

COMPANY PROFILE:

Dura Tech Gen. Trd. LLC was formed as a marketing firm engaged in marketing Samic Lubricants and Greases. The products are manufactured at the company's flagship blending plant, BEI Lubricants Ind LLC. The blending plant has a state of the art facility for blending and filling of Lubricants & Greases. The installed capacity of blending and filling is more than 40,000 MT of Lubricants, 16,000 MT of Greases and 6,000 MT of Viscosity Improvers per annum. It has one of the best R&D and testing lab in the region for Lubricants as well as Greases which helps to innovate and ensure that the auglity standards meet the international testing requirement. An indicator of the rigorous emphasis & commitment to quality is that the facility is ISO 9001-2015 certified. Moreover, our Quality Assurance Laboratory is pursuing ISO 17025 accreditation.

TECHNOLOGY

The blending plant has a comprehensive range of Lubricants blended from the finest base stocks procured from world class Exxon Mobil, Korean and European refineries & technologically advanced and superior additives procured from industry giants Afton, Chevron, Infinium and Lubrizol. It also carries out third party blending and filling of reputed brands who export these products from our plant to various countries. Samic Jubricants meet the specifications of major OEMs & highest standards of API, MIL, European and Japanese manufacturers, clearly indicates our commitment to adhere to latest technological developments in the industry.

MISSION STATEMENT

Samic Lubricants aims to be a technically sound & professionally organized Lubricants Company offering high quality, moderately priced, technologically advanced Lubricants comprising of virgin base stock and high quality additives & high quality Greases. Our goal is to become a recognized brand - Samic Lubricants, capitalizing on the integrity, quality & services offered to our esteemed customers. We will meet our challenging goals, by engaging talent that have urge and desire to perform exceedingly.

We have continued to invest in human resources as we recognize that they are the drivers of innovation and change that this organization represents. Our employees represent the best talent and experience in the industry and they along with our progressive management strive hard each day to deliver better products and services to our customers.

We hope you would find this product catalog useful and together we can strive to reach greater heights and achieve mutually beneficial goals in the Lubricant market and beyond.

SAMIC brand name stands for SPECIALIST IN AUTOMOTIVE, MARINE, INDUSTRIAL & COMMERCIAL.





SAMIC EXCEL SUPREME SP series

SAMIC EXCEL SUPREME SP 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

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	cP.	5060 @ -35 °C	5560.@ .35 °C	5600 @ -35 °C

API SP. SN Plus, SN. SM. SL. SJ Ford WSS-M2C947-A/B1, WSS-M2C962-A1 II SAC GE-6A. HONDA. TOYOTA. MITSUBISHI • General Motors dexos1 Gen

outstanding protection during long service intervals. It is suitable for the latest downsized engines equipped with stop & start technologies and hybrid engine: 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



SAMIC EXCEL JADE XFE SN Plus series

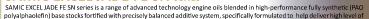
SAMIC EXCEL JADE XFE SN Plus series are advanced technology engine oils blended in high performance fully synthetic (PAO polyalphaolefin) basestocks fortified with precisely balanced additive system, specifically to help deliver high level of performance and outstanding protection during long service 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

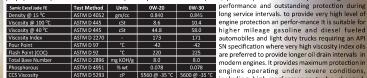
8.6 44.8 10.4 58.0 -42 8.0 8.0 0.078

Test Method Units 0w-20 0w-30 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.

> · APLSN Plus SN SM SL SL • ILSAC GF-5, HONDA, TOYOTA, MITSUBISHI

SAMIC EXCEL JADE FE SN series





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

Ford WSS-M2C947-A/B1

long service intervals, to provide very high level of engine protection an perfor-mance It is suitable for nigher 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. ncluding 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	d
Density @ 15 °C	ASTM D 4052	gm/cc	0.840	0.845	0.850	5
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	r
Viscosity Index	ASTM D 2270	-	185	185	185	r
Pour Point	ASTM D 97	*C	-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	t
Phosphorous	ASTM D 4951	% wt	0.1	0.1	0.1	١
CCS Viscosity	ASTM D 5293	cP	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.

ACEA 43/R3 43/R4

 API SN. SM. SL. SJ. CF
 BMW Long Life- 01 Renault RN 0700/0710
 MB 229.3/ 229.5

Porsche A40



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 Viceocity	ACTMAID E202	cD.	4050 @ 25 °C	4190 @ 25 °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 5IN SECTES

SAMIC VITAL JADE SN series is formulated with fully synthetic base stocks and advanced technology additive system to provide nd diesel fueled automobiles and light

or y high lever or engine protection and performance. It is suitable for higher inheage gasonine an								
Samic Vital Jade	Test Method	Units	5W-30	5W-40	5W-50	duty trucks		
Density @ 15 °C	ASTM D 4052	gm/cc	0.848	0.850	0.855	where very		
viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.30	20.50	preferred to		
/iscosity @ 40 °C	ASTM D 445	cSt	58.65	88.6	140.55	modern e		
Viscosity Index	ASTM D 2270		169	168	170	protection i		
Pour Point	ASTM D 97		-42	-42	-42			
Flash Point (COC)	ASTM D 92	°C	220	228	230	conditions		
Fotal Base Number	ASTM D 2896	mg KOH/g	10.2	10.2	10.2	turbocharg		
Phosphorous	ASTM D 4951	% wt	0.1	0.1	0.1	certain dies		
00016 1	10T110 F000		4500 0 0000	4050 0 0000	4050 @ 2010			

equiring an API SN specification, high viscosity index oils are rovide longer oil drain intervals in gines. It provides maximum engines operating under severe including high performance ed, supercharged gasoline and multi-valve fuel injected systems.

• VW 502 00/505 00 BMW Long Life- 01

50 @ -30 °C | 4850 @ -30 °C | • API SN, SM, SL, SJ, CF • Renault RN 0700

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, ear protection and overall performance. It

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	cP	4560 @ -30 °C	4650 @ -30 °C

API SN, CF
 ACEA C3/C2
 BMW Longlif
 VW 502/505

helps prolong the life and maintain the iciency of Car Emission Reduction Systems in oth diesel and gasoline powered automobile ngines, with recent multi valve engines nuipped with turbochargers and direct niection fuel systems. Low content in Sulphated Ash. Phosphorus and Sulphur duces particulate build up in Diesel Particulate lters (DPF's) and a voids poisoning of Gasoline Catalytic Converters (CAT's).

additive system, specifically formulated to

rovide exceptional cleaning power, wear

rotection and overall performance. It helps

haust gas after treatment systems in both

iesel and gasoline powered automobile

ngines, with recent multi-valve engines

equipped with turbochargers and direct

jection fuel systems. Mid SAPS (Sulphated

Ash, Phosphorus and Sulphur) reduces

particulate build up in Diesel Particulate Filters

(DPF's) and avoids poisoning of Gasoline

Catalytic Converters (CAT's).

prolong the life and maintain the efficiency of



SAMIC VITAL JADE C2 SN series are fully synthetic nce engine oils blended in high performance synthetic pasestocks fortified with advanced technology

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	cP	4560 @ -30 °C	4560 @ -30 °C

 PSA B71 2290 Renault RN 0700 • FIAT 955535-S1

SAMIC VITAL JADE FE SN series are advanced technology engine oils blended in high performance fully synthetic base stocks ed with balanced additive system, specifically formulated to help deliver very high level of performance and outstanding otection during long service intervals, to ovide very high level of engine protection and erformance. It is suitable for higher mileage

Samic Vital Jade FE	Test Method	Units	5W-20	5W-30	protection during long service interv
Density @ 15 °C	ASTM D 4052	gm/cc	0.848	0.848	provide very high level of engine protecti
Viscosity @ 100 °C	ASTM D 445	cSt	8.9	10.4	performance. It is suitable for higher m
Viscosity @ 40 °C	ASTM D 445	cSt	49.5	58.65	gasoline and diesel fueled automobiles an
Viscosity Index	ASTM D 2270		161	169	duty trucks requiring an API SN specific
Pour Point	ASTM D 97	°C	-39	-39	where very high viscosity index oil
Flash Point (COC)	ASTM D 92	°C	215	220	preferred to provide longer oil drain inter
Total Base Number	ASTM D 2896	mg KOH/g	8.0	8.0	modern engines. It provides max
Phosphorous	ASTM D 4951	% wt	0.078	0.078	protection in engines operating under
CCS Viscosity	ASTM D 5293	сP	4560 @ -30 °C	4560 @ -30 °C	conditions, including high perform
API SN, SM, SL, SJ	OTA MATCHINICIA	Ford WSS-M2	C945-A/WSS-M2C	930-A (5W-20)	turbocharged, supercharged gasoline

APISN, SN, SL, SI
APISN, SN, SL, SI
ESAC GF-5, HONDA, TOYOTA, MITSUBISH Ford WSS-MZC946-A/81, WSS-MZC929-A (5W-30)
certain diesel multi-valve fuel injected systems. General Motors devos1

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

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

uty trucks requiring an API SM specification, here very high viscosity index oils are ferred to provide longer oil drain intervals in odern engines. It provides maximum tection in engines operating under severe nditions, Including high performance bocharged, supercharged gasoline an tain diesel multi-valve fuel injected syste

PI SM, SL, SJ



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

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

SAMIC VITAL TOPAZ SL series are designed ith fully synthetic base stocks and advanced hnology additive system to provide very high level of engine protection and serformance. It is suitable for higher nileage gasoline fueled automobiles and duty trucks requiring an API SL ecification, where very high viscosity index ils are preferred to provide longer oi drain tervals in modern engines and better oil sumption 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		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	сP	5550 @ -25 °C	5650 @ -25 °C	6050 @ -25 °C

rucks requiring an API SN specification, here very high viscosity index oils are preferred to provide longer oil drain ntervals in modern engines and better oil onsumption control in older vehicles where il 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 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 Viccocity	ACTM D E202	cD.	E000 @ 35 °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 • General Motors dexos1 • ILSAC GF-5 • ACEA A1/B1, A5/B5

SAMIC MARVEL IVORY SM series SAMIC MARYEL IVORY SM 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 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 SE Series are designed with semi-synthetic base stocks :							
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	cP.	5550 @ -25 °C	5650 @ -25 °C			

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 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 (hurning) is an issue



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

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

SAMIC MARVEL CORAL SJ/CF series are

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



SAMIC MADVEL AMBED SE/CD corid

UNIVIIO IVINITVEE NIVIDEIT OI/OD 361163							
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 • API SF, CD • ACEA A2/B2 and newer model cars and is suitable for standard services.

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	cP	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.

- ADJON CAA CL CL CE
 API SN, SM, SL, SJ, CF
 ACEA A3/B3, A3/B4
• MB 229.1
- Damarda DNIOZOO

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.

- MB 229.1
 VW 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, naturallyadapted to vehicles equipped with catalytic converters running on unleaded fuels.

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 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	сP	6020 @ -15 °C	6060 @ -15 °C
ADJEL EL SC SE CE	CD . ACEA 43/	22 - 140 220	4	MEGE OO

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 ℃	6060 @ -15 ℃

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 new er model cars and is suitable for standard



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

SAMIC MARVEL JADE 4T SN/MA2 series

	SAMIC MARVEL JADE 4T SN/MA2 series is designed with synthetic blend base stoc							
	Samic Marvel Jade 4T	Test Method	Units	10W-30	10W-40	10W-60		
ı	Density @ 15 °C	ASTM D 4052	gm/cc	0.868	0.870	0.875		
1	Viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.30	22.50		
ı	Viscosity @ 40 °C	ASTM D 445	cSt	62.6	95	175.7		
ı	Viscosity Index	ASTM D 2270		156	155	155		
П	Pour Point	ASTM D 97	°C	-36	-36	-36		
П	Flash Point (COC)	ASTM D 92	°C	215	230	236		
ı	Total Base Number	ASTM D 2896	mg KOH/g	8.2	8.2	8.2		
ı	Phosphorous	ASTM D 4951	% wt	0.1	0.1	0.1		
L	CCS Viscosity	ASTM D 5293	сP	5550 @ -25 °C	5650 @ -25 °C	6050 @ -25 °C		

cks and advanced technology additive system to provide very high level of engine protection and performance. It is suitable for higher mileage gasoline fueled 4 stroke motor bikes requiring an API SN/CF 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



requiring SN/CF specifications and is suitable for use in 4 stroke gasoline engines, naturally aspirated or turbo charged engines, operating in all round seasons and adapted to vehicles equipped with catalytic converters running on unleaded fuels. It is suitable for higher mileage gasoline fueled 4 stroke engines, preferred to provide longer oil drain intervals in modern engines and better oil ASTM D 5293 CP 6020 @ -15 °C 6060 @ -15 °C consumption control in older vehicles where oil usage (burning) is an issue.

SAMIC MARVEL TOPAZ 4T 10W-40 SL/MA



SAMIC MARVEL TOP	AZ 4T 10W-40	SL/MA is design	ed with high qual	ity Synthetic Blend base stocks and advanced technol
Samic Marvel Topaz 4T	Test Method	Units	10W-40	additive system to provide high level of protection
Density @ 15 °C	ASTM D 4052	gm/cc	0.868	performance. It works harder than other convention
Viscosity @ 100 °C	ASTM D 445	cSt	14.30	motor oils by continuously preventing dirt and slu
Viscosity @ 40 °C	ASTM D 445	cSt	90	build-up and reduces engine noise. This product me
Viscosity Index	ASTM D 2270	-	165	the requirements of most motorcycle manufactu
Pour Point	ASTM D 97	°C	-36	and is suitable for use in 4 stroke gasoline engi
Flash Point (COC)	ASTM D 92	°C	220	naturally aspirated or turbo charged engines, opera
Total Base Number	ASTM D 2896	mg KOH/g	7.8	in all round seasons and adapted to vehicles equip with catalytic converters running on unleaded fuels.
Phosphorous	ASTM D 4951	% wt	0.098	API SL. SJ.CF
CCS Viscosity	ASTM D 5293	c D	5650 @ -25 °C	• API St, SJ,CF

API SL, SJ,CF
 JASO MA & JASO 4T Clutch Performance

SAMIC PRIMAL CORAL 4T SJ/MA series



AMIC PRIMAL CORAL 4T SJ/MA series is designed with high quality base stocks an							
Samic Primal Coral 4T	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	6.2	6.2			
Phosphorous	ASTM D 4951	% wt	0.098	0.098			
CCS Viscosity	ASTM D 5293	cР	6020 @ -15 °C	6060 @ -15 °C			

aspirated or turbo charged engines, operating in all round seasons and adapted to vehicles equipped with catalytic converters running on unleaded fuels

nd 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

use in 4 stroke gasoline engines, naturally

build-up and reduces engine noise. This product meets the requirements of most

product meets the requirements of most motorcycle manufacturers and is suitable for

• API SJ, CF • JASO MA • JASO 4T Clutch performance

SAMIC TWIN TURBO 2T TC-W3



SAMIC TWIN TURBO 2T TC-W3 is low ash premium performance 2 stroke marine outboard engine oil, pre-diluted to facilitate easy

Samic Twin Turbo	Test Method	Units	2T TC-W3
Specific Gravity	ASTM D 1298	-	0.878
Viscosity @ 100 °C	ASTM D 445	cSt	8.50
Viscosity @ 40 °C	ASTM D 445	cSt	51.9
Viscosity Index	ASTM D 2270	-	140
Pour Point	ASTM D 97	°C	-36
Flash Point (COC)	ASTM D 92	°C	98
Base Number (TBN)	ASTM D 2896	mg KOH/g	8.5
Sulfated Ash	ASTM D 874	% wt	< 0.001

mixing with fuel across wide temperature ranges. It is formulated with optimum blend of mineral & synthesized baseoils and advanced technology ashless additive system, to provide efficient performance in oil injected gasoline pre-mixed water cooled 2 stroke marine outboard engines. It is also suitable for use in naturally aspirated air cooled 2 stroke engines such as lawnmowers, chainsaws, motorcycles and auxiliary equipment.

• NMMA TC-W, TC-WII, TC-W3 • API TC

SAMIC TWIN TURBO 2T OIL

Samic Twin Turbo	Test Method	Units	2T Oil
Density @ 15 °C	ASTM D 4052	gm/cc	0.866
Viscosity @ 100 °C	ASTM D 445	cSt	7.8
Viscosity @ 40 °C	ASTM D 445	cSt	47.15
Viscosity Index	ASTM D 2270	-	135
Pour Point	ASTM D 97	°C	-24
Flash Point (COC)	ASTM D 92	°C	96
Sulfated Ash	ASTM D 874	% wt	0.09

SAMIC TWIN TURBO 2T oil is low ash high performance 2 stroke engine oil, pre-diluted to facilitate mixing when added to fuel. It is formulated with high quality mineral & synthesized baseoils and advanced technology additive system to provide reliable performance in direct injection and pre-mix engines. It is suitable for use in naturally aspirated 2 stroke engines such as lawnmowers, chainsaws, motorcycles and auxiliary equipment.

• API TC • JASO FB, FC, FD • ISO L-EGD

SAMIC AUTOTRANSYN DCTF is a high performance dual clutch transmission fluid, formulated with high quality fully synthetic base stocks and advanced additive technology with consistent shear stability for maintaining optimum film thickness for reliable protection of gears

Samic Autotransyn	Test Method	Units	DCTF	and bear
Color	Visual	-	Red	durability
Density @ 15 °C	ASTM D 4052	gm/cc	0.855	be used
Viscosity @ 100 °C	ASTM D 445	cSt	7.25	American
Viscosity @ 40 °C	ASTM D 445	cSt	35.5	Outstand
Viscosity Index	ASTM D 2270	-	175	(Noise, V
Pour Point	ASTM D 97	*C	-48	service lif
Flash Point (COC)	ASTM D 92	*C	205	corrosion
0 10 1117 2 0 1010	1 CT1 1 D 2002	-0	11 500	COLLOSIO

osity @-40°C | ASTM D 2983 | cP | 11.500 | • VW (Audi, Seat, Skoda) 6-speed FWD • Renault EDC 6-speed

ng torque retention to provide smooth shift feel without NVH pration and Harshness) concerns and all-around lubrication of the transmission components to help extend transmission with a smooth driving experience. It provides exceptional copper protection for better hardware durability, excellent oxidation ontrol to provide longer fluid life and good seal compatibility for better leakage prevention. Ford Powershift 6-Speed

e stringent requirements of GM's DEXRON-VI specification and provides

rotection for 2006 and newer GM vehicles. It also provides improved

r all automatic transmissions in passenger cars and commercial vehicles,

o used in applications like power steering systems, hydraulics and some

Chrysler ATF+, +2, +3 (MS 7176E), +4 (MS 9602) • ZF M-1375.4 (6HP)

Audi 5 HP LT71141 (ZF 5 HP 18FL/19FL/24A)
 Porsche T- V (JWS 3309) / Nissan Matic S
 MB 236.12 & 236.

Allison C-3 & C-4

• MB 236.12 & 236.14

 $ual\ transmissions\ where\ automatic\ transmission\ fluid\ is\ specified.$

Hyundai NWS-9638/ Acura ATF-Z1

Jaguar ATF 3403 JLM20238
 Vickers M2950-S, I-286-S

ormance in older GM vehicles, wherever DEXRON is specified. Suitable

 Mitsubishi TC-SST 6-speed
 Volvo powershift 6-speed

ings, also providing an outstanding improvement in friction

enabling longer drain transmissions. It is designed specifically to

s a service-fill DCT transmission fluid for European, Asian and

vehicles equipped with wet & dry dual clutch transmissions.

Chrysler Powershift 6-speed

SAMIC AUTOTRANSYN ATF DEXRON VI is a high performance automatic transmission oil, formulated with high quality synthetic base stocks and sophisticated additive system including high shear stable viscosity index improvers, antio-xidants, and defoaments providing ooth and controlled friction/wear characteristics, that meets or exceeds

Samic Autotransyn	Test Method	Units	Dexron VI
Color	Visual	-	Red
Density @ 15 °C	ASTM D 4052	gm/cc	0.850
Viscosity @ 100 °C	ASTM D 445	cSt	6.05
Viscosity @ 40 °C	ASTM D 445	cSt	30.5
Viscosity Index	ASTM D 2270	-	150
Pour Point	ASTM D 97		-51
Flash Point (COC)	ASTM D 92	°C	205
Brookfield Viscosity @-40°C	ASTM D 5293	сP	12,000

- JASO 1A-LV / Peugeot ZF 4HP20 Mazda ATF D-II/M-V/N-1 Ford Mercon LV
 ZF TE-ML 09X and all 3 & 4 speed transmission

SAM	IC AUTI		JVIF

SAMIC AUTOTRANSYN CVTF is a high performance continuous variable transmission fluid, formulated with high quality fully synthetic base stocks and advanced additive technology to ensure consistent repeatable, smooth, stepless shiftsunder a broad range of driving Test Method | Units | CVTF | conditions, temperatures and transmissions It meets or exceeds the Test Method Units CVTF conditions, temperatures and transmissions It meets or exceeds the Visual . Red Tequirements of specifications for many Japanese, American & European (estimated to the Visual ASTM 0452 m/c 0.850 designed vehicles and is also suitable in most OEMS CVTs with chain and push ASTM 0.445 cst 7.15 belt. It provides smoother, consistent all weather stepless shifting, and all-ASTM 0.2270 - 175 ASTM 0.97 °C - 48 refill of most pulley-based continuously variable transmissions in Japanese ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and Korea degined withlight grows of the CVT of Test ASTM 0.97 °C - 48 and CVT of Test 0.97 °C - Density @ 15 º(iscosity @ 100 ° osity @ 40 ^a

ASTM D 92 °C 205 and Korean designed vehicles (except for CVTS that require gear oils and Brookfield Viscosity @-40°C ASTM D 5293 CP 10,000 toroidal CVTs), where it emphasizes on Anti Shudder Durability performance. S, where it emphasizes on Anti Shudder Durability performance.

• Audy/WV [1.52180; G 052 180; G 052 216]

• BMW/MINI Cooper 8322 0 136 376/8322 0 429 154 (Ezt. 1799)

• BMW/MINI Cooper 8322 0 136 376/8322 0 429 154 (Ezt. 1799)

• Hyurdaj (X, 162 185) EV (TV (T) Punch (2Z. 1799A) 7 (CFT)

• JASO 1A / Shell Green 1V/Missian NS-1/NS-2/NS-3

• Mircudes Berr CVT28 (236-20) (Tyotyda (Leutz TC/HE 7 WHITE)

• Mitsubshi (CVT-1/VTF-Dia/Queen 12/Dia/Queen 1-4/Pp-III)

• Subazu (NS-2/ Lineartronic CVTF/CVTF/GVF) (2012 (2012) (2013) (-CVTF)

- Daihatsu (Amix CVTF-DC / Amix CVTF DFE) / Honda (HMMF, HCF-2)
- Dodge / Jeep CVT (NS-2 / CVTF+4/ MOPAR CVT 4) / ZF CVT V1
- Ford (CVT23 / CVT30 / MERCON C/CFT30/WSS-M2C933-A/Motorcraft XT GM/Saturn (DEX-CVT/CVTF I-Green2*) Jaguar ATF 3403 JLM20238

SAMIC AUTOTRANS DXIII is a high performance automatic transmission oil, formulated with high quality hydro-treated base stocks and advanced additive system including viscosity index improvers, antioxidants, and defoaments providing smooth and cont-rolled iction/wear characteristics, to meet or exceed the requirements of Ford con and General Motors for Dexron II specification, suit- able for

Samic Autotrans	Test Method	Units	DX III
Color	Visual	-	Red
Density @ 15 °C	ASTM D 4052	gm/cc	0.856
Viscosity @ 100 °C	ASTM D 445	cSt	7.4
Viscosity @ 40 °C	ASTM D 445	cSt	35.8
Viscosity Index	ASTM D 2270	-	178
Pour Point	ASTM D 97	°C	-51
Flash Point (COC)	ASTM D 92	°C	202

senger cars and commercial auto-matic transmissions, for use in lications like power steering systems, hydraulics and some manual missions where automatic trans-mission fluid is specified.

Suzuki (TC / NS 2 / CVT Green 1 / CVTF Green / CVTF 3320)

- M Dexron III, Type A & Ford Mercon
- - MAN 339 Z1 & V1/339 Z2 & V2

SAMIC AUTOTRANS DXII is a high performance automatic transmission oil, formulated with high quality hydro-treated base stocks ind advanced additive system including viscosity index improvers, antioxidants, and defoaments providing smooth and cont-

Samic Autotrans	Test Method	Units	DX II
Color	Visual	-	Red
Density @ 15 °C	ASTM D 4052	gm/cc	0.865
Viscosity @ 100 °C	ASTM D 445	cSt	7.2
Viscosity @ 40 °C	ASTM D 445	cSt	37.5
Viscosity Index	ASTM D 2270	-	160
Pour Point	ASTM D 97	°C	-45
Flash Point (COC)	ASTM D 92	°C	202

- rolled friction/wear characteristics, to meet or exceed the requirements of Ford Mercon and General Motors for Dexron II specification, suit-able for passenger cars and commercial automatic transmissions, for use in applications like power steering systems, hydraulics and some manua transmissions where automatic trans- mission fluid is specified.
- GM Dexron II, Type A & Ford ZF TE-ML 02F/4D/09/11A/11B/14A/170 Allison C-4/CAT TO-2
 - MAN 339 Z1 & V1
- Voith Turbo 55.6335 (G607 list)
 Volvo 97340 / MB 236.1/5/6/7/9

MIC AUTOTRANS ATF TYPE A

SAMIC AUTOTRANS ATF Type A is a high performance automatic transmission oil, formulated with high quality base stocks, shear ble viscosity index improvers and advanced additive system to meet or exceed the requirements of General Motors for Type A

Samic Autotrans	Test Method	Units	Type A
Color	Visual	-	Red
Density @ 15 °C	ASTM D 4052	gm/cc	0.876
Viscosity @ 100 °C	ASTM D 445	cSt	7.6
Viscosity @ 40 °C	ASTM D 445	cSt	41.3
Viscosity Index	ASTM D 2270	-	155
Pour Point	ASTM D 97	°C	-45
Fleels Delies (COC)	ACTM D.O.	0.0	202

specification. Suitable for passenger cars and commercial automatic ransmissions, for use in applications like power steering systems, nydraulics and some manual transmissions where automatic transmission luid is specified.

- GM Dexron Type A



SAMIC SYN SYNCHRO 75W-80 GL-4

SAMIC SYN SYNCHRO EP 75W80 GL-4 is a high performance heavy duty gear oil, formulated from high quality Synthetic Blend of base oils and an advanced additive system. These lubricants are designed for automotive heavy duty manual

Samic Syn Synchro EP	Test Method	Units	75W80
Density @ 15 °C	ASTM D 4052	gm/cc	0.850
Viscosity @ 40 °C	ASTM D 445	cSt	56.5
Viscosity @ 100 °C	ASTM D 445	cSt	9.5
Viscosity Index	ASTM D 2270	-	152
Pour Point	ASTM D 97	°C	-42
Flash Point (COC)	ASTM D 92	°C	220
Copper Strip Corrosion	ASTM D 130	-	1A
Foam Seq I,II,III	ASTM D 892	ml/ml	10/0
Phosphorus	ASTM D 4951	%wt	0.026

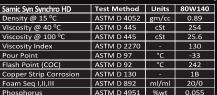
transmissions of most OEM like MAN, IVECO, DAF and RENAULT. More over, these oils are specially engineered for fuel economy nanual transmissions in commercial vehicles.

- SAE J2360
- MB 235.28
- MAN 341 Type E-3/Z-4
- ZF TE ML 01L, 02L, 16K
- Volvo 97305



SAMIC SYN SYNCHRO HD 80W-140 GL-5

SAMIC SYN SYNCHRO HD 80W140 GL-5 is a high performance heavy duty gear oil, formulated from high quality Synthet Blend of base oils and an advanced additive system. These lubricants are designed for automotive heavy duty transmissions, axles



and final drives. Moreover these oils are specially engineered for heavy duty axles and final drives where extreme pressures and shock loadings are expected.

- API GL-5/MT-1
- SAE J2360
- MIL-PRF-2105E
 Mack GO-J
- Meritor 0-76-N
 ZF TE ML 05A, 12M, 16F, 21A



SAMIC SYN SYNCHRO HD 75W-90 GL-5

SAMIC SYN SYNCHRO HD 75W90 GL-5 is a high performance heavy duty gear oil, formulated from high quality Synt-hetic Blend of base oils and duty transmissions, axles and final drives. Moreover

readvanced additive system. These indirection are designed for automotive frea						
Samic Syn Synchro HD	Test Method	Units	75W90			
Density @ 15 °C	ASTM D 4052	gm/cc	0.87			
Viscosity @ 40 °C	ASTM D 445	cSt	97.25			
Viscosity @ 100 °C	ASTM D 445	cSt	14.5			
Viscosity Index	ASTM D 2270	-	155			
Pour Point	ASTM D 97	°C	-39			
Flash Point (COC)	ASTM D 92	°C	222			
Copper Strip Corrosion	ASTM D 130	-	1B			
Foam Seq I,II,III	ASTM D 892	ml/ml	10/0			
Phosphorus	ASTM D 4951	%wt	0.055			

these oils are specially engineered for heavy-duty axles and final drives where extreme pressures and shock loadings are expected.

MB 235.8

Meritor 0-76-N

- APLGI-5/MT-1 SAE J2360
- MIL-PRF-2105E
- Mack GO-J Scania STO 1:0
- MAN 342 M2 ZF TE ML 05A,12L,12N,16F, 17B,19C, 21A
- Volvo 97312



SAMIC SYNCHRO HD GL-5 series

SAMIC SYNCHRO HD GL-5 series of lubricants are high performance heavy duty gear oils, formulated from high quality base oils and an advanced additive system. These lubricants are designed for automotive heavy-duty transmissions, axles and final drives. Moreover these oils

Samic Synchro HD	Test Method	Units	90	140	80W90	85W90	85W140
Density @ 15 ℃	ASTM D 4052	gm/cc	0.890	0.910	0.888	0.890	0.908
Viscosity @ 40 °C	ASTM D 445	cSt	145	447	146	190	356
Viscosity @ 100 °C	ASTM D 445	cSt	14.3	30.0	14.7	17.4	25.6
Viscosity Index	ASTM D 2270	-	96	95	100	97	95
Pour Point	ASTM D 97	°C	-12	-9	-24	-24	-15
Flash Point (COC)	ASTM D 92	°C	240	260	230	236	248
Copper Strip Corrosion	ASTM D 130	-	1B	1B	18	1B	1B
Foam Seq I,II,III	ASTM D 892	mi/mi	10/0	20/0	10/0	10/0	20/0

are specially engineered for heavy duty axles and final drives where extreme pressures and shock loadings are expected

- API GL-5
- MIL-L-2105D (U.S Military Specification)
- MAN 342 M2
- ZF TE ML 05A, 7A, 12E, 16B,C & D, 17B, 19B, 21A





				٠.			,
Samic Synchro EP	Test Method	Units	90	140	80W90	85W90	85W140
Density @ 15 °C	ASTM D 4052	gm/cc	0.890	0.910	0.888	0.890	0.908
Viscosity @ 40 °C	ASTM D 445	cSt	145	447	146	190	356
Viscosity @ 100 °C	ASTM D 445	cSt	14.3	30.0	14.7	17.4	25.6
Viscosity Index	ASTM D 2270	-	96	95	100	97	95
Pour Point	ASTM D 97	*C	-12	.9	-24	-24	-15
Flash Point (COC)	ASTM D 92		240	260	230	236	248
Copper Strip Corrosion	ASTM D 130		1B	1B	1B	1B	1B
Foam Seg I,II,III	ASTM D 892	ml/ml	10/0	20/0	10/0	10/0	20/0
Phosphorus	ASTM D 4951	%wt	0.026	0.026	0.026	0.026	0.026

oils, formulated from high quality base oils and an advanced additive system. These lubricants are designed for automotive heavyduty transmissions, axles and final drives. Moreover these oils are engineered to work efficiently in transmissions where prote-ction against wear and scoring is required and high level of oil film protection is desired

- API GL-4
- MIL-L-2105 (U.S Military Specification)





SAMIC ULTIMATE GOLD CI-4/SL series
SAMIC ULTIMATE GOLD CI-4 series uses fully synthetic technology base oil and balanced additive system to deliver fuel economy, erformance, and to protect modern engines operating under extreme conditions of pressures and temperatures. It's the ideal

Samic Ultimate Gold	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	215	228
Total Base Number	ASTM D 2896	mg KOH/g	11.0	11.0
Sulfated Ash	ASTM D 874	% wt	1.1	1.1
CCS Viscosity	ASTM D 5293	cP	4560 @ -30 °C	4650 @ -30 °C

for operators of heavy duty truck and leets equipped with latest emission s, including those with EGR systems, as satisfying the needs of older engines. It be used in naturally aspirated and charged diesel and petrol engines, ng excellent protection even under the evere conditions.

CH-4, CG-4, CF-4, CF, SL, SJ /E5/E3/A3/B4 • VOLVO VDS-3/Renault VI RLD-2 -1a, ECF-2 • MAN M 3277 /MB 228.5 Category 2 • Global DHD-1

 MACK EO-M plus CUMMINS CES 20076/77/78

new and old diesel engines for On & Off highway applications, due to it's backward compatibility down to CI-4 specifications and may also be used

in gasoline engines requiring the APISN specifica-

tion. They are specifically for mulated to deli- ver excellent wear and engine protection, extended

drain capability with excellent TBN retention. outstanding high temperature performance and

AMIC MAXIMA PLATINUM CJ-4/SN series is extra

SAMIC MAXIMA MERCURY CK-4/SN series are advanced performance low-SAPS fully synthetic diesel engine oils formulated with severely refined base stocks and sophisticated technology additives to provide outstanding engine performance in the latest emission Samic Maxima Mercury Test Method Units 10W-30 10W-40 designs, including those with after treatment systems with Diesel Particulate Filters (DPF), Density @ 15 °C ASTM D 4052 gm/cc 0.865 0.870 Selective Catalytic Reduction (SCR) and Diesel Oxidation Catalyst (DOC). It may be used in both

Viscosity @ 40 °C	ASTM D 445	cSt	62.6	96
Viscosity Index	ASTM D 2270	-	155	155
Pour Point	ASTM D 97	°C	-39	-39
Flash Point (COC)	ASTM D 92	°C	215	225
Total Base Number	ASTM D 2896	mg KOH/g	9.6	9.6
Sulfated Ash	ASTM D 874	% wt	0.9	0.9
CCS Viscosity	ASTM D 5293	cP	6050 @ -25 °C	6200 @ -25 °C
ADJOVA CLA CLADIN CLA	CILA CE CE 3 CM	AA CL - D-AIn I	olI navaaa	· CATECE 3

VOLVO VDS-4.5 engine cleanliness.
 Duetz DQC III-10 LA/JASO DH-2 • MAN 3275/3575

DAIVIIL IVIAXIIV	/IA PLAIII	ANIAI P	J-4/5IV SI	eries	high performance diesel engine oil formulated with
Samic Maxima Platinum	Test Method	Units	10W-30	10W-40	fully synthetic base stocks and advanced tech-nology
Density @ 15 °C	ASTM D 4052	gm/cc	0.868	0.875	additives to provide reliable engine performance in
Viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.4	the latest emission designs, including those with
Viscosity @ 40 °C	ASTM D 445	cSt	62.6	96	Exhaust Gas Recirculation (EGR) systems and after
Viscosity Index	ASTM D 2270	-	155	155	treatment systems with Diesel Particulate Filters
Pour Point	ASTM D 97	°C	-39	-39	(DPF) and Diesel Oxidation Catalyst (DOC), as well as
Flash Point (COC)	ASTM D 92	°C	215	236	satisfying the needs of older engines. It may be used
Total Base Number	ASTM D 2896	mg KOH/g	10.4	10.4	
Sulfated Ash	ASTM D 874	% wt	1.0	1.0	In naturally aspirated and turbo- charged diesel &
CCS Viscosity	ASTM D 5293	cР	6050 @ -25 °C	6200 @ -25 °C	petrol engines and On & Off highway applications,

ACEA E9/E7
 MTU OIL Category 2.1
 Detroit Diesel Power Guard 93K218

SAMIC MAXIMA GOLD CI-4/SI serie

CALAIO NANINA DI ATINI INA O LAION

		J, J.		
Samic Maxima Gold	Test Method	Units	10W-30	10W-40
Density @ 15 °C	ASTM D 4052	gm/cc	0.868	0.874
Viscosity @ 100 °C	ASTM D 445	cSt	10.4	15.5
Viscosity @ 40 °C	ASTM D 445	cSt	62.6	106
Viscosity Index	ASTM D 2270	-	155	155
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	12.4	12.4
Sulfated Ash	ASTM D 874	% wt	1.3	1.3
CCS Viscosity	ASTM D 5293	cP	6050 @ -25 °C	6200 @ -25 °C

 VOLVO VDS-3/MACK EO M plus
 CAT ECF 1a, ECF-2
 CUMMINS CES 20076/7/20078
 MTU OIL Category 2 ACEA F7/F5/F3/A3/B4

_	DAIVIID OF HIVE	M MILITOUT	11 1044-	10 017 -4 /0
	Samic Optima Mercury	Test Method	Units	15W-40
	Density @ 15 °C	ASTM D 4052	gm/cc	0.875
	Viscosity @ 100 °C	ASTM D 445	cSt	15.4
	Viscosity @ 40 °C	ASTM D 445	cSt	120
	Viscosity Index	ASTM D 2270	-	134
	Pour Point	ASTM D 97	°C	-33
A	Flash Point (COC)	ASTM D 92	°C	230
	Total Base Number	ASTM D 2896	mg KOH/g	9.6
9 II	Sulfated Ash	ASTM D 874	% wt	0.9
	CCS Viscosity	ASTM D 5293	cP	6500 @ -20 °C
100	APLCK-4 CL-4 CL-4 Plus CL-4	CH-4 CF CF-2 SN SM 1	SI .	- CATEGE 2

MACK EOS-4.5/FORD WSS -M2C171-F1 • Detroit Diesel Power Guard 93K222

SAMIC OPTIMA PLATINI IM 15W40 C.I-4 /SN SAMIC OPTIMA PLATINUM 15W-40 CI-4/SN is extra

Samic Optima Platinum	Test Method	Units	15W-40
Density @ 15 °C	ASTM D 4052	gm/cc	0.884
Viscosity @ 100 °C	ASTM D 445	cSt	15.4
Viscosity @ 40 °C	ASTM D 445	cSt	120
Viscosity Index	ASTM D 2270	-	134
Pour Point	ASTM D 97	°c	-33
Flash Point (COC)	ASTM D 92	°c	230
Total Base Number	ASTM D 2896	mg KOH/g	9.2
Sulfated Ash	ASTM D 874	% wt	0.9
CCS Viscosity	ASTM D 5293	cР	6000 @ -20 °C

• API CJ-4, Cl-4 Plus, Cl-4, CH-4, CF, CF-2, SN, SM, SL • ACEA E9/E7 / CAT ECF-3 • MTU Oll Category 2.1/MB 228.31

Samic Maxima Platinum	Test Method	Units	10W-30	10W-40
Density @ 15 °C	ASTM D 4052	gm/cc	0.868	0.875
Viscosity @ 100 °C	ASTM D 445	cSt	10.4	14.4
Viscosity @ 40 °C	ASTM D 445	cSt	62.6	96
Viscosity Index	ASTM D 2270	-	155	155
Pour Point	ASTM D 97	°C	-39	-39
Flash Point (COC)	ASTM D 92	*c	215	236
Total Base Number	ASTM D 2896	mg KOH/g	10.4	10.4
Sulfated Ash	ASTM D 874	% wt	1.0	1.0
CCS Viscosity	ASTM D 5293	cР	6050 @ -25 °C	6200 @ -25 °C
. API CI-4, CI 4 Plus, CI 4, CH	4. CF. CF 2. SM. SL			

e latest emission designs, including those with chaust Gas Recirculation (EGR) systems and after atment systems with Diesel Particulate Filters PF) and Diesel Oxidation Catalyst (DOC), as well as isfying the needs of older engines. It may be used naturally aspirated and turbo- charged diesel & ol engines and On & Off highway applications viding excellent protection even under the mos trenuous conditions.

SAMIC MAXIMA GOLD CI-4/SL series uses fully synthetic technology base oils and balanced additive system to deliver fuel economy performance, and to protect modern engines operating under extreme conditions of pressures and temperatures. It's the ideal choice for operators of heavy duty truck and bus fleets equipped with late st emission designs, including those with EGR systems, as well as satisfying the needs of older engines. It may be used in naturally aspirated and turbocharged diesel and petrol engines, providing excellent protection even under the most strenuous conditions.

MIC OPTIMA MERCURY 15W40 CK-4 /SN SAMIC OPTIMA MERCURY 15W-40 CK-4/SN is an advance performance low-SAPS synthetic diesel engine oi formulated with severely refined base stocks and sophisticated technology additives to provide outstanding engine performance in the latest emission designs including those with after treatmentent systems with Diesel Particulate Filters (DPF), Selective Catalytic Reduction (SCR) and Diesel Oxidation Catalyst (DOC). may be used in both new and old diesel engines for On & Off highway applications, due to it's backward compatibility down to CJ-4 specifications and may also be used in gasoline engines requiring the API SN specification. The are specifically formulated to deliver excellent wear and MB 228.31 engine protection, extended drain capability with excellen MAN 3275/3575/Renault VI RLD-4
 VOLVO VDS-4.5 TBN retention, outstanding high temperature performance. and engine cleanliness.

> high performance diesel engine oil formulated with highly refined base stocks and advanced technology dditives to provide reliable engine performance in the latest emission designs, including those with Exhaus Gas Recirculation (EGR) systems and after treatmen stems with Diesel part -iculate Filters (DPF) and iesel Oxidation Catalyst (DOC), as well as satisfying ne needs of older engines. It may be used in naturally spirated and turbocharged diesel & petrol engines nd On & Off highway applications, providing cellent protection even under the most strenuous





older engines. It may be used in naturally aspirated and turbocharged diesel and petrol engines, providing excellent protection even under the most strenuous conditions.
• API CI-4, CH-4, CG-4, CF-4, CF, SL, SJ

- ACEA E7/A3/B4
- CAT ECF-1a, ECF-2/VOLVO VDS-3
- MTU OIL Category 2 / MACK EO N MAN M3275/MACK EO-M PLUS
- Renault VI RLD-2/Renault VI RLD-2
 Deutz DQC -III-05/ MACK EO -N/Global DHD-1
- Detroit Diesel 93K215/MB 228.3/MB 229.1
- CUMMINS CES 20076/7/20078



SAMIC OPTIMA SILVER 15W-40 CH-4/SL diesel engine oil is formulated with high quality base stocks and specially selected additives o ensure optimum performance and protection for diesel engines requiring an API CH-4 specification. Suitable for modern and old

Samic Optima Silver	Test Method	Units	15W-40
Density @ 15 °C	ASTM D 4052	gm/cc	0.884
Viscosity @ 100 °C	ASTM D 445	cSt	15.4
Viscosity @ 40 °C	ASTM D 445	cSt	120
Viscosity Index	ASTM D 2270	-	134
Pour Point	ASTM D 97	°C	-33
Flash Point (COC)	ASTM D 92	°C	230
Total Base Number	ASTM D 2896	mg KOH/g	10.0
CCS Viscosity	ASTM D 5293	cP	6000 @ -20 °C

iesel engines fitted on trucks, buses, construction or gricultural machinery with or without turbo charger, tercooler or sophisticated injection systems.

۰	API	CH-4,	CG-4,	CF-4,	CF,	SL
٠	ACE	A E7/	13/B4			
	CAT	ECE :	15			

- CUMMINS CES 20076/7
- Deutz DQC -II-05
 Renault RD-2
 MB 228.3
- MAN M3275 MACK EO-M Plus



Samic optima ferrous 15W-40 cf-4

SAMIC OPTIMA FERRO	OUS 15W-40 CF-4 d	liesel engine o	il is formulated wit
Samic Optima Ferrous	Test Method	Units	15W-40
Density @ 15 ℃	ASTM D 4052	gm/cc	0.884
Viscosity @ 100 °C	ASTM D 445	cSt	15.4
Viscosity @ 40 °C	ASTM D 445	cSt	120
Viscosity Index	ASTM D 2270	-	134
Pour Point	ASTM D 97	°C	-30
Flash Point (COC)	ASTM D 92	°C	230
Total Base Number	ASTM D 2896	mg KOH/g	8.0
CCS Viscosity	ASTM D 5293	cР	6000 @ -20 °C

high quality base stocks and selected additives to ensure ptimum perform-ance and protection for diesel engines requiring an API CF-4 specification. Suitable for iesel engines for both turbocharged and normally spirated engines operating under severe service onditions in all seasons.

- ACEA E2
- VOLVO VDS Deutz DQC =I-05
 MB 228.0/1
- MTU OIL Category-1 MAN 270/271

SAMIC NOVA GOLD CI-4/SL series

SAMIC NOVA GOLD CI-4/SL series is high performance diesel engine oil formulated with highly refined base stocks and advanced technology iose with EGR systems, as well as satisfying the needs of

Samic Nova Gold CI-4	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	21.4
Viscosity @ 40 °C	ASTM D 445	cSt	107	182
Viscosity Index	ASTM D 2270	-		137
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	11.5	11.5
Sulfated Ash	ASTM D 874	% wt	1.2	1.2

older engines. It may be used in naturally aspirated and turbocharged diesel and petrol engines, providing excellent protection even under the most strenuous conditions.

 Π

- API CI-4, CH-4, CG-4, CF-4, CF, SI, SI ACEA E7/A3/B4 CAT ECF-1a, EG-2 MTU OIL Category 2 MAN M3275 VOLVO VDS-3 MB 228.3/MB 229.1
- - Renault VI RI D-2
 MACK FO-N

MIC NOVA FERROUS CF-4 series

SAMIC NOVA FERROUS CF-4 series are diesel engine oils formulated with high quality base stocks and selected additives to ensure optimum performance and protection for diesel engines requiring an API CF-4 specification. Suitable for diesel engines for both turbocharged and normally aspirated engines operating under severe

Samic Nova Ferrous	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	21.4
Viscosity @ 40 °C	ASTM D 445	cSt	107	182
Viscosity Index	ASTM D 2270	-	137	137
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	8.0	8.0
CCC \ ///h-	ACTA A D FOOD	- 0	C020 0 15 90	C030 0 15 90

samic Nova Ferrous	l est ivietnoa	Units	20W-40	20W-50	service conditions in a
Density @ 15 °C	ASTM D 4052	gm/cc	0.888	0.890	service conditions in a
iscosity @ 100°C/	ASTM D 445	cSt	14.30	21.4	 API CF-4, CF, SJ
iscosity @ 40 °C	ASTM D 445	cSt	107	182	 ACEA E2
iscosity Index/	ASTM D 2270	-	137	137	 MTU OIL Category
our Point	ASTM D 97	°C	-30	-30	 MAN 270/271
lash Point (COC)	ASTM D 92	°C	230	236	VOLVO VDS Deutz DOC =I-05
otal Base Number	ASTM D 2896	mg KOH/g	8.0	8.0	 Deutz DQC –I-05 MB 228.0/1
CCS Viscosity	ASTM D 5293	cP	6020 @ -15 °C	6020 @ -15 °C	Caterpillar TO-2

SAMIC DYNAMO 9000 CF series

Samic Dynamo 9000	Test Method	Units	10W	30	40	50	1
Density @ 15 °C	ASTM D 4052	gm/cc	0.880	0.892	0.900	0.904	
Viscosity @ 100 °C	ASTM D 445	cSt	5.6	11.6	15.4	20.2	
Viscosity @ 40 °C	ASTM D 445	cSt	32	102	158	234	
Viscosity Index	ASTM D 2270	-	114	100	99	99	
Pour Point	ASTM D 97	°C	-33	-18	-15	-12	
Flash Point (COC)	ASTM D 92	°C	214	230	236	242	
Sulfated Ash	ASTM D 874	Wt%	0.95	0.95	0.95	0.95	ľ
Total Base Number	ASTM D 2896	mg KOH/g	9.6	9.6	9.6	9.6	

SAMIC DYNAMO 9000 CF is a range of diesel engine oils formulated with high quality base ocks and selected additives to ensure optimum rformance and protection for diesel engines quiring an API CF specification. Suitable for heavy luty, high output diesel engines where monograde oils are specified. It provide excellent protection in engines, against high temperature piston deposits, vear, corrosion and foaming under severe perating conditions.

API CF-2, CD-2, CF, CD, SF . MAN 270

MTU Type-1

Mercedes Benz 228.0 Caterpillar TO-2







CUMMINS CES 20081
 MACK EO-O Premium Plus /VOLVO-VDS-4

SAMIC AUTO COOL series

nt is formulated with high quality corrosion inhibited Mono-Ethylene glycol liquid and

Auto Cool	Test Method	Units	Value	Concentration			
Grade		-	33%	40%	50-50	100%	
Density @ 20 °C	ASTM D 4052	gm/cc	1.050	1.080	1.089	1.118	
Color	ASTM D 1500	-	Green	Green	Green	Green	
рН	ASTM D 1287	-	7.9	8.0	8.0	9.6	
Boiling Point	ASTM D 1120	٥C	>105	>135	>140	150 min	
Flash Point	ASTM D 92	°C	>110	>110	>110	110 min	
Freezing Point	ASTM D 1177	°C	-18	-27	-36	N/A	

arefully selected additives to provide year round tomotive cooling system treatment. It is designed to ovide complete cooling system protection in a ncentration range of 33% to 100% by volume.

• ASTM 3306 ritish Standard - BS 6580

SAMIC AUTO COOL ELC series

SAMIC AUTO COOL ELC an 'Extended Life Coolant' is fill-for-life antifreeze concentrate, formulated with high quality Ethylene ibitor (BASF Glysantin G30) additive to provide year round

Auto Cool ELC	Test Method	Units	1	Value		
Chemical Nature	-		Moi	Mono Ethylene Glycol - Glysantin G30		
Density @ 20 °C	ASTM D 4052	gm/cc		1.122 - 1.125		
Color	ASTM D 1500			Magenta/Fluorescent Pink/Red		
Viscosity @ 20 °C	ASTM 445	mm2/sec		22 - 26		
Refraction @ 20 °C	DIN 51423			1.432 - 1.436		
рН	ASTM D 1287		1	8.2 – 8.6		
Boiling Point	ASTM D 1120	1120 °C		>160		
Flash Point	ASTM D 92	ASTM D 92 °C		>120		
Freezing Point	ASTM D 1177	°C	N/A			
Product Name	Auto Co.		Mater	Freeze Protection arc ASTM D 1177		

otive cooling system treatment. It is designed to complete cooling system protection in a ation range of 33% (-18 0 C) & amp; 50% (-37 0 ume. It is free from nitrite, amine, phosphate, nd borate and based on mono ethylene glycol, st be diluted with water before use.

- des-Benz DBL 7700.30, page 325.3
- TL 5048
- e Carrera, Boxster, Cavenne nia TI 02-98 0813 T/B/M sv
- VW/Audi/Seat/Skoda/Bentley/Lamborghini: TL 774-D/F

50%

Auto Cool ELC -18 °C

Auto Cool FLC -37 °C

SAMIC AUTO COOL LLC series
Samic Auto Cool LLC series is 'Long Life Coolant' is fill-for-life antifreeze concentrate, formulated with high quality Ethylene

Auto Cool LLC	Test Method	Units	Value
Chemical Nature			Mono Ethylene Glycol – Glysantin G48
Density@ 20 °C	ASTM D 4052	gm/cc	1.122-1.125
Color	ASTM D 1500		Blue
Viscosity@ 20 ℃	ASTM 445	mm2/sec	22 - 26
Refraction@ 20 ℃	DIN 51423		1.432-1.436
pН	ASTM D 1287		8.2-8.6
BoilingPoint	ASTM D 1120	%	>160
Flash Point	ASTM D 92	٥C	>120
Freezing Point	ASTM D 1177	°C	N/A

Auto Cool LLC Water Freeze Protection, acc. ASTM D 1177 Auto Cool LLC -18 °C 67% Auto Cool LLC -37 °C 50% 50% -37 °C

glycol and Silicate-Hybrid Technology based corrosion inhibitor (BASF Glysantin G48) additive to provide year round automotive cooling system treatment. It is designed to provide complete cooling system protection in a concentration range of 33% (-180C) & amp; 50% (-37 0 C) by volume. It is free from nitrite, amine, phosphate and borate and based on mono ethylene glycol, which must be diluted with water before use.

- des-Benz DBL 7700.20, page 325.0 MTU MTL 5048
- he Carrera, Boxster, Cavenne BMW N 600 69.0
- Saab 69011599
 Liebherr TLV 035, TLV 23009 A Jenbacher TA-Nr. 1000-0201
 Volvo Truck/Car 1286083

Samic Brake Fluid DOT-4 are supreme performance hydraulic brake fluid based

SAMIC BRAKE FLUID DOT-4

on polyethylene glycol ether technology to provide a high level of brake and clutch performance in automotive and commercial vehicles. They are designed to meet or exceed the general requirements of most builders of automotive disc, drum and anti-skid brake systems and clutch systems, used in average to high performance vehicles requiring DOT 3 or DOT 4 level performance.

- FMVSS 116 DOT 3
- ISO 4925 Class 3 & 4 SAE J-1703



SAMIC BRAKE FLUID DOT-3

Samic Brake Fluid DOT-3 are supreme performance hydraulic brake fluid based on polyethylene glycol ether technology to provide a high level of brake and clutch performance in automotive and commercial vehicles. They are designed to meet or exceed the general requirements of most builders of automotive disc, drum and anti-skid brake systems and dutch systems.

- FMVSS 116 DOT 3 SAE J-1703
- ISO 4925 Class 3



SAMIC SPRAY CUT OIL

Samic Spray Cut Oil is high quality water soluble cutting oil specifically formulated for cutting and grinding operations of

Samic Spray Cut Oil	Test Method	Units	Water Soluble Cutting Oil		
Color	ASTM D 1500		4.0		
Appearance	Visual		Brown & Clear		
Specific gravity @ 60/60 °F	ASTM D 4052	gm/cc	0.872		
Viscosity @ 40 °C	ASTM D 445	c5t	40.5		
pH value (1% solution in distilled H2O)	E70		9.0 max		
Emulsion stability, 24 hour					
a. 5% in distilled water	ASTM D 3707	• '	Slight ring – no oil trace		
b. 5% in 340 ppm CaCo3			2 ml cream – no oil trace		
Pour Point	ASTM D 97	°C	-12 (max)		
Flash Point (COC)	ASTM D 92	°C	185 (min)		
Sulfur content	ASTM D 4951	%wt	0.35		

metalworking for both ferrous and non-ferrous mponents. These oils are formulated to provide itstanding emulsion stability & rust inhibition and wok tisfactorily for all types of processes involving fine carbon

- oplication in following ratios:
 5% for general metal working.

- 10% for heavy duty cutting. -6% for use as a fire-resistant hydraulic fluid.



SAMIC COAST GUARD 15 series

Samic Coast Guard 15 series is a range of high performance marine diesel engine oils formulated with premium quality base stocks Samic Coast Guard | Test Method | Units 1530 1540 1550 iscosity @ 100 °C ASTM D 445 cSt 11.6 14.6 19.2 /iscosity @ 40 °C STM D 445 cSt 145 100 90 245 268 Total Base Number | ASTM D 2896 | mg KOH/g 15

and selected additives to ensure optimum performance and protection for trunk piston engines, operating on low sulphur distillate fuels. Suitable for heavy duty diesel engines in Marine and Industrial applications, where monograde oils are specified. It provides excellent protection in engines, against high temperature piston deposits, wear, corrosion and foaming under severe operating conditions.

• ΔPI CE



SAMIC COAST GUARD 20 series

uard 20 series is a range of high performance marine diesel engine oils formulated with premium quality base stocks

Samic Coast Guard	Test Method	Units	2030	2040	2050
SAE Grade			30	40	50
Density @ 15 °C	ASTM D 4052	gm/cc	0.892	0.900	0.904
Viscosity @ 100 °C	ASTM D 445	cSt	10.8	15.8	19.2
Viscosity @ 40 °C	ASTM D 445	cSt	94.0	164	218
Viscosity Index	ASTM D 2270		99	99	99
Pour Point	ASTM D 97	°C	-21	-18	-15
Flash Point (COC)	ASTM D 92	°C	245	268	276
Total Base Number	ASTM D 2896	mg KOH/g	20	20	20
Sulphated Ash	ASTM D 874	wt%	2.25	2.25	2.25

and selected additives to ensure optimum performance and protection for trunk piston engines. operating on low/moderate sulphur distillate fuels. Suitable for heavy duty diesel engines in Marine and Industrial applications, where monograde oils are specified. It provides excellent protection in engines, against high temperature piston deposits, wear, corrosion and foaming under severe operating

• API CE



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SAMIC COAST GUARD 30 series

Samic Coast Guard 30 series is a range of high performance 30 TBN marine diesel engine oils formulated with premium quality base

Samic Coast Guard	Test Method	Units	3030	3040	3050
SAE Grade			30	40	50
Density @ 15 °C	ASTM D 4052	gm/cc	0.892	0.900	0.904
Viscosity @ 100 ℃	ASTM D 445	cSt	11.6	14.6	19.2
Viscosity @ 40 °C	ASTM D 445	cSt	103	145	218
Viscosity Index	ASTM D 2270		100	99	99
Pour Point	ASTM D 97	°C	-9	-9	-6
Flash Point (COC)	ASTM D 92	°C	245	268	276
Total Base Number	ASTM D 2896	mg KOH/g	30	30	30
Sulphotod Ach	ASTM D 974	30400	2.7	2.7	2.7

stocks and high performance additive detergent technology to ensure optimum performance and protection for trunk piston engines. They are designed to operate efficiently in severe residualfuelled medium-speed diesel applications found in marine and stationary power industries. These TPEOs provide outstanding residual fuel compatibility and excellent engine cleanliness, especially in crankcase camshaft areas, ring belt and piston under crowns operating under severe conditions.



SAMIC COAST GUARD 40 series

Samic Coast Guard 40 series is a range of high performance 40 TBN marine diesel engine oils formulated with premium quality base stocks and high performance additive detergent technology to ensure optimum performance and

Samic Coast Guard	Test Method	Units	4030	4040	4050
SAE Grade			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	14.6	19.2
Viscosity @ 40 °C	ASTM D 445	cSt	103	145	218
Viscosity Index	ASTM D 2270		100	99	99
Pour Point	ASTM D 97	°C	-9	-9	-6
Flash Point (COC)	ASTM D 92	°C	245	268	276
Total Base Number	ASTM D 2896	mg KOH/g	40	40	40
Sulphated Ash	4STM D 874	wt%	4.8	4.8	4.8

protection for highly rated trunk piston engines. They are designed to operate efficiently in severe residualfuelled medium-speed diesel applications found in marine and stationary power industries. These TPEOs provide outstanding residual fuel compatibility and excellent engine cleanliness, especially in crankcase, camshaft areas, ring belt and piston under crowns operating under severe conditions.

•API CE



SAMIC COAST GUARD MDCL 7050

Samic Coast Guard MDCL 7050 is extra high performance 70 TBN marin									
Samic Coast Guard MDCL	Test Method	Units	7050						
SAE Grade	-		50						
Density @ 15 °C	ASTM D 4052	gm/cc	0.935						
Viscosity @ 100 °C	ASTM D 445	cSt	20.4						
Viscosity @ 40 °C	ASTM D 445	cSt	240.9						
Viscosity Index	ASTM D 2270		99						
Pour Point	ASTM D 97	°C	-9						
Flash Point (COC)	ASTM D 92	°C	276						

e diesel engine cylinder oil formulated with premium quality base stocks and high performance additive detergent 8 special anti-wear technology. This cylinder oil ensures ontimum performance and excellent protection in low speed 2-stroke marine diesel engines, operating on severe residual fuels & HFO with sulfur content in range of 1.0% to 3.5%. It is designed to provide excellent anti-wear properties to potentially reduce liner & ring wear and demonstrate outstanding anti-scuffing property under severe operating conditions.



SAMIC COAST GUARD SO 6 series

Samic Coast Guard SO 6 series is a range of high performance marine multipurpose system oils formulated with high quality

Samic Coast Guard SO	Test Method	Units	630	640
SAE Grade			30	40
Density @ 15 °C	ASTM D 4052	gm/cc	0.892	0.900
Viscosity @ 100 ℃	ASTM D 445	cSt	11.6	14.6
Viscosity @ 40 °C	ASTM D 445	cSt	103	145
Viscosity Index	ASTM D 2270		100	99
Pour Point	ASTM D 97	*C	-21	-21
Flash Point (COC)	ASTM D 92	°C	245	268
Total Base Number	ASTM D 2896	mg KOH/g	6	6

paraffinic base stocks and balanced additive system to ensure optimum performance and excellent protection in low speed, high output cross head marine engines, operating on residual fuels. It has sufficient alkalinity to neutralize any strong acidic combustion products which may enter into the crankcase and it demonstrates high load carrying ability under severe operating conditions

API CD

• US Military MII-I-2104C

SAMIC HYDRA HYD HVI series

∕IIC HYDRA HYD AW series

SAMIC HYDRA HYD HVI range of lubricants are high viscosity index anti-wear hydraulic fluid									
Samic Hydra HYD HVI	Test Method	Units	15	22	32	46	68	100	150
ISO Viscosity Grade	ISO 3448	-	15	22	32	46	68	100	150
Density @ 15 °C	ASTM D 4052	gm/cc	0.845	0.864	0.870	0.878	0.880	0.887	0.894
Viscosity @ 40 °C	ASTM D 445	cSt	15.6	22.9	32.4	46.8	68.9	100.8	150.2
Viscosity @ 100 °C	ASTM D 445	cSt	3.99	5.12	6.46	8.41	11.27	13.21	16.85
Viscosity Index	ASTM D 2270	-	161	160	156	156	156	128	120
Pour Point	ASTM D 97	°C	-39	-39	-36	-36	-36	-33	-33
Flash Point (COC)	ASTM D 92	°C	202	204	224	230	234	246	252
Copper Strip Corrosion	ASTM D 130	-	1A	1A	1A	1A	1A	1A	1A
Rust Characteristics	ASTM D 665		Pass	Dane	Pass Pass	Pass	Pass	Pass	Pass
Proc B	ASTIVI D 663	l .	F455	FdSS FdSS				Fd55	rass
Foam Seq I,II,III	ASTM D 892	ml/ml	20/0	20/0	20/0	20/0	20/0	20/0	20/0
Demulsibility, 40/40/0	ASTM D 1401	min	10	10	15	20	20	25	30
TAN mg KOH/g	ASTM D 2896		0.6	0.6	0.6	0.6	0.6	0.6	0.6

wear additive technology. They are designed to work efficiently in hydraulic & fluid power transmission systems, subjected to wide temperature ranges operating under severe conditions. These oils are available in ISO viscosity grades from 15 to 150.

ds formulated with high quality HVI

hase stocks and advanced anti-

DIN 51524 Part 3 HVLP type
 Denison HF-0, HF-2 (T6H20C)
 Cincinnati Machine P68, P69, P70
 ISO 6743/4 HV
 VICKERS M-2950S, -I-286
 VICKERS 35VQ25, 104C

AMIC HYDRA HYD AW range of lubricants are supreme performance anti wear hydraulic oils formulated with high quality Samic Hydra HYD AW Test Method Units 15 22 32 46 68 100 150 base stocks and balanced

 ISO Viscosity Grade
 BSD 3848
 15
 22
 32
 46
 68
 100
 150
 additive technology. They are Demand of the Signed to work efficiently in Viscosity @ 40 °C
 ASTM D 4052
 gm/cc
 0.843
 0.854
 0.854
 0.859
 0.859
 1502
 Jydraulic systems operating under

 Viscosity @ 40 °C
 ASTM D 4055
 CSt
 15.6
 22.9
 32.4
 46.8
 68.9
 100.8
 150.2
 hydraulic systems operating under
 °C 202 204 224 230 234 246 272 strength protection are desired. 204 224 230 234 248 272 18 18 18 18 18 18 18 00 Moreover they are also designed to work in systems where non

Pass Pass Pass Pass Pass anti-wear hydraulic oils are ASTM D 892 ml/ml 20/0 20/0 20/0 20/0 20/0 20/0 20/0 generally recommended. DIN 51524 Part 2 HLP type

Denison HF-0 (T6H20C)
 ISO 11158 (HM fluids)
 VICKERS M-2950S, -I-286



ASTM D 92

ASTM D 130

SAMIC INDUS GEAR EP series of lubricants are supreme performance industrial gear oils, formulated with high quality base stocks fortified with sulfur-phosphorus additive system. They are designed to work efficiently in all types of enclosed gear drives with EP/AW properties), extremely high load carrying capability and excellent

irculation or splash lubrication systems, where outstanding extreme pressure characteristics (
Samic Indus Gear EP	Test Method	Units	46	68	100	150	220	320	460	680
AGMA 9005			-	2 EP	3 EP	4 EP	5 EP	6 EP	7 EP	-
ISO Viscosity Grade	ISO 3448	-	46	68	100	150	220	320	460	680
Density @ 15 °C	ASTM D 4052	gm/cc	0.878	0.880	0.887	0.894	0.898	0.900	0.904	0.910
Viscosity @ 40 °C	ASTM D 445	cSt	46.8	68.9	100.8	150.2	220.5	320.9	460.8	680.5
Viscosity @ 100 °C	ASTM D 445	cSt	6.78	8.72	11.15	14.56	18.75	23.95	30.45	37.85
Viscosity Index	ASTM D 2270		98	98	95	95	95	95	95	92
Pour Point	ASTM D 97	°C	-27	-27	-24	-24	-24	-24	-15	-12
Flash Point (COC)	ASTM D 92	°C	216	218	226	238	248	248	256	282
FZG Scuff Fail Stage	A/8.3/90		12+	12+	12+	12+	12+	12+	12+	12+
Timken OK Load	ASTM D 2670	lb/kgf	65	65	65	75	75	75	75	75
Cu Strip Corrosion	ASTM D 130	-	1B							
Rust Test-Proc B	ASTM D 665	-	Pass							
Coom Coo I II III	ACTAL D. 903	mil/mil	0/0	0/0	0/0	0./0	0./0	0/0	0./0	0/0

Pass

demulsifying properties are desired. Moreover they offer extremely high protection against Micro pitting, wear and corrosion in enclosed gears and all types of oil lubricated bearings. Suitable for use in large & mall spur bevel, spiral helical & herringbone gears

DIN 51517-3 (CLP)
 ISO 6743-6 & ISO 12925-1 (CKC/CKD)

JS Steel 224 David Brown \$1.53.101 Flender BA 7300, table A



Samic Rota R	Test Method	Units	32	46	68	100	150
ISO Viscosity Grade	ISO 3448		32	46	68	100	150
Density @ 15 °C	ASTM D 4052	gm/cc	0.870	0.878	0.880	0.887	0.894
Viscosity @ 40 °C	ASTM D 445	cSt	32.4	46.8	68.9	100.8	150.2
Viscosity @ 100 °C	ASTM D 445	cSt	5.38	6.78	8.72	11.15	14.56
Viscosity Index	ASTM D 2270	-	98	98	98	95	95
Sulfated Ash	ASTM D 874	wt%	< 0.01	<0.01	< 0.01	< 0.01	< 0.01
Pour Point	ASTM D 97	"C	-27	-27	-21	-21	-18
Flash Point (COC)	ASTM D 92	°C	224	230	234	246	272
Copper Strip Corrosion	ASTM D 130	-	18	18	18	1B	18
Rust Characteristics Proc B	ASTM D 665		Pass	Pass	Pass	Pass	Pass
Foam Seq I,II,III	ASTM D 892	ml/ml	10/0	10/0	10/0	10/0	20/0

SAMIC ROTA R series are air compressor performance air compressor oils formulated with high quality base stocks and advanced additive technology to provide exceptional equipment protection and reliability for compressors operating under mild to severe conditions. They are designed to meet or exceed the requirements of DIN 51506 VD-L standards and demonstrate high resistance to oxidation and denosit formation DIN 51506 VD-L



AMIC ROTA T series

SAMIC ROTA T series are high performance zinc free turbine oils formulated with high quality hydro treated base stocks and

Samic Rota T	Test Method	Units	32	46	68
ISO Viscosity Grade	ISO 3448		32	46	68
Density @ 15 °C	ASTM D 4052	gm/cc	0.870	0.872	0.875
Viscosity @ 40 °C	ASTM D 445	c5t	32.2	46.5	68.8
Viscosity @ 100 ℃	ASTM D 445	cSt	5.62	7.10	9.16
Viscosity Index	ASTM D 2270		112	110	108
Pour Point	ASTM D 97	*C	-30	-30	-27
Flash Point (COC)	ASTM D 92	*C	224	230	234
TOST, Hours to 2 NN	ASTM D 943	Hours	>10,000	>10,000	>10,000
Copper Strip Corrosion	ASTM D 130		1A	1A	1A
Rust Characteristics Proc B	ASTM D 665		Pass	Pass	Pass
Air Release , 50 °C	ASTM D 3427	mins	3	4	4
Foam Seq I,II,III	ASTM D 892	ml/ml	0/0	0/0	10/0
Demulsibility 40/40/0	ASTM D 1401	min	10	10	10

dvanced additive technology, to provide exceptional uipment protection and reliability in most non-geared team turbine systems and low to moderate duty gas rbines. They are designed to demonstrate excellenxidation stability, resistance to sludge & varnish rmation, protection against rust & corrosion, lov aming and excellent demulsibility.

- DIN 51515 Part-1 & Part-2
- MANTurbo QualityRequirementfor Lubricants
 Siemens(non-EP)- TLV 901304,TLV 901305
- GE GEK 28413B/27070/32568J/107395A/46506E
- British Standard BS489 & Solar ES9-224W
- AlstomPowerTurbo HTGD 90-117V0001X(non-EP)

	SAMIU THE	KIVI FLL	טונ	
	Samic Therm Fluid	Test Method	Unit	
	ISO Viscosity Grade	ISO 3448		
	Density @ 15 °C	ASTM D 4052	gm/d	
	Viscosity @ 40 °C	ASTM D 445	cS:	
_ ^	Viscosity @ 100 °C	ASTM D 445	cS1	
(SAME)	Viscosity Index	ASTM D 2270		
SHMIC	Pour Point	ASTM D 97	.с	
ARTECENTA	Flash Point (COC)	ASTM D 92	.c	
	Fire Point (COC)	ASTM D92	•с	
	Micro-Conradson Residue	ASTM D 4530	%w	
	Copper Strip Corrosion	ASTM D 130	-	
	Rust Characteristics Proc B	ASTM D 665	-	
	Foam Seq I,II,III	ASTM D 892	ml/r	

46 68 SAMIC THERM FLUID series are high performance heat 32.4 46.8 98 98 230 268 0.05 (max) 0.05 (max) 18 deposit formation or increase in viscosity.

transfer oils formulated with highly refined base stocks 68.9 intended for use in closed and indirect heating installations. They provide exceptional resistance to thermal cracking and chemical oxidation, thus flash point of these oils will not decrease significantly in service. Moreover, they are thermally stable and are o.05 (max) capable of an extremely long service oil life, without



SAMIC TRANSFLUID STOU/UTTO series
Samic Transfluid STOU/UTTO series are extra high performance multipurpose tractor lubricants formulated from highly refined base stocks and advanced tech nology additive system, to meet or exceed transmission and hydraulic fluid requirements. These oils are engineered to deliver the varied lubricant performance properties required in severe duty applications of agricultural and construction equipment drive trains. Moreover it is particularly well suited for reducing wet UTTO Specifications:

branc and rovici raio	()				
Samic Transfluid STOU/UTTO	Test Method	Units	10W30	15W-40	20W-40
Density @ 15 °C	ASTM D 4052	gm/cc	0.870	0.875	0.888
Viscosity @ 40 °C	ASTM D 445	cSt	59	103	107
Viscosity @ 100 °C	ASTM D 445	cSt	9.6	14.30	14.30
Viscosity Index	ASTM D 2270	-	146	142	136
Pour Point	ASTM D 97	°C	-39	-36	-33
Flash Point (COC)	ASTM D 92	°C	212	225	230
CCS Viscosity	ASTM D 5293	cP	5550 @ -25 °C	6000 @ -20 °C	6020 @ -15 °C
Zinc	ASTM D 4951	%wt	0.12 (Min) -	0.12 (Min) -	0.12 (Min) -
ZIIIC	M31W1 D 4931	20WL	0.19 (max)	0.19 (max)	0.19 (max)

- API GL-4/ Allison C-4/ Caterpillar TO-2 Massey Ferguson: M1135,43,45
- John Deere J20C/J20D
- Ford M2C134D/ M2C86B.C
- JI Case/Case Int: MS 1204.6.7.9 CNH MAT 3525.3526

Engine Oil Specifications: API CG-4,CF-4,CF,CE/SF,CD/SF STOU Specifications ZF TE-ML 06A, 06B, 06C, 07B/

 MB 228.1/227.1 & ACEA E3 Ford M2C159B,C/New Holland Hydraulic Oil Specifications

82009201,2,3
 Massey Ferguson: M1139,44,45
 M2950S/I-280-S



SAMIC

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Samic Trans HD series is a range of extra high performance transmission and drive train oils, formulated with high quality base stocks

SamicTrans HD	Test Method	Units	10W	30	50	60
Density @ 15 °C	ASTM D 4052	gm/cc	0.880	0.892	0.904	0.910
Viscosity @ 100 °C	ASTM D 445	cSt	5.6	11.6	20.5	25.6
Viscosity @ 40 °C	ASTM D 445	cSt	35	108	254	356
Viscosity Index	ASTM D 2270	-	96	95	95	95
Pour Point	ASTM D 97	°C	-33	-18	-12	-12
Flash Point (COC)	ASTM D 92	°C	214	230	242	242

equirements of Caterpillar TO-4 specification. Suitable provide heavy duty performance benefits in power hift transmissions, gearboxes, final drives and high ress- ure hydraulic applications. It helps in maximizing he productivity in construction, quarrying and mining equipment operating under severe conditions.

and advanced additive system to meet or exceed the

- API GI -4/ Allison C-4
- Caterpillar TO-4/TO-4M/TO-2 Komatsu KES 07.868.1
- · Suitable Hydraulics and Wet Brakes
- · Sperry Vickers/Eaton: M2950S, I-280-S



SAMIC XTREME COMPACT GREASE EP series are high performance greases, formulated with lithium complex based thickeners, high viscosity index r, rusting and water washout. They are available in NLGI

ous and extreme pressure dedictive system to provide executive protection against we								
Samic Xtreme Compact	Test Method	Units	EP 2	EP 3				
NLGI Grade	ASTM D 217		2	3				
Thickener Type			Lithium Complex	Lithium Complex				
Penetration, Worked @ 25 °C	ASTM D 217	0.1mm	265-295	220-250				
Viscosity @ 40 °C	ASTM D 445	cSt	220	220				
Dropping Point	ASTM D 566	°C	230 (min)	230 (min)				
4-Ball Wear, Scar	ASTM D 2266	mm	0.4	0.4				
A-Rall Weld Load	ASTM D 2506	Vσ	215	215				

grades ranging from 00 to 3 with base oil viscosity of ISO VG 220. They are suitable for most types of Automotive and Industrial applications, including heavy-duty Marine applications where high emperatures, heavy loads and extreme unit pressures are present. EP 1, 2, 3 & 2 Molygreases are suitable for operating temperatures range from -20°C to 140°C, while EP 00 & 0 greases are suitable for operating temperatures range from -25°C to 130°C.

- DIN 51502: KP2N-20
- ISO 6743-9: L-XBEHB-2/3



SAMIC COMPACT MOLY GREASE EP series are high performance greases, formulated with lithium based thickeners fortified with Molybdenum ure additive system to provide excellent protection against wear, rusting

Samic Compact Moly Grease	Test Method	Units	EP 2	EP 3
NLGI Grade	ASTM D 217		2	3
Thickener Type			Li-Moly	Li-Moly
Penetration, Worked @ 25 °C	ASTM D 217	0.1mm	265-295	220-250
Viscosity @ 40 °C	ASTM D 445	cSt	320	320
Dropping Point	ASTM D 566	°C	190 (min)	190 (min)
4-Ball Wear, Scar	ASTM D 2266	mm	0.4	0.4
4-Ball Weld Load	ASTM D 2596	Kg	315	315

SAMIC COMPACT GREASE EP series are high performance greases, formulated with lithium based thickeners and extreme pressure additive

Samic Compact Grease	Test Method	Units	EP 000	EP 00	EP 0	EP 1	EP 2	EP 3
NLGI Grade	ASTM D 217		000	00	0	1	2	3
ISO Grade	6743-9		L-XCBEB 000	L-XCBEB 00	L-XBCEB 0	L-XBCEB 1	L-XBCEB 2	L-XBCEB 3
DIN Grade	51502		GP000G -30	GP00G- 30	MP0K -25	KP1K-30	KP2K -25	KP3K -20
Thickener Type	-		Lithium	Lithium	Lithium	Lithium	Lithium	Lithium
Penetration, Worked @ 25 °C	ASTM D 217	0.1 mm	445-475	400-430	355-385	310-340	265-295	220-250
Viscosity @ 40 °C	ASTM D 445	cSt	460	320	160	160	160	160
Dropping Point	ASTM D 566	°C	-	-	190 (min)	190 (min)	190 (min)	190 (min)
4-Ball Wear, Scar	ASTM D 2266	mm	0.5	0.5	0.4	0.4	0.4	0.4
4-Ball Weld Load	ASTM D 2596	Ke	240	240	250	250	250	250

SAMIC COMPACT GREASE MP series

SAMIC COMPACT GREASE MP series are high performance greases, formulated with lithium based thickeners and an ISO VG 150 mineral base

			,	
Samic Compact Grease	Test Method	Units	MP 2	MP 3
NLGI Grade	ASTM D 217		2	3
Thickener Type			Lithium	Lithium
Color	Visual		Cream	Cream
Texture	Visual		Smooth	Smooth
Penetration, Worked @ 25 °C, 60 strokes	ASTM D 217	0.1mm	265-295	220-250
Viscosity @ 40 °C	ASTM D 445	cSt	150	150
Dropping Point	ASTM D 566	°C	190 (min)	190 (min)
4-Ball Wear, Scar test	ASTM D 2266	mm	0.6	0.6

stock to provide added protection against wear, usting and water washout. They are available in NLGI grades 2 & 3, which are suitable for general ourpose automotive applications at moderate emperatures and loads. The suitable operating mperature range is from -20°C to 120°C. It does ot contain lead or any other heavy metals which re considered harmful to human health and

- nvironment. • DIN 51502: K2K-25/ K3K-20
 - ISO 6743-9: L-XBCEA-2/3

