (burning) is an issue.



### SAMIC MARVEL JADE SN series

SAMIC MARVEL JADE SN series is designed with synthetic blend base stocks and advanced technology additive system to provide very high level of engine protection and performance. It is suitable for higher mileage gasoline fueled automobiles and light duty

Samic Marvel Jade SN	Test Method	Units	10W-30	10W-40	10W-60
Density @ 15 °C	ASTM D 4052	gm/cc	0.868	0.870	0.875
Viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.30	22.50
Viscosity @ 40 °C	ASTM D 445	cSt	62.6	95	175.7
Viscosity Index	ASTM D 2270	-	156	155	155
Pour Point	ASTM D 97	°C	-36	-36	-36
Flash Point (COC)	ASTM D 92	°C	215	230	236
Total Base Number	ASTM D 2896	mg KOH/g	8.2	8.2	8.2
Phosphorous	ASTM D 4951	% wt	0.1	0.1	0.1
CCS Viscosity	ASTM D 5293	cР	5550 @ -25 ℃	5650 @ -25 °C	6050 @ -25 °C

trucks requiring an API SN specification, where very high viscosity index oils are preferred to provide longer oil drain intervals in modern engines and better oil consumption control in older vehicles where oil usage (burning) is an issue.

- API SN, SM, SL, SJ, CF
- MB 229.1
- ACEA A3/B3, A3/B4-08
- Renault RN0700



## SAMIC MARVEL JADE 10W-30 FE SN

SAMIC MARVEL JADE FE SN is advanced technology engine oil blended in high performance synthetic blend precisely balanced additive system, specifically formulated to help deliver basestocks fortified with high level of performance and outstanding protection during long service intervals, to provide very high level of engine protection and performance. It is suitable for higher mileage gasoline and diesel fueled automobiles and light duty trucks requiring an API SN specification, wherevery high

Samic Marvel Jade FE SN	Test Method	Units	10W-30
Density @ 15 °C	ASTM D 4052	gm/cc	0.855
Viscosity @ 100 °C	ASTM D 445	cSt	10.4
Viscosity @ 40 °C	ASTM D 445	cSt	64.5
Viscosity Index	ASTM D 2270	-	149
Pour Point	ASTM D 97	°C	-36
Flash Point (COC)	ASTM D 92	°C	225
Total Base Number	ASTM D 2896	mg KOH/g	8.0
Phosphorous	ASTM D 4951	% wt	0.078
CCS Viscosity	ASTM D 5293	cР	5900 @ -25 °C

viscosity index oils are preferred to provide longer oil drain intervals in modern engines. It provides maximum protection in engines operating under severe conditions, including high-performance turbocharged, supercharged gasoline and certain diesel multi-valve fuel charged, supercharged gasoline and certain diesel multi-valve fuel injected systems.

- API SN, SM, SL, SJ Ford WSS-M2C947-A
- Ford WSS-M2C947-A ILSAC GF-5 General Motors dexos1 ACEA A1/B1, A5/B5



### SAMIC MARVEL IVORY SM series

SAMIC MARVEL IVORY SM series are designed with synthetic blend base stocks and advanced technology additive system to provide very high level of engine protection

Samic Marvel Ivory	Test Method	Units	10W-30	10W-40
Density @ 15 °C	ASTM D 4052	gm/cc	0.868	0.870
Viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.30
Viscosity @ 40 °C	ASTM D 445	cSt	62.6	95
Viscosity Index	ASTM D 2270	-	156	155
Pour Point	ASTM D 97	°C	-36	-36
Flash Point (COC)	ASTM D 92	°C	220	230
Phosphorous	ASTM D 4951	% wt	0.072	0.072
CCS Viscosity	ASTM D 5293	cР	5550 @ -25 °C	5650 @ -25 °C

and performance. It is suitable for higher mileage gasoline fueled automobiles and light duty trucks requiring an API SM specification, where very high viscosity index oils are preferred to provide longer oil drain intervals in modern engines and better oil consumption control in older vehicles where oil usage (burning) is an issue.

• API SM, SL, SJ, CF



#### SAMIC MARVEL TOPAZ SL series

SAMIC MARVEL TOPAZ SL series are designed with semi-synthetic base stocks and advanced technology additive system to

Samic Marvel Topaz	Test Method	Units	10W-30	10W-40
Density @ 15 °C	ASTM D 4052	gm/cc	0.868	0.870
Viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.30
Viscosity @ 40 °C	ASTM D 445	cSt	62.6	95
Viscosity Index	ASTM D 2270		156	155
Pour Point	ASTM D 97	°C	-36	-36
Flash Point (COC)	ASTM D 92	°C	220	230
Total Base Number	ASTM D 2896	mg KOH/g	8.0	8.0
Phosphorous	ASTM D 4951	% wt	0.098	0.098
CCS Viscosity	ASTM D 5293	cР	5550 @ -25 °C	5650 @ -25 °C

provide very high level of engine protection and performance. It is suitable for higher mileage gasoline fueled automobiles and light duty trucks requiring an API SL specification, where very high viscosity index oils are preferred to provide longer oi drain intervals in modern engines and better oil consumption control in older vehicles where oil usage (burning) is an issue.

• API SL, SJ, CF • MB 229.1 • ACEA A3/B4 • VW 505 00



#### SAMIC MARVEL CORAL SJ series

Samic Marvel Coral	Test Method	Units	10W-30	10W-40
Density @ 15 °C	ASTM D 4052	gm/cc	0.868	0.870
Viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.30
Viscosity @ 40 °C	ASTM D 445	cSt	62.6	95
Viscosity Index	ASTM D 2270	-	156	155
Pour Point	ASTM D 97	°C	-36	-36
Flash Point (COC)	ASTM D 92	°C	220	230
Total Base Number	ASTM D 2896	mg KOH/g	6.2	6.2
Phosphorous	ASTM D 4951	% wt	0.098	0.098
CCS Viscosity	ASTM D 5293	cР	5550 @ -25 °C	5650 @ -25 °C

SAMIC MARVEL CORAL SJ/CF series are designed with semi-synthetic base stocks and advanced technology additive system to provide very high level of engine protection and performance. It is suitable for higher mileage gasoline fueled automobiles and light duty trucks requiring an API SJ/CF specification, where very high viscosity index oils are preferred to provide longer oi drain intervals in modern engines and better oil consumption control in older vehicles where oil usage (burning) is an issue.

• API SJ, CF • MB 229.1 • VW 505 00 • ACEA A3/B3



### SAMIC MARVEL AMBER SF/CD series

Samic Marvel Amber	Test Method	Units	10W-30	10W-40
Density @ 15 °C	ASTM D 4052	gm/cc	0.868	0.870
Viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.30
Viscosity @ 40 °C	ASTM D 445	cSt	62.6	95
Viscosity Index	ASTM D 2270	-	156	155
Pour Point	ASTM D 97	°C	-36	-36
Flash Point (COC)	ASTM D 92	°C	220	230
Total Base Number	ASTM D 2896	mg KOH/g	5.8	5.8
Phosphorous	ASTM D 4951	% wt	0.078	0.078
CCS Viscosity	ASTM D 5293	cР	5550 @ -25 °C	5650 @ -25 °C

SAMIC MARVELZZZ AMBER SF/CD series are formulated with premium quality base stocks and balanced additive system to provide superior level of engine protection and performance. It works harder than other conventional motor oils by continuously preventing dirt and sludge build-up and reduces engine noise. This product meet meets the requirements of most old and newer model cars and is

API SF, CD and newer model cars and is ACEA A2/B2 suitable for standard services.



SAMIC OPTIMAL JADE SN series

SAMIC OPTIMAL JADE SN series are designed with synthetic blend base stocks and advanced technology additive system to provide very high level of engine protection and performance. It is suitable for higher mileage gasoline fueled automobiles and

Samic Optimal Jade	Test Method	Units	15W-40	15W-50
Density @ 15 °C	ASTM D 4052	gm/cc	0.870	0.865
Viscosity @ 100 °C	ASTM D 445	cSt	14.30	19.66
Viscosity @ 40 °C	ASTM D 445	cSt	100	154.6
Viscosity Index	ASTM D 2270	-	147	147
Pour Point	ASTM D 97	°C	-33	-36
Flash Point (COC)	ASTM D 92	°C	230	235
Total Base Number	ASTM D 2896	mg KOH/g	8.2	8.2
Phosphorous	ASTM D 4951	% wt	0.1	0.1
CCS Viscosity	ASTM D 5293	сP	5600 @ -20 °C	5550 @ -20 °C

light duty trucks requiring an API SN specification, where very high viscosity index oils are preferred to provide longer oil drain intervals in modern engines and better oil consumption control in older vehicles where oil usage (burning) is an issue.

- API SN, SM, SL, SJ, CF ACEA A3/B3, A3/B4
- MB 229.1Renault RN0700



## SAMIC OPTIMAL TOPAZ 15W-40 SL

Samic Optimal Topaz	Test Method	Units	15W-40
Density @ 15 °C	ASTM D 4052	gm/cc	0.878
Viscosity @ 100 °C	ASTM D 445	cSt	14.30
Viscosity @ 40 °C	ASTM D 445	cSt	100
Viscosity Index	ASTM D 2270	-	147
Pour Point	ASTM D 97	°C	-33
Flash Point (COC)	ASTM D 92	°C	230
Total Base Number	ASTM D 2896	mg KOH/g	7.8
Phosphorous	ASTM D 4951	% wt	0.098
CCS Viscosity	ASTM D 5293	cР	5600 @ -20 °C

SAMIC OPTIMAL TOPAZ 15W-40 SL is designed with high quality base stocks and advanced technology additive system to provide high level of protection and performance. It works harder than other conventional motor oils by continuously preventing dirt and sludge build-up and reduces engine noise.

- API SL, SJ, CFACEA A3/B3MB 229.1VW 505 00



### SAMIC PRIMAL JADE SN series

Samic Primal Jade	Test Method	Units	20W-40	20W-50
Density @ 15 °C	ASTM D 4052	gm/cc	0.888	0.890
Viscosity @ 100 °C	ASTM D 445	cSt	14.30	20.4
Viscosity @ 40 °C	ASTM D 445	cSt	107	175
Viscosity Index	ASTM D 2270	-	137	136
Pour Point	ASTM D 97	°C	-30	-30
Flash Point (COC)	ASTM D 92	°C	230	236
Total Base Number	ASTM D 2896	mg KOH/g	8.2	8.2
Phosphorous	ASTM D 4951	% wt	0.1	0.1
CCS Viscosity	ASTM D 5293	cР	6020 @ -15 °C	6060 @ -15 °C

• API SN. SM. SL. SJ. CF • ACEA A3/B3 • MB 229.1 • Volkswagen VW 505 00

SAMIC PRIMAL JADE SN series is designed with high quality base stocks and latest technology additive system to provide excellent level ofprotection and performance. It works harder than other conventional motor oils by continuously prenenting dirt and sludge buildup and reduces engine noise. This product meets the requirements of most car manufacturers and is suitable for use in both gasoline and diesel, naturally adapted to vehicles equipped with catalytic converters running on unleaded fuels.



### SAMIC PRIMAL TOPAZ SL series

Samic Primal Topaz	Test Method	Units	20W-40	20W-50
Density @ 15 °C	ASTM D 4052	gm/cc	0.888	0.890
Viscosity @ 100 °C	ASTM D 445	cSt	14.30	20.4
Viscosity @ 40 °C	ASTM D 445	cSt	107	175
Viscosity Index	ASTM D 2270	-	137	136
Pour Point	ASTM D 97	°C	-30	-30
Flash Point (COC)	ASTM D 92	°C	230	236
Total Base Number	ASTM D 2896	mg KOH/g	7.8	7.8
Phosphorous	ASTM D 4951	% wt	0.098	0.098
CCS Viscosity	ASTM D 5293	сР	6020 @ -15 °C	6060 @ -15 °C

• API SL, SJ, SG, SF, CF, CD • ACEA A3/B3 • MB 229.1 • Volkswagen VW 505 .00

SAMIC PRIMAL TOPAZ SL series are designed with high quality base stocks and advanced technology additive system to provide high level of protection and performance. It works harder than other conventional motor oils by continuously preventing dirt and sludge build-up and reduces engine noise. This product meets the requirements of most car manufacturers and is suitable for use in both gasoline and diesel, naturally aspirated or turbo charged engines, operating in all round seasons and adapted to vehicles equipped with catalytic converters running on unleaded



## SAMIC PRIMAL AMBER SF/CD series

Samic Primal Amber	Test Method	Units	20W-40	20W-50
Density @ 15 °C	ASTM D 4052	gm/cc	0.888	0.890
Viscosity @ 100 °C	ASTM D 445	cSt	14.30	20.4
Viscosity @ 40 °C	ASTM D 445	cSt	107	175
Viscosity Index	ASTM D 2270	-	137	136
Pour Point	ASTM D 97	°C	-30	-30
Flash Point (COC)	ASTM D 92	°C	230	236
Total Base Number	ASTM D 2896	mg KOH/g	5.8	5.8
Phosphorous	ASTM D 4951	% wt	0.078	0.078
CCS Viscosity	ASTM D 5293	cP	6020 @ -15 °C	6060 @ -15 °C

 API SF, CD • ACEA A2/B2

SAMIC PRIMAL AMBER SF/CD series are formulated with premium quality base stocks and balanced additive system to provide superior level of engine protection and performance. It works harder than other conventional motor oils by contin- uously preventing dirt and sludge build-up and reduces engine noise. This product meet meets the requirements of most old and newer model cars and is suitable for standard services.



### SAMIC SPECTRA 6000 SF/CD series

Samic Spectra 6000	Test Method	Units	30	40	50
Density @ 15 °C	ASTM D 4052	gm/cc	0.892	0.900	0.904
Viscosity @ 100 °C	ASTM D 445	cSt	11.6	15.4	20.2
Viscosity @ 40 °C	ASTM D 445	cSt	102	158	234
Viscosity Index	ASTM D 2270	-	100	99	99
Pour Point	ASTM D 97	°C	-18	-18	-18
Flash Point (COC)	ASTM D 92	°C	230	236	242
Total Base Number	ASTM D 2896	mg KOH/g	5.8	5.8	5.8
Phosphorous	ASTM D 4951	% wt	0.078	0.078	0.078

• API SF, CD • ACEA A2/B2

SAMIC SPECTRA 6000 SF/CD series are monograde crankcase lubricants formulated with high quality base stocks and balanced additive system to provide high level of engine protection and performance. It works harder than other conventional motor oils by continuously preventing dirt and sludge build-up and reduces engine noise. This product meets the requirements of most mixed fleet applications and is suitable for general service and commercial engines.