

PENTOSIN TECHNICAL FLUIDS

CAR AND LIGHT TRUCK APPLICATIONS

2014 CATALOG



NOW INCLUDING

Antifreeze A2/A3/A4



ABBREVIATIONS KEY

4WD	Four Wheel Drive	H.D.	Heavy Duty
4WS	Four Wheel Steering	Hyd.	Hydraulic
ABC	Active Body Control	I.D.	Inside Diameter
ABS	Anti-Lock Brake System	IAQS	Interior Air Quality System
AC	Air Conditioning	Incl.	Includes
ADS	Adaptive Damping System	Inj.	Injection
ALT	Alternator	Inst.	Installed
Amp	Amperage	JS	Jackshaft
AP	Air Pump	L	Liter
Assy.	Assembly	Lbs.	Pounds
ATF	Automatic Transmission Fluid	LCI	Life Cycle Impulse
Auto.	Automatic	Man.	Manual
Aux.	Auxiliary	Mech.	Mechanical
AWD	All Wheel Drive	ml	Milliliter
Bbl.	Barrel	mm	Millimeter
Bal. Shaft	Balance Shaft	No.	Number
Calif.	California	O.C.	Outside Circumference
Cam.	Camshaft	O.D.	Outside Diameter
Carb.	Carburetor	OHV	Overhead Valve
Compr.	Compressor	Pass.	Passenger
Cont'd.	Continued	Pcs.	Pieces
CS	Crankshaft	Pkg.	Package
CV	Constant Velocity	PS	Power Steering
CVT	Continuously Variable Transmission	Rad.	Radiator
Cyl.	Cylinder	RWD	Rear Wheel Drive
Desig.	Designation	SHO	Super High Output
Dia.	Diameter	SOHC	Single Overhead Cam
DOHC	Dual Overhead Cam	Std.	Standard
DSC	Dynamic Stability Control	Stg.	Steering
EDC	Electronic Damper Control	Susp.	Suspension
EHPS	Electro-Hydraulic Power Steering	Temp.	Temperature
EPS	Electronic Power Steering	Trans.	Transmission
Eng.	Engine	T-Stat	Thermostat
Eqpt.	Equipment	v	Volts
ESC	Electronic Stability Control	VIN	Vehicle Identification Number
ESP	Electronic Stability Program	VP	Vacuum Pump
Exc.	Except	VTEC	Variable Valve Timing & Lift Electronic Control
FWD	Front Wheel Drive	VVT	Variable Valve Timing
Ga.	Gallon	w/	With
GVW	Gross Vehicle Weight	w/o	Without
H.O.	High Output	WP	Water Pump
HP	Horsepower		

PRODUCT DATA SHEET

ANTIFREEZE



PENTOFROST A1

Antifreeze Specially Formulated For Asian Vehicles – Concentrate

DESCRIPTION

Pentofrost A1 is a phosphated organic acid technology (phosphated OAT); which is categorized as HOAT (hybrid organic acid technology) in the US market. Pentofrost A1 is suitable for all Asian vehicles using “red” Antifreeze/Coolant.

Pentofrost A1 does not contain any silicate, borate, nitrite or amine containing additives since these may harm your Asian vehicle. Do not mix with other coolants (especially silicated coolants), as this may cause gel formation and clog your radiator.

Pentofrost A1 is an antifreeze **CONCENTRATE** for Asian vehicle applications in water-cooled engines. Must mix with distilled water. It contains phosphates and organic salts to protect all materials used in cooling systems for Asian vehicles. Pentofrost A1 is mixable with all phosphated OATs. Meets ASTM D-3306.

PRODUCT ATTRIBUTES

Appearance	Red
Density at 20°C	1127 kg/m ³
Freezing Point	<-15°C/<5°F
Flash Point	128°C/262°F
Boiling Point	>173.5°C/>344.3°F
Water Content	Max 5%
pH Value	7.9
Mixing Ratio With Water	50/50
Boiling Point With Water	109°C/228°F
Freezing Point With Water	-37.6°C/-35.7°F

SIZE	PART NUMBER	GTIN-12
1 US Gallon	8115203	843266031575
1 Canada Gallon	8115204	843266036549

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
Toyota, Lexus, Scion	00272-1LLAC
Toyota, Lexus, Scion	00272-1LLAC-01

PRODUCT DATA SHEET

ANTIFREEZE



PENTOFROST A2

Antifreeze Specially Formulated For Asian Vehicles – Concentrate

DESCRIPTION

Pentofrost A2 is a phosphated organic acid technology (phosphated OAT); which is categorized as HOAT (hybrid organic acid technology) in the US market. Pentofrost A2 is suitable for all Asian vehicles using “green” Antifreeze/Coolant.

Pentofrost A2 does not contain any silicate, borate, nitrite or amine containing additives since these may harm your Asian vehicle. Do not mix with other coolants (especially silicated coolants), as this may cause gel formation and clog your radiator.

Pentofrost A2 is an antifreeze **CONCENTRATE** for Asian vehicle applications in water-cooled engines. Must mix with distilled water. It contains phosphates and organic salts to protect all materials used in cooling systems for Asian vehicles. Pentofrost A2 is mixable with all phosphated OATs. Meets ASTM D-3306.

PRODUCT ATTRIBUTES

Appearance	Green
Density at 20°C	1127 kg/m ³
Freezing Point	<-15°C/<5°F
Flash Point	128°C/262°F
Boiling Point	>173.5°C/>344.3°F
Water Content	Max 5%
pH Value	7.9
Mixing Ratio With Water	50/50
Boiling Point With Water	109°C/228°F
Freezing Point With Water	-37.5°C/-35.5°F

SIZE	PART NUMBER	GTIN-12
1 US Gallon	8115205	843266042694
1 Canada Gallon	8115206	843266042700

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
Nissan, Infiniti	999MP-AF000P
Kia, Hyundai	00232-19010
Mazda	0000-77-501E-02

OE REFERENCE NUMBERS/RECOMMENDATIONS CONT.

Make	Reference Number
Subaru	SOA868V9210
Mitsubishi	MZ311986

ANTIFREEZE



PENTOFROST A3

Antifreeze Specially Formulated For Asian Vehicles – 50/50 Pre-Diluted

DESCRIPTION

Pentofrost A3 is a phosphated organic acid technology (phosphated OAT); which is categorized as HOAT (hybrid organic acid technology) in the US market. Pentofrost A3 is suitable for all Asian vehicles using “blue” Antifreeze/Coolant.

Pentofrost A3 does not contain any silicate, borate, nitrite or amine containing additives since these may harm your Asian vehicle. Do not mix with other coolants (especially silicated coolants), as this may cause gel formation and clog your radiator.

Pentofrost A3 is a **PRE-DILUTED** antifreeze for Asian vehicle applications in water-cooled engines. It contains phosphates and organic salts to protect all materials used in cooling systems for Asian vehicles. Pentofrost A3 is mixable with all phosphated OATs. Meets ASTM D-3306.

PRODUCT ATTRIBUTES

Appearance	Blue
Density at 20°C	1140 kg/m ³
Flash Point	129°C/264°F
Water Content	Max 52%
pH Value	7.9
Pre-Diluted	50/50
Boiling Point (With Water)	109°C/228°F
Freezing Point (With Water)	-37.6°C/-35.7°F

SIZE	PART NUMBER	GTIN-12
1 US Gallon	8115207	843266042717
1 Canada Gallon	8115208	843266042724

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
Honda, Acura	OL999-9011
Nissan, Infiniti	999MP-L25500P
Subaru	SOA868V9270
Mitsubishi	MZ320125

PRODUCT DATA SHEET

ANTIFREEZE



PENTOFROST A4

Antifreeze Specially Formulated For Asian Vehicles – 50/50 Pre-Diluted

DESCRIPTION

Pentofrost A4 is a phosphated organic acid technology (phosphated OAT); which is categorized as HOAT (hybrid organic acid technology) in the US market. Pentofrost A4 is suitable for all Asian vehicles using “pink” Antifreeze/Coolant.

Pentofrost A4 does not contain any silicate, borate, nitrite or amine containing additives since these may harm your Asian vehicle. Do not mix with other coolants (especially silicated coolants), as this may cause gel formation and clog your radiator.

Pentofrost A4 is a **PRE-DILUTED** antifreeze for Asian vehicle applications in water-cooled engines. It contains phosphates and organic salts to protect all materials used in cooling systems for Asian vehicles. Pentofrost A4 is mixable with all phosphated OAT's. Meets ASTM D-3306.

PRODUCT ATTRIBUTES

Appearance	Pink
Density at 20°C	1140 kg/m ³
Flash Point	129°C/264°F
Water Content	Max 52%
pH Value	7.9
Pre-Diluted	50/50
Boiling Point (With Water)	109°C/228°F
Freezing Point (With Water)	-37.4°C/-35.3°F

SIZE	PART NUMBER	GTIN-12
1 US Gallon	8115209	843266042731
1 Canada Gallon	8115210	843266042748

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
Toyota, Lexus, Scion	00272-SLLC2

PRODUCT DATA SHEET

ANTIFREEZE



PENTOFROST ++

Phosphate-Free Multipurpose Antifreeze

DESCRIPTION

Pentofrost ++ is an environmentally friendly Antifreeze concentrate for multipurpose applications in water-cooled engines. It does not contain any nitrites, amines or phosphorous containing additives. Pentofrost ++ protects all material used in cooling systems and is recommended for non-ferrous metals and year-round use. Pentofrost ++ can be used where G12+ is required. Meets ASTM D-3306.

SIZE	PART NUMBER	GTIN-13
1.5 Liter	8112106	4008849451126
5 Liter	8112206	4008849451119

PRODUCT ATTRIBUTES

Appearance	Pink & Clear
Density at 20°C	1120 kg/m ³
Flash Point	>110°C/>230°F
Boiling Point	>160°C/>320°F
pH-Value	8
Mixing Ratio With Water	50/50
Boiling Point With Water	109°C/228.2°F
Freezing Point With Water	-38°C/-36.4°F

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
Audi/Volkswagen	G 012 A8G M1
Audi/Volkswagen	G 012 A8G M8
Audi/Volkswagen	G 012 A8G M9
Porsche	000 043 301 03
Porsche	000 043 301 04
Porsche	000 043 301 05

APPROVALS/SPECIFICATIONS

Organization Name	Specification Met
Audi/Volkswagen	TL 774 G
Bentley	Bentley approved
Lamborghini	Lamborghini approved

PRODUCT DATA SHEET

ANTIFREEZE



PENTOFROST NF

Environmentally Friendly Nitrite-Free Antifreeze

DESCRIPTION

Pentofrost NF is an environmentally friendly Antifreeze concentrate for multipurpose applications in water-cooled engines. It does not contain any nitrites, amines or phosphorous containing additives. Pentofrost NF protects all material used in cooling systems and is recommended for non ferrous metals and year-round use. Meets ASTM D-3306.

PRODUCT ATTRIBUTES

Appearance	Blue, Bright & Clear
Density at 20°C	1100 kg/m ³
Freezing Point	-12°C/ 10.4°F
Flash Point	111°C/231.8°F
Boiling Point	197°C/386.6°F
pH-Value	7.7
Mixing Ratio With Water	50/50
Boiling Point With Water	109°C/228.2°F
Freezing Point With Water	-38°C/-36.4°F

SIZE	PART NUMBER	GTIN-13
1.5 Liter	8114117	4008849400582

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number	Make	Reference Number
Audi/Volkswagen	ZVW 237 105	Mercedes Benz	Q 1 03 0002
BMW/MINI	82 14 1 467 704	Porsche	000 043 203 78
BMW/MINI	81 22 9 407 454	Porsche	000 043 300 88
BMW/MINI	81 22 9 407 455	Porsche	000 043 300 31
BMW/MINI	81 22 9 407 456	Porsche	000 043 203 79
Jaguar	JLM 11979/1	Saab	02 68 177
Land Rover	PDA500300	Volvo	94 34 699
Land Rover	PDS500310	Volvo	13 81 081

ANTIFREEZE



PENTOFROST SF

Environmentally Friendly Silicate-Free Antifreeze

DESCRIPTION

Pentofrost SF is an environmentally friendly Antifreeze concentrate for multipurpose applications in water-cooled engines. It does not contain any nitrites, amines or phosphorous containing additives. In addition, it does not contain any Silicates. Pentofrost SF protects all material used in cooling systems and is recommended for non ferrous metals and year-round use. Meets ASTM D-3306.

PRODUCT ATTRIBUTES

Appearance	Pink & Clear
Density at 20°C	1120 kg/m ³
Flash Point	>110°C/>230°F
Boiling Point	>175°C/>347°F
pH-Value	8
Mixing Ratio With Water	50/50
Boiling Point With Water	109°C/228.2°F
Freezing Point With Water	-38°C/-36.4

SIZE	PART NUMBER	GTIN-13
1.5 Liter	8114107	4008849400544

OE REFERENCE NUMBERS/RECOMMENDATIONS	
Make	Reference Number
Audi/Volkswagen	G 012 A8F M1
Audi/Volkswagen	G 012 A8F M8
Audi/Volkswagen	G 012 A8F M9
Audi/Volkswagen	G 012 A8F A1
Audi/Volkswagen	G 012 A8F A8
Jaguar	JLM20972/1
Land Rover	STC 50529
Land Rover	STC 50530
Land Rover	STC 50527
Porsche	000 043 203 78
Porsche	000 043 300 88
Porsche	000 043 300 31

OE REFERENCE NUMBERS/RECOMMENDATIONS CONT.	
Make	Reference Number
Porsche	A 000 043 203 79
Saab	12799123
Saab	12799124

APPROVALS/SPECIFICATIONS	
Organization Name	Specification Met
Audi/Volkswagen	TL 774 F
Ford	Ford approved
Jaguar	Jaguar approved
Land Rover	Land Rover approved
GM/Opel/Saab/Vauxhall	GM/Opel/Saab/Vauxhall approved
Zeppelin/Caterpillar	Zeppelin/Caterpillar approved

PRODUCT DATA SHEET

BRAKE FLUID



PENTOSIN SUPER DOT 4

Corrosion Resistant Universal Brake Fluid

DESCRIPTION

Pentosin Super DOT 4 is a brake fluid of superior quality for universal use in modern brake systems and ideal for vehicles with ABS systems. Pentosin Super DOT 4 offers safety against vapor lock; it has excellent resistance to absorbing and retaining water and provides superior corrosion resistance.

SIZE	PART NUMBER	GTIN-13
0.25 Liter	1204112	4008849204036
0.5 Liter	1204114	4008849204067
1 Liter	1204116	4008849204074
5 Liter	1204204	4008849204159

PRODUCT ATTRIBUTES

Appearance	Yellow & Clear
Density at 20°C	1065 kg/m ³
Kinematic Viscosity at 40°C	7.9 mm ² /s
Kinematic Viscosity at 20°C	14.5 mm ² /s
Kinematic Viscosity at -40°C	≤ 1500 mm ² /s
Melting Point	>-50°C/>-58°F
Flash Point	130°C/266°F
Ignition Temperature	>200°C/>392°F
Boiling Point	≥265°C/≥509°F
Wet Boiling Point	≥165°C/≥329°F
pH Value	8

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
Audi/Volkswagen	B 000 700 A1
Audi/Volkswagen	B 000 700 A3
Audi/Volkswagen	B 000 700 A6
BMW/Mini	81 22 9 407 510
BMW/Mini	81 22 9 407 511
BMW/Mini	81 22 9 407 512
BMW/Mini	81 22 9 407 513
Land Rover	LRNDOT4
Mercedes Benz	000 989 08 07 10
Mercedes Benz	000 989 08 07 11

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
Mercedes Benz	000 989 08 07 19
Porsche	000 043 203 66
Porsche	000 043 203 67

APPROVALS/SPECIFICATIONS

Organization Name	Specification Met
MAN	TUC 6518/07
FMVSS	No. 116 DOT 4
ISO	4925 Class 4
SAE	J1704

PRODUCT DATA SHEET

BRAKE FLUID



PENTOSIN DOT 4 LV

Low Viscosity/Cold Conditions Brake Fluid

DESCRIPTION

Pentosin DOT 4 LV is a special brake fluid of highest DOT 4 performance levels and extremely low viscosity at cold temperatures.

It offers safety against vapor lock; it has excellent resistance to absorbing and retaining water and provides superior corrosion resistance. Pentosin DOT 4 LV Brake Fluid is ideal for all modern vehicles with ESP and ABS. DOT 4 LV can be used in all vehicles that require DOT 4 fluid.

SIZE	PART NUMBER	GTIN-13
1 Liter	1224116	4008849207228
5 Liter	1224204	4008849205156

PRODUCT ATTRIBUTES

Appearance	Yellow & Clear
Density at 20°C	1062 kg/m ³
Kinematic Viscosity at 40°C	6.4 mm ² /s
Kinematic Viscosity at -40°C	< 700 mm ² /s
Melting Point	>-50°C/>-58°F
Flash Point	>130°C/>266°F
Ignition Temperature	>200°C/>392°F
Boiling Point	≥265°C/≥509°F
Wet Boiling Point	≥170°C/≥338°F
pH Value	Slightly Alkaline

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
Audi/Volkswagen	B 000 750 M1 (MX)
Audi/Volkswagen	B 000 750 M2
Audi/Volkswagen	B 000 750 M3
Audi/Volkswagen	B 000 750 M7
Audi/Volkswagen	B 000 750 M9
BMW/Mini	83 13 0 139 895
BMW/Mini	83 13 0 139 896
BMW/Mini	83 13 0 139 897
BMW/Mini	83 13 0 139 898

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
BMW/Mini	83 13 0 139 899
Saab	93165410
GM	19299570

APPROVALS/SPECIFICATIONS

Organization Name	Specification Met
FMVSS	No. 116 DOT 4
ISO	4925 Class 6
SAE	J1704

PRODUCT DATA SHEET

HYDRAULIC
FLUID



PENTOSIN CHF 11S

Long-Life Synthetic Hydraulic Fluid For Modern Vehicles

DESCRIPTION

Pentosin CHF 11S is a synthetic high performance hydraulic fluid for life-time application in modern vehicle aggregates. Pentosin CHF 11S is especially designed for hydraulics in the automotive industry with the highest technical requirements such as in: power steering, level control, shock absorber, hydro-pneumatic suspension, stability and traction control, hydraulics for convertible tops, central lock systems, etc. It is suitable for all extreme conditions and guarantees full performance from -40°C to over 130°C system temperature.

SIZE	PART NUMBER	GTIN-13
1 Liter	1405116	4008849503016
5 Liter	1405216	4008849512346
20 Liter	1405208	4008849522345

PRODUCT ATTRIBUTES

Appearance	Dark Green
Density at 20°C	825 kg/m ³
Kinematic Viscosity at 100°C	6.0 mm ² /s
Kinematic Viscosity at 40°C	18.7 mm ² /s
Kinematic Viscosity at -40°C	1100 mm ² /s
Viscosity Index	313
Pour Point	-57°C/-70.6°F
Flash Point	160°C/320°F
Ignition Temperature	235°C/455°F

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
Audi/Volkswagen	G 002 000 A2
Bentley	RH 5000
BMW/Mini	82 11 1 468 041
BMW/Mini	82 11 0 148 132
BMW/Mini	83 29 0 429 576
Fendt	X 902 011 622
Mercedes-Benz	001 989 24 03 10
Mercedes-Benz	001 989 24 03 12
Mercedes-Benz	Q 1 32 0001
Porsche	000 043 203 33
Saab	3032 380
Volvo	11 61 529

APPROVALS/SPECIFICATIONS

Organization Name	Specification Met
Audi/VW	TL 52 146.00
Bentley	Bentley approved
BMW	BMW approved
Chrysler	Chrysler approved
Dodge	Dodge approved
Fendt	Fendt approved
Ford	Ford WSS-M2C204-A
GM/Opel	GM/Opel approved
Jeep	Jeep approved
MAN	M 3289
MB	345.0
Porsche	Porsche approved
Saab	Saab approved
Volvo	Volvo approved
ZF	ZF TE-ML 02K
DIN	51 524 T3
ISO	7308

**HYDRAULIC
FLUID**



PENTOSIN CHF 202

Long-Life Synthetic Hydraulic Fluid For Modern Vehicles

DESCRIPTION

Pentosin CHF 202 is a synthetic high performance hydraulic fluid for life-time application in modern vehicle aggregates. Pentosin CHF 202 is especially designed for hydraulics in the automotive industry with the highest technical requirements such as: power steering, clutch hydraulic, electro-hydraulic mechanisms of convertible tops, etc. It is suitable for all extreme ambient temperatures and guarantees full performance from -40°C to 130°C system temperature.

PRODUCT ATTRIBUTES

Appearance	Dark Green
Density at 15°C	840 kg/m ³
Kinematic Viscosity at 100°C	6.1 mm ² /s
Kinematic Viscosity at 40°C	19.3 mm ² /s
Kinematic Viscosity at -40°C	1400 mm ² /s
Viscosity Index	302
Pour Point	-54°C/-65.2°F
Flash Point	154°C/309.2°F
Ignition Temperature	245°C/473°F

SIZE	PART NUMBER	GTIN-13
1 Liter	8403107	4008849501425
5 Liter	1403206	4008849513343
20 Liter	1403208	4008849522369

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
Audi/Volkswagen	G 004 000 M2
Audi/Volkswagen	G 004 000 M7
Audi/Volkswagen	G 004 000 M8
Audi/Volkswagen	G 004 012
Porsche	000 043 206 56
Saab	93160548
Volvo	30741424
Land Rover	LR003401

APPROVALS/SPECIFICATIONS

Organization Name	Specification Met
DIN	51 524 T3
Ford	Ford approved
GM/Opel	B 040 2012
Hyundai	00232-19017
ISO	7308
Porsche	000 043 206 56
Volkswagen	TL 52 146.01
Volvo	30741424

MOTOR OIL



PENTO HIGH PERFORMANCE 5W-30

Fully Synthetic Fuel Economy Engine Oil

DESCRIPTION

5W-30 Pentosin High Performance is a fully synthetic high performance engine oil, developed for the most recent vehicles with extended oil service intervals. Pentosin HP can be used in all gasoline and diesel engines containing turbochargers as well as non-turbocharged vehicles requiring 5W-30.

PRODUCT ATTRIBUTES

Appearance	Amber & Clear
Density at 15°C	852 kg/m ³
Density at 20°C	849 kg/m ³
Kinematic Viscosity at 100°C	12.3 mm ² /s
Kinematic Viscosity at 40°C	73 mm ² /s
Viscosity Index	167
Dynamic Viscosity at -30°C	5900 mPa*s
Pour Point	-36°C/-32.8°F
Flash Point	220°C/428°F

SIZE	PART NUMBER	GTIN-13
1 Liter	8043107	4008849115233
5 Liter	8043206	4008849155239
20 Liter	8043208	4008849165221
60 Liter	8043303	4008849186226
210 Liter	8043305	4008849185229

OE REFERENCE NUMBERS

Make	Reference Number
Audi/Volkswagen	ZVW 352 167
BMW	83 21 0 144 450
BMW	83 21 0 144 452
BMW	07 51 0 017 866
Mini	83 21 0 144 468
Mercedes Benz	000 989 78 01
Mercedes Benz	000 989 83 01

APPROVALS/SPECIFICATIONS

Organization Name	Specification Met
Audi/Volkswagen	502.00, 505.00
BMW	LL-01
Mercedes Benz	229.5
Opel/GM	GM-LL-B-025
ACEA	A3/B4
API	SL/CF

MOTOR OIL



PENTO HIGH PERFORMANCE II 5W-40

Fully Synthetic Four-Season Engine Oil

DESCRIPTION

5W-40 Pentosin High Performance II is a newly formulated, fully synthetic, high performance engine oil. It was designed to be used in vehicles for all year use. This new formulation allows for longer changing intervals, and it preserves the catalyst, the environment, and maintains outstanding engine performance.

SIZE	PART NUMBER	GTIN-13
1 Liter	8042107	4008849113239
5 Liter	8042206	4008849153235
20 Liter	8042208	4008849155338
60 Liter	8042303	4008849155437
210 Liter	8042305	4008849153365

PRODUCT ATTRIBUTES

Appearance	Amber & Clear
Density at 15°C	850 kg/m ³
Density at 20°C	846 kg/m ³
Kinematic Viscosity at 100°C	13.9 mm ² /s
Kinematic Viscosity at 40°C	84 mm ² /s
Kinematic Viscosity at 20°C	168 mm ² /s
Viscosity Index	171
Dynamic Viscosity at -30°C	5700 mPa*s
Pour Point	-42°C/-43.6°F
Flash Point	240°C/464°F

OE REFERENCE NUMBERS

Make	Reference Number
Audi/Volkswagen	G 052 167 M2
Audi/Volkswagen	G 052 167 M4 (MX)
Audi/Volkswagen	G 052 167 M6 (MX)
BMW	81 22 9 407 002
BMW	81 22 9 407 029
BMW	81 22 9 407 547
Mercedes Benz	000 989 82 01

APPROVALS/SPECIFICATIONS

Organization Name	Specification Met
Audi/Volkswagen	502.00, 505.00, 505.01
BMW	LL-04
Ford	WSS-M2C917-A
Mercedes Benz	229.51
Porsche	A40
ACEA	A3/B3/B4/C3
API	SM/CF



PENTO SUPER PERFORMANCE III 5W-30

Fully Synthetic Extended Life Engine Oil

DESCRIPTION

5W-30 Pentosin Super Performance III is a newly formulated high performance engine oil designed to be used in vehicles that call for extended oil drain intervals. This oil is blended by using some of the most modern additives available and carefully selected synthetic based oils. By doing this the oil is considered a “Low SAPS” formulation that preserves catalysts, the environment, and maintains outstanding engine performance.

SIZE	PART NUMBER	GTIN-13
1 Liter	8078106	4008849115431
5 Liter	8078206	4008849115448
20 Liter	1078208	4008849115301
60 Liter	1078303	4008849111563
210 Liter	1078305	4008849111761

PRODUCT ATTRIBUTES

Appearance	Brown
Density at 15°C	852 kg/m ³
Density at 20°C	845 kg/m ³
Kinematic Viscosity at 100°C	11.9 mm ² /s
Kinematic Viscosity at 40°C	71.3 mm ² /s
Viscosity Index	166
Dynamic Viscosity at -30°C	5900 mPa*s
Pour Point	-39°C/-38.2°F
Flash Point	230°C/446°F

OE REFERENCE NUMBERS

Make	Reference Number
Audi/Volkswagen	G 052 195 M2
Audi/Volkswagen	G 052 195 M4
Audi/Volkswagen	G 052 195 M6
BMW	83 21 0 398 507
BMW/Mini	83 21 0 398 508
Mercedes Benz	000 989 89 01 10

APPROVALS/SPECIFICATIONS

Organization Name	Specification Met
Audi/Volkswagen	504.00, 507.00
BMW	LL-04
Mercedes Benz	229.51
ACEA	C3
API	Exceeds SM Class

**TRANSMISSION
FLUID**



PENTOSIN ATF1

Long-Life Fully Synthetic Automatic Transmission Fluid

DESCRIPTION

Pentosin ATF 1 is a fully synthetic high performance Automatic Transmission Fluid (ATF) for life-time application in automatic gear boxes. Pentosin ATF 1 is formulated by means of the best commercially available synthetic base oils and additive components. A high performance shear stable VI-Improver plus modern antiwear chemistry and friction modifiers guarantee a sound stable friction performance in modern automatic transmissions equipped with an electronically controlled converter clutch.

SIZE	PART NUMBER	GTIN-13
1 Liter	1058107	4008849131875
5 Liter	1058206	4008849135842
20 Liter	1058209	4008849133855
60 Liter	1058303	4008849135330
210 Liter	1058305	4008849135439

PRODUCT ATTRIBUTES

Appearance	Amber & Clear
Density at 20°C	850 kg/m ³
Kinematic Viscosity at 100°C	7.6 mm ² /s
Kinematic Viscosity at 40°C	38.0 mm ² /s
Viscosity Index	171
Dynamic Viscosity at -40°C	14000 mPa*s
Pour Point	-51°C/-59.8°F
Flash Point	>220°C/>428°F

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
Audi/Volkswagen	G052162 A1/A2/A6
BMW	83229407807
Citroen	Z000169756
Jaguar	JLM20238
Mercedes-Benz	0019892203
Peugeot	Z000169756
Porsche	99991754700
Rolls Royce	PL 31493PA

APPROVALS/SPECIFICATIONS

Organization Name	Specification Met
ZF	TE-ML 11B
Voith	DIWA, DIWA.2, DIWA.3, DIWA.3E, DIWA.5

Always consult the vehicle owner's manual to identify fluid specification requirements. MSDS available to professional repair technician upon request.

PRODUCT DATA SHEET

TRANSMISSION
FLUID



PENTOSIN FFL-2

Fully Synthetic Double Clutch (DSG) Transmission Fluid

DESCRIPTION

Pentosin FFL-2 is the only approved First Fill and Service Fill transmission fluid for the new generation of AVW double clutch gear transmissions (DSG). Pentosin FFL-2 is founded on a fully synthetic base oil technology for safe operation at even the highest thermal load. FFL-2 features a special clutch friction performance which makes it mandatory to be applied solely to the double clutch gear box – do not mix with any other gear oils.

SIZE	PART NUMBER	GTIN-13
1 Liter	1038107	4008849174216
20 Liter	1038208	4008849172212

PRODUCT ATTRIBUTES

Appearance	Amber & Clear
Density at 15°C	845 kg/m ³
Density at 20°C	841 kg/m ³
Kinematic Viscosity at 40°C	36.3 mm ² /s
Viscosity Index	173
Dynamic Viscosity at -40°C	12100 mPa*s
Pour Point	-51°C/-59.8°F
Flash Point	224°C/435.2°F
pH Value	N/A

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
Audi/Volkswagen	G 052 182 A2
Audi/Volkswagen	G 052 182 A6

APPROVALS/SPECIFICATIONS

Organization Name	Specification Met
Audi/Volkswagen	TL 521 82

**TRANSMISSION
FLUID**



PENTOSIN FFL-3

Fully Synthetic Double Clutch (PDK) Transmission Fluid

DESCRIPTION

Pentosin FFL-3 is the only approved First Fill and Service Fill transmission fluid for the new generation of Porsche double clutch gear transmissions (PDK). Pentosin FFL-3 is founded on a fully synthetic base oil technology for safe operation at even the highest thermal load. FFL-3 features a special clutch friction performance which makes it mandatory to be applied solely to the double clutch gear box – do not mix with any other gear oils.

PRODUCT ATTRIBUTES

Appearance	Amber & Clear
Density at 15°C	842 kg/m ³
Density at 20°C	840 kg/m ³
Kinematic Viscosity at 100°C	7 mm ² /s
Kinematic Viscosity at 40°C	34.7 mm ² /s
Kinematic Viscosity at 20°C	68 mm ² /s
Viscosity Index	168
Dynamic Viscosity at -40°C	7400 mPa*s
Pour Point	-54°C/-65.2°F
Flash Point	220°C/428°F
Boiling Point	>200°C/>392°F
pH Value	N/A

SIZE	PART NUMBER	GTIN-13
1 Liter	1052107	4008849174117
20 Liter	1052208	4008849174124

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
Porsche	000 043 207 29
Porsche	000 043 207 30

APPROVALS/SPECIFICATIONS

Organization Name	Specification Met
Porsche	0000043020
ZF	TE-ML 11

**TRANSMISSION
FLUID**



PENTOSIN FFL-4

Fully Synthetic Double Clutch (DCT) Transmission Fluid

DESCRIPTION

Pentosin FFL-4 is the only approved First Fill and Service Fill transmission fluid for the new generation of BMW double clutch gear transmissions (DCT). Pentosin FFL-4 is founded on a fully synthetic base oil technology for safe operation at even the highest thermal load. FFL-4 features a special clutch friction performance which makes it mandatory to be applied solely to the double clutch gear box – do not mix with any other gear oils.

SIZE	PART NUMBER	GTIN-13
1 Liter	1080107	4008849173332
20 Liter	1080208	4008849173431

PRODUCT ATTRIBUTES

Appearance	Amber & Clear
Density at 15°C	842 kg/m ³
Density at 20°C	839 kg/m ³
Kinematic Viscosity at 100°C	7 mm ² /s
Kinematic Viscosity at 40°C	34.7 mm ² /s
Kinematic Viscosity at 20°C	83.9 mm ² /s
Viscosity Index	168
Dynamic Viscosity at -40°C	7400 mPa*s
Pour Point	-54°C/-65.2°F
Flash Point	220°C/428°F
pH Value	N/A

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
BMW	83 22 0 440 214
BMW	83 22 2 147 477

PRODUCT DATA SHEET

TRANSMISSION
FLUID



PENTOSIN MTF 2

Fully Synthetic All-Purpose Manual Transmission Fluid

DESCRIPTION

Pentosin MTF 2 is a fully synthetic gear oil with all purpose performance for manual transmissions. This manual transmission oil is formulated with modern EP-additives, high shear stable VI improvers and premium synthetic base oils. Pentosin MTF 2 improves synchronization characteristics and was lowered to SAE 75W-80 for better fuel economy.

PRODUCT ATTRIBUTES

Appearance	Amber & Clear
Density at 15°C	851 kg/m ³
Density at 20°C	850 kg/m ³
Kinematic Viscosity at 100°C	7.7 mm ² /s
Kinematic Viscosity at 40°C	38.3 mm ² /s
Kinematic Viscosity at 20°C	88 mm ² /s
Viscosity Index	177
Dynamic Viscosity at -40°C	7600 mPa*s
Pour Point	<-60°C/<-76°F
Flash Point	228°C/442.4°F
Ignition Temperature	330°C/626°F
pH Value	N/A

SIZE	PART NUMBER	GTIN-13
1 Liter	8056107	4008849112331
5 Liter	8056206	4008849135545

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
BMW	83 22 0 309 031
BMW	83 19 2 344 627
Hyundai	00232-19041
Hyundai	00232-19042

APPROVALS/SPECIFICATIONS

Organization Name	Specification Met
API	GL-4

PRODUCT DATA SHEET

TRANSMISSION
FLUID



PENTOSIN FFL RACING

Double Clutch Transmission Fluid for Nissan GT-R

DESCRIPTION

Pentosin FFL Racing is a special fully synthetic transmission fluid which has been developed for the application in the new Nissan GT-R R35 double clutch transmission (DCT). This transmission is a highly sophisticated, complex high-tech aggregate which puts extremely demanding requirements onto the transmission fluid. To avoid noisy stick slip effects (shudder) of the clutches when starting and at high temperatures, Pentosin FFL Racing's friction characteristics have been adjusted accordingly. All crucial DCTF performance criteria as e.g. cold flow performance, shear stability, evaporation loss and wear stability have been lifted to highest possible levels.

PRODUCT ATTRIBUTES

Appearance	Dk Yellow & Clear
Density at 15°C	844 kg/m ³
Density at 20°C	840 kg/m ³
Kinematic Viscosity at 40°C	31.6 mm ² /s
Viscosity Index	166
Dynamic Viscosity at -40°C	6400 mPa*s
Pour Point	<-60°C/-76°F
Flash Point	223°C/433.40°F
pH Value	N/A

SIZE	PART NUMBER	GTIN-13
20 Liter	1098208	4008849173530

OE REFERENCE NUMBERS/RECOMMENDATIONS

Make	Reference Number
Nissan	999MP-GTRT00P