

BELL CHEMICALS

PRODUCT CATALOG

Complete English translation of all product data in the official Bell Chemicals catalog



Source catalog: Bell Chemicals d.o.o. (official product catalog). English translation prepared 11 August 2026.

About this English edition

This document is a faithful English-language presentation of the product information contained in Bell Chemicals' official catalog. Product names, numerical values, standard designations, quality levels and manufacturer specifications/approvals are reproduced from the source catalog. No additional approval is implied where the source does not list one. For commercial or regulatory decisions, the current technical data sheet (TDS), safety data sheet (SDS) and manufacturer approval database should be checked.

Company ISO certifications

Bell Chemicals currently lists EN ISO 9001:2015 and EN ISO 14001:2015 on its official website. The older source catalog also states that ISO/IEC 17025 laboratory accreditation was in progress at the time of publication; this translation does not present ISO/IEC 17025 as a completed certification.

How product approvals are shown

The heading "Specifications / approvals" includes the exact kinds of references used by Bell Chemicals: ISO, DIN, API, ACEA, SAE, ASTM, FMVSS, VW, Mercedes-Benz, MAN, Volvo, ZF, Allison, Caterpillar and other OEM or industry specifications. They are not all ISO standards, so they are intentionally kept under one neutral heading.

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Total products translated from the source catalog: 36.

DIESEL ENGINE OILS

BELL TOP TIR GOLD EXTRA SAE 10W-40

Premium synthetic-based XHPD (Extra High Performance Diesel) engine oil.



Application / product description

- For the lubrication of the latest high-performance diesel engines installed in commercial vehicles and buses.
- Recommended for modern commercial-vehicle diesel engines with exhaust gas recirculation (EGR) systems designed for reduced exhaust emissions.
- Suitable for agricultural, construction and mining machinery meeting EURO IV, V and VI exhaust-emission standards.
- The new low-ash additive package, with low sulfated-ash content, supports longer service life and efficiency of exhaust after-treatment systems such as diesel particulate filters (DPF).

Physical & chemical characteristics

Property	10W-40
SAE grade	10W-40
Kinematic viscosity at 100°C, mm²/s	15.2
Viscosity index	145
Flash point, °C	240
Pour/solidification point, °C	-24

All values are average values and may be used for guidance only.

Specifications / approvals

ACEA E9-12 (2012)
API CI-4/CH-4/CG-4
MAN M 3477
MTU Type 3.1
Deutz DQC IV-10 LA

ACEA E7-12 (2012)
MB-Approval 229.1
MAN M 3275
Volvo VDS-3
Scania Low Ash

Packaging & storage

Packaging: Plastic containers of 1 and 5 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 1 of 36.

DIESEL ENGINE OILS

BELL TOP TIR GOLD SAE 10W-40 / SAE 15W-40

Premium SHPD (Super High Performance Diesel) engine oil.



Application / product description

- For all types of diesel engines installed in commercial vehicles, including trucks, buses, mining, construction and agricultural machinery, operating under normal and severe service conditions.
- Very high performance; belongs to the SHPD class with very long service capability.
- May also be used in engines meeting EURO IV and EURO V exhaust-emission requirements where no limitation of chemical composition is specified (engines without DPF).
- Oil-change interval according to the engine manufacturer's recommendations.

Physical & chemical characteristics

Property	10W-40	15W-40
SAE grade	10W-40	15W-40
Kinematic viscosity at 100°C, mm²/s	14.5	15.2
Viscosity index	139	145
Flash point, °C	234	240
Pour/solidification point, °C	-29	-24

All values are average values and may be used for guidance only.

Specifications / approvals

ACEA E7-12 (2012)	API CI-4
API CH-4	API CG-4
API CF-4	API CF
API SL	MB-Approval 229.1
Volvo VDS-3	Renault Truck RLD-2
Mack EO-N	Mack EO-M Plus
MAN M 3275	Cummins CES 20076
Cummins CES 20077	Cummins CES 20078
CAT ECF-1-a	CAT ECF-2
MTU Type 2	Deutz DQC III-10
Detroit Diesel DDC 93K215	Global DHD-1

Packaging & storage

Packaging: Plastic containers of 1 and 5 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 2 of 36.

BELL SUPER LONG SAE 15W-40

Very high-performance SHPD (Super High Performance Diesel) engine oil.



Application / product description

- For all types of diesel engines in commercial vehicles (trucks, buses, mining, construction and agricultural machinery) operating under normal and severe conditions.
- Provides excellent wear protection and extended oil-change intervals.
- May also be used in engines meeting EURO IV and EURO V exhaust-emission requirements where no limitation of chemical composition is specified (without DPF).
- Oil-change interval according to the engine manufacturer's recommendations.

Physical & chemical characteristics

Property	15W-40
SAE grade	15W-40
Kinematic viscosity at 100°C, mm ² /s	15.5
Viscosity index	140
Flash point, °C	225
Pour/solidification point, °C	-30

All values are average values and may be used for guidance only.

Specifications / approvals

ACEA E7-12 (2012)	API CH-4
API CG-4	API CF-4
API CF	API SJ
MB-Approval 228.3	Volvo VDS-3
Renault Truck RLD-2	Mack EO-N
Mack EO-M Plus	MAN M 3275
Cummins CES 20076	Cummins CES 20077
CAT ECF-1-a	MTU Type 2
Detroit Diesel DDC 93K215	

Packaging & storage

Packaging: Plastic containers of 1 and 5 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 3 of 36.

DIESEL ENGINE OILS

BELL EDT SAE 30 / SAE 40 / SAE 15W-40

Economical monograde or multigrade mineral engine oils.



Application / product description

- For all types of diesel engines, naturally aspirated or turbocharged, in commercial vehicles such as trucks, buses, mining, construction and agricultural machinery under normal operating conditions.
- Provides reliable operation in the climatic conditions for which the source catalog was intended.
- Recommended for older-generation vehicles.
- Oil-change interval according to the engine manufacturer's recommendations.

Physical & chemical characteristics

Property	10W	15W-40	20W-50	30	40	50
SAE grade	10W	15W-40	20W-50	30	40	50
Kinematic viscosity at 100°C, mm ² /s	5	15.5	8.5	11.8	15.7	20.3
Viscosity index	100	130	120	95	95	95
Flash point, °C	200	220	225	220	225	320
Pour/solidification point, °C	-27	-24	-24	-24	-18	-12
TBN, mgKOH/g	12	12	12	12	12	12

All values are average values and may be used for guidance only.

Specifications / approvals

ACEA E2-96 Issue 5 (2007)

MB-Approval 228.0

API CF/CF-2/SF

MAN 270

Packaging & storage

Packaging: Plastic containers of 1 and 5 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 4 of 36.

BELL STAR W 504/507 SAE 5W-30

Premium, fully synthetic, new-generation multigrade Low-SAPS engine oil.



Application / product description

- Primarily intended for modern passenger-car engines of the Audi and Volkswagen Group (VW, Audi, SEAT, Škoda).
- Recommended for petrol and diesel passenger-car engines.
- Especially for engines meeting EURO IV, EURO V and EURO VI exhaust-emission requirements.
- For diesel engines with diesel particulate filters (DPF) or exhaust gas recirculation (EGR).
- For VW direct-injection diesel engines, especially pump-nozzle (Pumpe-Düse) systems.
- For petrol engines with three-way catalytic converters (TWC).

Physical & chemical characteristics

Property	5W-30
SAE grade	5W-30
Kinematic viscosity at 100°C, mm²/s	10.1
Kinematic viscosity at 40°C, mm²/s	57.9
Viscosity index	163
Flash point, °C	220
Pour point, °C	-39
TBN, mgKOH/g	7.6

All values are average values and may be used for guidance only.

Specifications / approvals

ACEA C3-08 (2008)

Volkswagen VW 504 00 (2004)

BMW Longlife-04

MB-Approval 229.51

Volkswagen VW 507 00 (2004)

Porsche C30

Packaging & storage

Packaging: Plastic container of 1 litre and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 5 of 36.

BELL GT PREMIUM SAE 5W-40

High-quality synthetic engine oil with low sulfated ash, phosphorus and sulfur content (Low SAPS).



Application / product description

- Recommended for modern petrol and diesel passenger-car engines meeting EURO IV, EURO V and EURO VI exhaust-emission standards.
- Compatible with diesel particulate filters (DPF) and catalytic after-treatment systems.
- May also be used in vehicles with pump-nozzle systems where VW 505 01 is required.
- Oil-change interval according to the engine manufacturer's recommendations.

Physical & chemical characteristics

Property	5W-40
SAE grade	5W-40
Kinematic viscosity at 100°C, mm ² /s	14.0 - 15.0
Viscosity index	160
Flash point, °C	230
Pour point, °C	-30

All values are average values and may be used for guidance only.

Specifications / approvals

API SN/SM/CF	ACEA A5/B5-10
ACEA C3-10	ACEA A3/B4-04 / A3/B3-08
MB-Approval 229.31/229.51	Renault RN0700/RN0710
BMW Longlife-04	GM dexos2
Porsche A40 5W-40 12.3	Ford WSS-M2C917-A
VW 502 00/505 00/505 01	Renault RN0700

Packaging & storage

Packaging: Plastic container of 1 litre and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 6 of 36.

BELL STAR 7 SAE 5W-40

Synthetic engine oil for all types of modern petrol and diesel passenger-car engines.



Application / product description

- Intended for new-generation petrol and diesel engines with turbochargers and direct fuel injection (TDI, GDI, HDI, FSI, CDI, DTI, JTD, etc.).
- Suitable for high-tech multi-valve engines and turbocharged engines.
- Oil-change interval according to the engine manufacturer's recommendations.

Physical & chemical characteristics

Property	5W-40
SAE grade	5W-40
Kinematic viscosity at 100°C, mm ² /s	13.5 - 15.0
Viscosity index	155
Flash point, °C	229
Pour point, °C	-39

All values are average values and may be used for guidance only.

Specifications / approvals

ACEA A3/B4-10 (2010)

MB-Approval 229.3

Volkswagen VW 505 00 (2005)

API SL

Volkswagen VW 501 01 (1997)

Renault RN0700

Packaging & storage

Packaging: Plastic containers of 1 and 5 litres.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 7 of 36.

BELL ELITE 4 SAE 10W-40

Premium semi-synthetic, easy-flowing engine oil.



Application / product description

- Excellent lubricating performance for reliable operation under severe driving and changing climatic conditions.
- For all types of high-performance petrol and diesel engines, with or without catalytic converters and turbochargers, installed in vehicles from leading European and global manufacturers.
- Oil-change interval according to the engine manufacturer's recommendations.

Physical & chemical characteristics

Property	10W-40
SAE grade	10W-40
Kinematic viscosity at 100°C, mm ² /s	15.9
Viscosity index	139
Flash point, °C	230
Pour point, °C	-30

All values are average values and may be used for guidance only.

Specifications / approvals

ACEA A3/B4
MB 229.3

API SL/SJ/CF
VW 505.00

Packaging & storage

Packaging: Plastic containers of 1 and 5 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 8 of 36.

BELL TRIUMPH+ SAE 15W-40

Quality mineral engine oil.



Application / product description

- For lubrication of petrol and diesel engines in passenger vehicles from manufacturers worldwide.
- Protects the engine against wear and corrosion.
- Helps maintain engine cleanliness.
- Recommended for older-generation vehicles.
- Oil-change interval according to the engine manufacturer's recommendations.

Physical & chemical characteristics

Property	15W-40
SAE grade	15W-40
Appearance	Clear brown liquid
Kinematic viscosity at 100°C, mm ² /s	15.0
Viscosity index	129
Flash point, °C	220
Pour/solidification point, °C	-25

All values are average values and may be used for guidance only.

Specifications / approvals

API SF/CD

Packaging & storage

Packaging: Plastic containers of 1 and 5 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 9 of 36.

BELL GASOIL SAE 15W-40

Special engine oil for Otto-cycle engines operating on LPG (autogas) or petrol.



Application / product description

- Compared with standard passenger-car petrol/diesel oils, the source catalog lists lower engine-oil consumption, longer oil-change intervals, improved engine operating conditions and longer engine life as advantages.
- Oil-change interval according to the engine manufacturer's recommendations.

Physical & chemical characteristics

Property	15W-40
SAE grade	15W-40
Appearance	Clear brown liquid
Density at 15°C, kg/m ³	Min. 880
Kinematic viscosity at 100°C, mm ² /s	15.20 - 18.30
Viscosity index	Min. 130
Flash point, °C	Min. 220
Pour point, °C	Max. -24

All values are average values and may be used for guidance only.

Specifications / approvals

API SL/CF

ACEA A2-96/B2-98

Packaging & storage

Packaging: Plastic container of 1 litre and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 10 of 36.

BELL RED STORM / BELL TC 2T

Economical mineral engine oils for air-cooled two-stroke petrol engines.



Application / product description

- For motorcycles, scooters, agricultural machinery, chainsaws, pumps and other older-design, small-capacity machines.
- Most commonly used as a mixture with petrol in accordance with the engine manufacturer's recommendation, typically from 2% upward.

Physical & chemical characteristics

Property	Value
Appearance - BELL TC 2T	Clear brown liquid
Appearance - BELL RED STORM	Red liquid
Density at 15°C, kg/m ³	Min. 880
Kinematic viscosity at 100°C, mm ² /s	Min. 10.50
Viscosity index	Min. 105
Flash point, °C	Min. 220
Pour point, °C	Max. -24

All values are average values and may be used for guidance only.

Specifications / approvals

API TC (TSC-3)

JASO FC

Packaging & storage

Packaging: Plastic containers of 0.15 and 0.5 litres.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 11 of 36.

BELL HIP EP-D

Multipurpose mineral gear oils.



Application / product description

- For gearboxes and extremely loaded hypoid, spiral-bevel, worm and similar gear drives in motor vehicles where EP oils are recommended.
- For transmissions of passenger cars, commercial vehicles, construction, mining and agricultural machinery where API GL-5 quality is required.

Physical & chemical characteristics

Property	80	90	140	80W-90	85W-140
SAE grade	80	90	140	80W-90	85W-140
Density at 15°C, g/ml	0.890	0.895	0.910	0.896	0.910
Kinematic viscosity at 100°C, mm²/s	10	18	31	14	25
Viscosity index	95	95	90	100	95
Flash point, °C (min.)	230	230	230	220	230
Pour point, °C	-18	-15	-10	-24	-18

All values are average values and may be used for guidance only.

Specifications / approvals

API GL-5

ZF TE-ML 07A

ZF TE-ML 08

Packaging & storage

Packaging: Plastic containers of 1 and 5 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 12 of 36.

BELL HIP EP-C

Multipurpose mineral oils for lubricating gear drives.



Application / product description

- For gear drives used in synchronized and non-synchronized transmissions in commercial vehicles, passenger cars and agricultural, construction and mining machinery.
- May also be used for normally loaded drive axles where API GL-4 is recommended.

Physical & chemical characteristics

Property	80	90	140	80W-90	85W-140
SAE grade	80	90	140	80W-90	85W-140
Density at 15°C, g/ml	0.890	0.895	0.910	0.896	0.910
Kinematic viscosity at 100°C, mm²/s	10	18	31	14	25
Viscosity index	95	95	90	100	95
Flash point, °C (min.)	230	230	230	220	230
Pour point, °C	-24	-19	-12	-24	-12

All values are average values and may be used for guidance only.

Specifications / approvals

API GL-4

ZF TE-ML 08

Packaging & storage

Packaging: Plastic containers of 1 and 5 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 13 of 36.

BELL ATF DEXRON III

Universal automatic-transmission fluid.



Application / product description

- For automatic transmissions from leading global transmission manufacturers installed in motor vehicles.
- Excellent low-temperature properties, good thermal and oxidation stability and very good anti-wear performance.
- May be used, according to manufacturer requirements, in automatic transmissions requiring GM DEXRON III quality.

Physical & chemical characteristics

Property	Value
Kinematic viscosity at 40°C, mm²/s	35.82
Kinematic viscosity at 100°C, mm²/s	7.00 - 7.40
Viscosity index, min.	179
Flash point, °C	230
Pour point, °C	-50

All values are average values and may be used for guidance only.

Specifications / approvals

GM DEXRON III
Voith H55.6335
Allison C-4
MAN 339 Type V1 & Z1

ZF TE-ML 03D/04D/05L/09/11A/11B/14A
MB 236.6
Allison TES 389
Volvo 97340

Packaging & storage

Packaging: Plastic container of 1 litre and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 14 of 36.

BELL ATF DEXRON II D

Universal automatic-transmission fluid.



Application / product description

- For automatic transmissions, power steering systems and similar assemblies.
- Excellent low-temperature and anti-wear properties, with good thermal and oxidation stability.
- May be used, according to manufacturer requirements, in automatic transmissions requiring GM DEXRON II D quality.

Physical & chemical characteristics

Property	Value
Kinematic viscosity at 40°C, mm²/s	35.82
Kinematic viscosity at 100°C, mm²/s	7.40
Viscosity index, min.	179
Flash point, °C	223
Pour point, °C	-35

All values are average values and may be used for guidance only.

Specifications / approvals

Allison C4 11.8
DEXRON II-D
MB-Approval 236.5/236.7
Voith G607

Caterpillar TO-2
MAN 339 Type V1/Z1
Renk
ZF TE-ML 03D/04D/11A/14A/17C

Packaging & storage

Packaging: Plastic container of 1 litre and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 15 of 36.

BELL ATF SUFIX A

Universal transmission fluid.



Application / product description

- For automatic transmission systems in motor vehicles and transmissions in agricultural, mining and construction machinery, including automatic gearboxes, hydraulic control systems, hydraulic couplings, torque converters and heavy-vehicle power steering systems, where Type A Suffix A (TASA) quality is recommended.

Physical & chemical characteristics

Property	Value
Density at 15°C, g/ml	0.883
Kinematic viscosity at 40°C, mm²/s	55
Kinematic viscosity at 100°C, mm²/s	9
Viscosity index	143
Flash point, °C	215
Pour point, °C	-25

All values are average values and may be used for guidance only.

Specifications / approvals

ATF Type A Suffix A
ALLISON C-3

MB 236.2
VOITH

Packaging & storage

Packaging: Plastic container of 1 litre and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 16 of 36.

BELL SUPER TRAKTOL PREMIUM STOU SAE 10W-30

Universal multifunctional oil.



Application / product description

- For tractors and other agricultural machinery.
- STOU (Super Tractor Oil Universal) oil with a very broad field of application.
- For lubrication of engines, gear drives, hydraulics and wet brakes in agricultural machinery.
- Change interval according to the engine/manufacture recommendation.

Physical & chemical characteristics

Property	15W-40	15W-30	10W-30
SAE grade	15W-40	15W-30	10W-30
Viscosity at 100°C, mm²/s	14.5	11 - 12	10.14
Viscosity index	130	130	145
Flash point, °C	220	220	Min. 200
Pour point, °C	-30	-30	-31
TBN, mgKOH/g	Min. 10	Min. 10	Min. 7

All values are average values and may be used for guidance only.

Specifications / approvals

API CF-4/SF

MB 228.3 / MB 227.1

API GL-4

Allison C-4

Massey Ferguson M1139/M1144/M1145

ACEA E4-08

Transmission: MIL-L-2104D

ZF TE-ML 06B & 06C

Caterpillar TO-2

John Deere JDM J27C

Packaging & storage

Packaging: Plastic containers of 5 and 10 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 17 of 36.

BELL TRAKTOL PREMIUM SAE 10W-30

Premium multipurpose multigrade tractor oil.



Application / product description

- UTTO (Universal Tractor Transmission Oil) with a wide range of applications.
- For hydraulics, transmissions and wet brakes of medium- and high-power tractors.
- Recommended for John Deere, Massey Ferguson and Ford-New Holland tractors, and other makes where the listed quality level is required.
- Change interval according to the manufacturer's recommendation.

Physical & chemical characteristics

Property	10W-30
SAE grade	10W-30
Density at 15°C, g/ml	0.876
Kinematic viscosity at 100°C, mm²/s	9
Viscosity index	145
Flash point, °C	215
Pour point, °C	-30

All values are average values and may be used for guidance only.

Specifications / approvals

AGCO POWERFLUID 821XL	Allison C-4 A
API GL-4	Caterpillar TO-2
CASE MS 1210	Case New Holland CNH MAT3525
Case New Holland CNH MAT3509	Case New Holland CNH MAT3505
John Deere JDM J20C	John Deere JDM J20D
Massey Ferguson CMS M1145	Massey Ferguson CMS M1143
ZF TE-ML 03E/05F/06E/06F/06K/17E/21F	

Packaging & storage

Packaging: Plastic containers of 5 and 10 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 18 of 36.

TRAKTOL JD SAE 80W / SAE 85W

Multipurpose oil for tractors and other agricultural machinery.



Application / product description

- UTTO (Universal Tractor Transmission Oil) with a wide application range.
- For hydraulics, transmissions and wet brakes of medium- and high-power tractors.
- Recommended for John Deere tractors and other makes requiring the listed quality level.
- Change interval according to the manufacturer's recommendation.

Physical & chemical characteristics

Property	80W	85W
SAE grade	80W	85W
Kinematic viscosity at 100°C, mm²/s	10	9.1 - 10.5
Viscosity index	123	136
Pour point, °C	-27	-36
Flash point, °C	210	215
TBN, mgKOH/g	7.7	9

All values are average values and may be used for guidance only.

Specifications / approvals

API GL-4

Ford M2C86-B/C

Massey Ferguson M1143

John Deere JDM J20C, J20D

Massey Ferguson M1135

Caterpillar TO-2

Packaging & storage

Packaging: Plastic containers of 5 and 10 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 19 of 36.

BELL LANCOIL

High-quality mineral oil for chainsaw-chain lubrication.



Application / product description

- For chains on chainsaws from various manufacturers operating under severe conditions.
- Good adhesion and low-temperature performance for use in winter conditions.
- Provides excellent corrosion and wear protection.

Physical & chemical characteristics

Property	Value
Viscosity at 40°C, mm²/s	100
Viscosity at 100°C, mm²/s	10
Viscosity index	95
Flash point, °C	200
Pour/solidification point, °C	-24

All values are average values and may be used for guidance only.

Specifications / approvals

SRPS ISO 6743

ISO 6743-1

Packaging & storage

Packaging: Plastic containers of 1, 2 and 5 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 20 of 36.

BELL HIDROL HV

High-viscosity-index hydraulic oils for variable temperature and pressure conditions.



Application / product description

- For hydraulic systems operating outdoors and other systems exposed to external influences.
- Supports reliable operation of mobile cranes, excavators, loaders, tipper systems and forklifts.
- Provides wear protection, corrosion protection, good filterability and excellent thermal and oxidation stability under severe service.

Physical & chemical characteristics

Property	32	37	46	68
ISO viscosity grade	32	37	46	68
Density at 15°C, g/ml	0.872	0.875	0.879	0.882
Kinematic viscosity at 40°C, mm ² /s	32	37	46	68
Viscosity index	145	140	140	135
Flash point, °C	210	210	220	225
Pour point, °C	-30	-30	-27	-27

All values are average values and may be used for guidance only.

Specifications / approvals

ISO 6743/4 (HV)

AFNOR NF E 48-603 (HV)

SPERRY VICKERS M-2950-S/I-286-S

DIN 51524/3 (HVLP)

DENISON HF-0/HF-2

CINCINNATI-MACHINE P-68 (ISO VG 32), P-70 (ISO VG 46), P-69 (ISO VG 68)

Packaging & storage

Packaging: Canisters of 5, 10 and 20 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 21 of 36.

BELL HIDROL HM

Hydraulic oils for modern hydraulic systems under moderate loads and relatively constant temperatures.



Application / product description

- Lower-viscosity grades are used as hydraulic power-transmission media in high-precision, low-power equipment such as spindles, grinding spindles and precision machine tools.
- Medium viscosity grades are used in medium-power, pressure and load hydraulic systems such as presses, cranes and machine tools, and are suitable for gear and rotary-piston pumps at medium pressure.
- Higher viscosity grades are used at higher temperatures and loads.

Physical & chemical characteristics

Property	32	46	68	100
ISO viscosity grade	32	46	68	100
Kinematic viscosity at 40°C, mm²/s	32	46	68	100
Viscosity index	100	99	98	95
Flash point, °C	200	220	220	230
Pour point, °C	-21	-15	-15	-12

All values are average values and may be used for guidance only.

Specifications / approvals

ISO 6743/4 (HM)
AFNOR NF E 48-603 (HM)
SPERRY VICKERS I-286-S

DIN 51524/2 (HLP)
DENISON HF-0/HF-2
CINCINNATI MACHINE P-68 (ISO VG 32), P-70 (ISO VG 46), P-69 (ISO VG 68)

Packaging & storage

Packaging: Canisters of 5, 10 and 20 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 22 of 36.

BELL RED

Industrial oil recommended for highly loaded reduction gears and bearings.



Application / product description

- High-quality oil for systems operating under severe conditions, such as cement plants, steelworks, mining, paper mills, rolling mills and the rubber industry.
- Recommended for bearings in cranes, excavators, lifting equipment and machine tools.
- Excellent thermal and oxidation stability, good demulsibility, anti-wear and EP properties.
- Provides good corrosion protection and resists foaming.

Physical & chemical characteristics

Property	68	100	150	220	320	460
ISO viscosity grade	68	100	150	220	320	460
Density (source table), g/ml	0.883	0.889	0.898	0.906	0.908	0.912
Kinematic viscosity at 100°C (as printed in source), mm ² /s	68	100	150	220	320	460
Viscosity index	95	95	95	93	92	92
Flash point, °C	215	220	225	230	235	240
Pour point, °C	-22	-20	-18	-15	-13	-12

All values are average values and may be used for guidance only.

Note: the kinematic-viscosity row above is reproduced exactly from the source catalog, which labels it "at 100°C" while the values correspond numerically to the ISO grades.

Specifications / approvals

DIN 51517/3 (CLP)

ISO 6743-6 CKC

AGMA 9005-E02

ISO 12925-1 CKC

AIST 224

Packaging & storage

Packaging: Canisters of 5, 10 and 20 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 23 of 36.

BELL KOMPRESOL VDL

High-quality compressor oil providing equipment protection under severe operating conditions.



Application / product description

- For lubrication of screw air compressors over a wide range of temperatures, loads and speeds.
- Contains ashless anti-wear additives for maximum protection against wear and corrosion and for cleanliness of critical compressor components.
- Good water-separation properties reduce the possibility of sludge formation.

Physical & chemical characteristics

Property	68	100	150	220
ISO viscosity grade	68	100	150	220
Density at 15°C, g/ml	0.883	0.890	0.897	0.903
Kinematic viscosity at 40°C, mm ² /s	68	100	150	220
Viscosity index	95	95	95	93
Flash point, °C	215	220	225	230
Pour point, °C	-20	-19	-15	-13

All values are average values and may be used for guidance only.

Specifications / approvals

ISO 6743-3

VICKERS V 104 C

DIN 51506 (VBL, VCL, VDL)

Packaging & storage

Packaging: Canisters of 5, 10 and 20 litres, and metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 24 of 36.

BELL REZOL EPN

Multipurpose oils for cooling and lubrication in machining of light and non-ferrous metals and their alloys.



Application / product description

- Produced from refined mineral oil and additives that contain neither chlorine nor active sulfur.
- Good antioxidant, anticorrosion and anti-wear properties.
- Very wide field of application, particularly effective for machining steel and non-ferrous metals.
- For machining operations requiring a high-quality finished surface.
- May also be used in automatic machine tools, where the oil both cools and lubricates the machine.

Physical & chemical characteristics

Property	VG 32	VG 42
Appearance	Clear	Clear
Viscosity at 40°C, mm²/s	32	42
Flash point, °C	210	220
Pour point, °C	-15	-15

All values are average values and may be used for guidance only.

Specifications / approvals

ISO 6743/7

L-MHC

ISO/TS 12927

Packaging & storage

Packaging: Metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 25 of 36.

BELL TERMO

Mineral-based heat-transfer oils.



Application / product description

- Thermally stable, non-corrosive fluids providing fast and efficient heat transfer in closed circulation systems with expansion-vessel temperatures up to 320°C.
- Recommended for heat-transfer systems in the rubber, plastics, paints and coatings industries, asphalt plants, grain dryers and the textile industry.

Physical & chemical characteristics

Property	32	100
ISO viscosity grade	32	100
Kinematic viscosity at 40°C, mm ² /s	32	96
Viscosity index	95	95
Flash point, °C	218	230
Pour point, °C	-18	-16
Expansion coefficient, %/°C	0.07	0.07

All values are average values and may be used for guidance only.

Specifications / approvals

SRPS ISO 6743-12 (L-Q)

DIN 51522

Packaging & storage

Packaging: Metal drums.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 26 of 36.

TECHNICAL FLUIDS

BELL KO 3

Brake fluid for brake systems requiring DOT 3 quality.



Application / product description

- May also be used for hydraulic clutches in motor vehicles and agricultural/construction machinery, and for shock absorbers where the manufacturer recommends this type of fluid.

Physical & chemical characteristics

Property	KO-3
SAE grade / designation	KO-3
Kinematic viscosity at 100°C, mm²/s	1.5
Kinematic viscosity at -40°C	1500
Boiling point, °C	Min. 205
Wet boiling point, °C	Min. 140
Specific gravity, kg/m³	1010 - 1070

All values are average values and may be used for guidance only.

Specifications / approvals

SAE J 1703

FMVSS 116 DOT 3

IVECO 18-820

ISO 4925 Class 3

Fiat 9.55597

SRPS H.Z2.100 Type 1

Packaging & storage

Packaging: Plastic containers of 0.5 litre.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 27 of 36.

TECHNICAL FLUIDS

BELL KO 4

Fluid for pressure transmission in hydraulic brake systems of all types of motor vehicles requiring DOT 4 quality.



Application / product description

- For brake systems of leading global and European vehicle manufacturers.
- May also be used for hydraulic clutches, agricultural/construction machinery, shock absorbers and similar hydraulic systems where the manufacturer recommends this type of fluid.

Physical & chemical characteristics

Property	KO-4
SAE grade / designation	KO-4
Kinematic viscosity at 100°C, mm²/s	2.3
Kinematic viscosity at -40°C	950
Boiling point, °C	280
Wet boiling point, °C	155
Specific gravity, kg/m³	1020

All values are average values and may be used for guidance only.

Specifications / approvals

ISO 4925 Class 4
FMVSS 116 DOT 4

SAE J 1704/1703
SRPS H.Z2.100 Type 2

Packaging & storage

Packaging: Plastic containers of 0.5 litre.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 28 of 36.

BELL ADDITIVE D2

Fuel additive for Euro diesel to improve lubricity, especially in older engine/vehicle designs.



Application / product description

- Improves lubricity, helping protect the moving parts of the high-pressure fuel pump against wear and supporting longer component service life.
- The source catalog instructs adding 1 litre of additive to 200 litres of diesel fuel.
- Best results are stated to be achieved when the additive is poured into the tank before refuelling.

Physical & chemical characteristics

Property	Value
Appearance / physical state	Light brown liquid
Flash point, °C	80
Viscosity at -40°C, mm²/s	4
Pour point, °C	-27
Relative density at 15°C, g/cm³	845 (as printed in source)

All values are average values and may be used for guidance only.

Source dosage table: 0.15 L additive / 50 L Euro diesel; 0.5 L additive / 150 L Euro diesel. The source catalog also states 1 L additive per 200 L diesel; both source statements are reproduced.

Specifications / approvals

No separate quality-level / approval list is printed for this product in the source catalog.

Packaging & storage

Packaging: Plastic containers of 0.15, 0.5 and 1 litre.

Storage: Store in the original, tightly closed packaging, in premises protected from moisture, weathering and fire, at a temperature of 5 to 30°C.

Source catalog product page translation - product 29 of 36.

BELL ANTIFREEZE SUPER 100

Concentrated monoethylene-glycol antifreeze with selected corrosion inhibitors.



Application / product description

- Contains no amines, nitrites or phosphates.
- For both steel and aluminium radiators.
- Must be diluted with demineralized water before use.
- Suitable for year-round use.
- Protects the engine from corrosion, freezing and overheating.
- Recommended replacement interval in the source catalog: 2 years.

Physical & chemical characteristics

Property	Method	Value
Colour	Visual	Light blue
Specific gravity at 20°C	ASTM D1122	1.12 g/ml
Reserve alkalinity to pH 5.5	ASTM D1121	12 ml 0.1 N HCl
Freezing point, first crystals, 50:50 volume dilution	ASTM D1177	-38°C

All values are average values and may be used for guidance only.

For antifreeze, the freezing point of a water/glycol mixture decreases as glycol concentration rises, but only up to about 70%. The freezing point of concentrated antifreeze is approximately -20 to -23°C. The source catalog provides the following indicative dilution table.

Concentrated coolant (%)	Water (%)	Freezing point (°C)
10	90	-4.5
20	80	-10
30	70	-16
35	65	-22
40	60	-27
50	50	-38
60	40	-52
70	30	-70
90	10	-32
100	-	-23

Specifications / approvals

SRPS H.Z2.010 Type I
AFNOR NFR 15-601

BS 6580

Packaging & storage

Packaging: Plastic containers of 1 and 5 litres and metal drums of 220 kg.

Storage: Store in the original, tightly closed packaging.

Source catalog product page translation - product 30 of 36.

BELL ANTIFREEZE SUPER 40

Ready-to-use prepared coolant for direct filling into the radiator.



Application / product description

- Contains no amines, nitrites or phosphates.
- Suitable for steel and aluminium radiators.
- Diluted in demineralized or softened water and ready for use.
- For direct filling and year-round use.
- Protects against corrosion, freezing and overheating.
- Recommended replacement interval in the source catalog: 2 years.

Physical & chemical characteristics

Property	Method	Value
Colour	Visual	Light blue
Specific gravity at 20°C	ASTM D1122	1.08 g/ml
Reserve alkalinity to pH 5.5	ASTM D1121	6.5 ml 0.1 N HCl
Freezing point	ASTM D1177	-38°C

All values are average values and may be used for guidance only.

Specifications / approvals

SRPS H.Z2.010 Type III

BS 6580

AFNOR NFR 15-601

Packaging & storage

Packaging: Plastic containers of 1 and 5 litres and metal drums of 200 kg.

Storage: Store in the original, tightly closed packaging, protected from moisture, weathering and fire.

Source catalog product page translation - product 31 of 36.

BELL ANTIFREEZE SUPER 100 G12+

Concentrated monoethylene-glycol antifreeze in the organic-acid (OAT) group.



Application / product description

- Contains no amines, nitrites, phosphates, borates or silicates.
- For cooling systems in VW vehicles and vehicles from other manufacturers requiring VW TL 774-D/F (G12/G12+) quality.
- Must be diluted with demineralized water before use.
- Suitable for year-round use.
- Protects against corrosion, freezing and overheating.
- Recommended replacement interval in the source catalog: 5 years.

Physical & chemical characteristics

Property	Method	Value
Colour	Visual	Pink
Specific gravity at 20°C	ASTM D1122	1.12 g/ml
Reserve alkalinity to pH 5.5	ASTM D1121	12.7 ml 0.1 N HCl
Freezing point, first crystals, 50:50 volume dilution	ASTM D1177	-38°C

All values are average values and may be used for guidance only.

For antifreeze, the freezing point of a water/glycol mixture decreases as glycol concentration rises, but only up to about 70%. The freezing point of concentrated antifreeze is approximately -20 to -23°C. The source catalog provides the following indicative dilution table.

Concentrated coolant (%)	Water (%)	Freezing point (°C)
10	90	-4.5
20	80	-10
30	70	-16
35	65	-22
40	60	-27
50	50	-38
60	40	-52
70	30	-70
90	10	-32
100	-	-23

Specifications / approvals

VW TL 774-D/F (G-12/G-12+)
Ford WSS-M97B44-D
MTU MTL 5048

MB 325.3
MAN Type 324 SNF
SRPS H.Z2.010 Type I

Packaging & storage

Packaging: Plastic containers of 1 and 5 litres and metal drums of 220 kg.

Storage: Store in the original, tightly closed packaging.

Source catalog product page translation - product 32 of 36.

BELL ANTIFREEZE SUPER 100 G13

Concentrated monoethylene-glycol antifreeze for latest-generation cooling systems, especially VW Group vehicles.



Application / product description

- Must be diluted with demineralized water before use.
- Suitable for year-round use.
- Protects against corrosion, freezing and overheating.
- Recommended replacement interval in the source catalog: 5 years.

Physical & chemical characteristics

Property	Method	Value
Table label in source	-	Bell ANTIFRIZ LONG LIFE 100 G12+
Colour	Visual	Pink
Specific gravity at 20°C	ASTM D1122	1.14 g/ml

All values are average values and may be used for guidance only.

For antifreeze, the freezing point of a water/glycol mixture decreases as glycol concentration rises, but only up to about 70%. The freezing point of concentrated antifreeze is approximately -20 to -23°C. The source catalog provides the following indicative dilution table.

Concentrated coolant (%)	Water (%)	Freezing point (°C)
10	90	-4.5
20	80	-10
30	70	-16
35	65	-22
40	60	-27
50	50	-38
60	40	-52
70	30	-70
90	10	-32
100	-	-23

Specifications / approvals

VW TL 774 J

Audi/VW G 013 A8J 1G

Audi/VW G 013 A8J M1

SRPS H.Z2.010 Type I

Packaging & storage

Packaging: Plastic container of 1 litre and metal drums of 220 kg.

Storage: Store in the original, tightly closed packaging.

Source catalog product page translation - product 33 of 36.

BELL AdBlue

Agent for reducing harmful exhaust-gas components, primarily nitrogen oxides (NO_x).



Application / product description

- For newer EURO IV, EURO V and EURO VI passenger-car and commercial-vehicle engines, buses and trucks equipped with SCR (Selective Catalytic Reduction) exhaust after-treatment.
- Filled into a separate vehicle tank and must not be added to diesel fuel.
- Metered into the exhaust stream downstream of the diesel engine through a dedicated injection/mixing system.
- In the hot exhaust gas the fluid vaporizes; the SCR catalyst promotes reactions that reduce harmful nitrogen oxides, forming carbon dioxide (CO₂), atmospheric nitrogen (N₂) and water vapour.

Physical & chemical characteristics

Property	Value
Relative density at 20°C	1.09 g/cm ³
Viscosity at -20°C	1 mPa·s (as printed in source)
Boiling point	106 - 110°C
pH of concentrated product	<10

All values are average values and may be used for guidance only.

Specifications / approvals

ISO 22241

DIN V 70070

CEFIC (AUS32)

Packaging & storage

Packaging: Plastic containers of 5 litres and 1000-litre containers.

Storage: The source catalog states storage at 20°C.

Source catalog product page translation - product 34 of 36.

BELL GLAZER SUMMER

Pleasantly scented windscreen-washer fluid for summer use.



Application / product description

- Removes dirt, insects and oily film and cleans the glass without damaging rubber parts or vehicle paint.
- Provides clear visibility while driving.
- The source catalog states that the fluid is harmless.

Physical & chemical characteristics

Property	Method / unit	Value
Density at 15°C, g/cm ³	ISO 3675	Min. 0.945
Appearance	Visual / standard	Green liquid
Freezing point, °C	ISO 3016	0°C
Conductivity of demineralized water	Microsiemens	Max. 2.0

All values are average values and may be used for guidance only.

Specifications / approvals

No separate quality-level / approval list is printed for this product in the source catalog.

Packaging & storage

Packaging: Plastic containers of 1, 2, 5 and 6 litres.

Storage: Store in the original, tightly closed packaging.

Source catalog product page translation - product 35 of 36.

TECHNICAL FLUIDS

BELL GLAZER -21°C

Pleasantly scented windscreen-washer fluid for winter use.



Application / product description

- Used undiluted in winter and provides freeze protection down to -21°C.
- May be diluted with water in summer.
- Removes dirt, insects and oily film.
- Cleans the glass without damaging rubber parts or vehicle paint.

Physical & chemical characteristics

Property	Method / unit	Value
Density at 15°C, g/cm ³	ISO 3675	Min. 0.945
Appearance	Visual / standard	Clear turquoise liquid
Freezing point, °C	ISO 3016	-21°C
Conductivity of demineralized water	Microsiemens	Max. 2.0

All values are average values and may be used for guidance only.

Specifications / approvals

No separate quality-level / approval list is printed for this product in the source catalog.

Packaging & storage

Packaging: Plastic containers of 1, 2, 3, 5 and 6 litres.

Storage: Store in the original, tightly closed packaging.

Source catalog product page translation - product 36 of 36.

TECHNICAL REFERENCE APPENDIX

The original catalog includes reference pages explaining the classification systems used throughout the product specifications. The following English appendix translates the key classification content and preserves the standard identifiers.

Engine oils - SAE and ACEA classifications

SAE J300 classifies engine oils by viscosity grade. The source catalog uses SAE grades throughout the engine-oil product pages.

ACEA specifications

ACEA (Association des Constructeurs Européens d'Automobiles) is the association of European vehicle manufacturers. Passenger-car petrol categories use the letter A and passenger-car diesel categories use the letter B; combined A/B categories define performance for both engine types. The C categories cover catalyst-compatible oils for vehicles with exhaust after-treatment systems such as diesel particulate filters (DPF) and three-way catalysts (TWC), with limits on sulfated ash, phosphorus and sulfur. Heavy-duty commercial diesel categories use the letter E.

ACEA A1/B1	Extended-drain, low-viscosity oils where approved by the engine manufacturer. Not suitable for every engine.
ACEA A3/B3	Engine oils for extended oil-change intervals in accordance with the engine manufacturer's recommendation.
ACEA A3/B4	For direct-injection engines; meets the requirements of A3/B3 and additional direct-injection diesel performance.
ACEA A5/B5	Low-viscosity, fuel-saving oils for engines specifically designed/approved for them; may support extended oil-change intervals.
ACEA C1	DPF/TWC-compatible, fuel-saving low-viscosity oil with the lowest SAPS content; not suitable for every engine.
ACEA C2	DPF/TWC-compatible low-viscosity mid-SAPS oil; manufacturer approval/application must be checked.
ACEA C3	DPF/TWC-compatible mid-SAPS oil based on performance equivalent to ACEA A3/B4-04; not suitable for every engine.
ACEA C4	DPF/TWC-compatible low-SAPS oil based on performance equivalent to ACEA A3/B4-04; application must follow manufacturer recommendation.
ACEA E2	Heavy-duty diesel oils for naturally aspirated and turbocharged engines with normal oil-change intervals.
ACEA E4	Viscosity-stable heavy-duty diesel oils with excellent piston cleanliness, wear and soot control; for certain EURO I-V engines without DPF and some SCR/NOx systems; extended drains.
ACEA E6	Low-SAPS, viscosity-stable heavy-duty diesel oils for very highly loaded engines using low-sulfur fuel; suitable for EURO I-VI engines, including many engines with DPF, EGR and NOx reduction systems; extended drains.
ACEA E7	Viscosity-stable heavy-duty diesel oils with excellent piston cleanliness, wear, soot and turbo-deposit control; for EURO I-V engines, generally without DPF and for many EGR/NOx systems; extended drains.
ACEA E9	Low-SAPS heavy-duty diesel oils for highly loaded engines meeting modern emission requirements, including many engines with DPF/SCR/EGR systems.

Engine oils - API and selected OEM specifications

The source catalog explains API “S” categories for petrol engines and API “C” categories for diesel engines. Newer service categories supersede older categories only where API/manufacture guidance allows. The catalog also lists numerous OEM specifications; these must be applied according to the specific vehicle/engine manufacturer.

API SE	Petrol engines up to approximately 1980 (obsolete historical category).
API SF	Petrol engines up to approximately 1989; improved wear, corrosion and deposit protection over SE.
API SG	Petrol engines up to approximately 1992; improved deposit/sludge control over SF.
API SH	Historical petrol category for later engines; superseded by newer S categories.
API SJ	Petrol engines introduced around the late 1990s; supersedes earlier categories where permitted.
API SL	Petrol engines introduced around 2001; improved high-temperature deposit control and oil consumption.
API SM	Petrol category with further oxidation, deposit and wear performance.
API SN	Later petrol category with improved deposit, sludge, oxidation and emission-system compatibility requirements.
API CF	Off-road/indirect-injection diesel service category.
API CF-2	Severe-duty two-stroke diesel category.
API CF-4	High-speed four-stroke diesel category.
API CG-4	Severe-duty four-stroke diesel engines meeting 1994 emission requirements.
API CH-4	High-speed four-stroke diesel engines meeting 1998 emission requirements.
API CI-4	Heavy-duty high-speed four-stroke diesel engines, including EGR-equipped engines meeting 2002 emission requirements; may replace earlier C categories where permitted.

Selected Mercedes-Benz passenger-car engine-oil specifications reproduced/explained in the source appendix

MB 229.1	Petrol-engine oil without long-drain requirement; based on ACEA A2/B2 plus additional MB tests.
MB 229.3	Fuel-saving petrol/diesel passenger-car oil; ACEA A3/B3/B4 plus additional MB tests.
MB 229.31	Mid-SAPS oil for Euro 4/5/6 applications; ACEA C3 plus MB tests; no extended drain in the source appendix.
MB 229.5	Fuel-saving, extended-drain petrol/diesel oil; ACEA A3/B3/B4 plus additional MB tests.
MB 229.51	ACEA C3 plus additional MB tests with low SAPS limits.
MB 229.52	Later low-SAPS specification requiring improved fuel economy, oxidation stability and biofuel compatibility; can be used where MB 229.31/229.51 are required according to the source appendix.

Two-stroke oils and selected Volkswagen specifications

ISO two-stroke classification in the source catalog

ISO-L-EGB	Additives provide lubricity and engine cleanliness for moderate two-stroke service.
ISO-L-EGC	Higher detergency/cleanliness and reduced smoke compared with EGB.
ISO-L-EGD	Highest level in the source appendix, with enhanced detergency and performance for severe two-stroke service.

API / ASTM two-stroke categories

API TA (ASTM TSC-1)	Two-stroke engines up to 50 cm ³ ; light duty.
API TB (ASTM TSC-2)	Two-stroke engines up to 250 cm ³ such as motorcycles, scooters and chainsaws; medium duty.
API TC (ASTM TSC-3)	Engines above 250 cm ³ ; severe duty; deposit and ring-sticking control.
API TD (ASTM TSC-4)	Modern two-stroke petrol engines using unleaded fuel; also described in the source for certain outboard applications.

NMMA categories mentioned in the source

NMMA (BIA) TC-W	Obsolete historical outboard specification.
NMMA TC-W II®	US outboard specification replacing BIA TC-W.
NMMA TC-W3®	Requires deposit, wear, ring-sticking, rust/corrosion protection and good fuel mixing; replaced TC-W II.
NMMA FC-W™	Oils for water-cooled four-stroke outboard engines.

Volkswagen specifications referenced by the source appendix include VW 500.00, 501.01, 502.00, 503.00, 503.01, 504.00, 505.00, 505.01, 506.00, 506.01 and 507.00. Their application depends on engine type, drain interval and exhaust after-treatment; the vehicle manufacturer's current specification must be followed.

Gear oils - SAE J306 and API service classifications

The source appendix uses SAE J306 for gear-oil viscosity classification and provides the following API service descriptions.

API GL-1	Oil without EP additives; may contain oxidation/corrosion inhibitors and pour-point depressants.	Spiral-bevel and worm gears under very light loads; manual transmissions under low-load conditions.
API GL-2	GL-1 type oils plus anti-wear additives.	Worm gears under heavier service; gearboxes requiring non-EP oils where GL-1 is insufficient.
API GL-3	GL-2 plus medium-performance EP additives.	Spiral-bevel gears under moderate/severe loads; not intended for hypoid gears.
API GL-4	High-performance EP additives; source also references MIL-L-2105, MAN 341, MB 235.1.	Spiral-bevel and hypoid gears without severe shock loading; widely used in passenger/commercial manual transmissions; may suit lightly loaded differentials.
API GL-5	Higher concentration of EP additives than GL-4; source references MIL-L-2105B/C/D, MAN 342, MB 235.0.	Hypoid gears under severe/shock loading; differentials and rear axles; may be used in gearboxes where GL-5 is specified.
API MT-1	EP additives plus enhanced thermal-stability additives; MIL-PRF-2105E referenced.	Non-synchronized manual transmissions in buses and heavy trucks, including Eaton/Fuller types.
API MT-2	Similar to API MT-1.	Non-synchronized manual transmissions in light commercial vehicles.

Automatic-transmission fluids and universal tractor oils

General Motors ATF sequence reproduced by the source appendix

ATF Type A Suffix A	1957-era specification; obsolete but still referenced in some applications.
DEXRON B	1967-era specification.
DEXRON II (C)	1973-era specification with requirements including low static friction and oxidation resistance.
DEXRON II D	Further development with improved corrosion and oxidation requirements.
DEXRON II E	Electronic-transmission era development with improved low-temperature performance.
DEXRON III	Further performance development for automatic transmissions; later variants include III-G/H in industry usage.

Universal tractor-oil specifications listed in the source appendix

UTTO	Massey Ferguson M1135/M1141/M1143; John Deere J14C/J20C/D; Ford M2C86B/M2C134D; Case JI MS1207; IHC/B6 and related manufacturer requirements.
STOU	Massey Ferguson M1139/M1144; John Deere J20A/J27; Ford M2C159 B/C; Case JI MS1206/MS1210; International Harvester IHC/B6 and related requirements.

Industrial oils - ISO viscosity and hydraulic-fluid classifications

ISO 3448 viscosity classification defines ISO VG grades by kinematic viscosity at 40°C. The source catalog uses ISO VG numbers such as 32, 46, 68, 100, 150, 220, 320 and 460.

ISO 6743-4 hydraulic-fluid classification

L-HH	Refined mineral oils without inhibitors.
L-HL	HH oils with added rust and corrosion inhibitors.
L-HM	HL oils with additional anti-wear properties.
L-HR	HL oils with improved viscosity-temperature behaviour.
L-HV	HM oils with improved viscosity-temperature behaviour (high viscosity index).
L-HG	HM-type oils with anti-stick-slip/friction characteristics for slideways/hydraulic systems.

DIN 51524 hydraulic-fluid quality levels

DIN 51524 Part 1 (HL)	Hydraulic HL oils according to ISO classification; rust and corrosion inhibitors.
DIN 51524 Part 2 (HLP)	Hydraulic HM oils with rust, corrosion and anti-wear additives; for relatively moderate temperature conditions.
DIN 51524 Part 3 (HVLP)	Hydraulic HV oils with rust, corrosion, anti-wear and viscosity-index-improving additives; for variable and low-temperature conditions.

Other industrial-oil standards referenced by the product pages include ISO 6743 series, ISO 12925-1, DIN 51517, DIN 51506, DIN 51522, AFNOR NF E 48-603, Denison, Vickers, Cincinnati Machine, AGMA and AIST specifications. Exact references are listed on the corresponding product pages.