



# SHELL OMALA<sup>®</sup> OILS

## Premium quality extreme pressure industrial gear oils

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### Product Description

Shell Omala<sup>®</sup> Oils are versatile, premium quality extreme pressure oils designed to lubricate industrial gear units. They are available in seven ISO viscosity grades ranging from 68 to 3200. All grades are manufactured using a proven sulfur-phosphorus additive system and are free of lead or lead compounds.

### Applications

- industrial gear units requiring an extreme pressure type of oil
- large and small spur, bevel, spiral bevel, helical, herringbone, and hypoid gears
- worm, cylindrical, and other gears where EP is not a necessity, but where the use of only one type of gear oil for a plant may be desirable
- some double-enveloping worm gears (consult manufacturer prior to use)
- systems serving both gears and bearings subject to shock and high-load conditions.
- gear motors and drives
- oil mist systems, including oil mist-lubricated gears and bearings
- special and often severe industrial applications in steel and paper mills, rubber and glass plants, mines and quarries, and marine vessel transmissions
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**Note:** Shell Spirax Heavy Duty and Shell Spirax S are recommended for automotive and high-speed diesel applications.

### Features/Benefits

- wide versatility of application
- excellent load carrying capability for extended service life
- exceptional oxidation and thermal stability
- resistance to rusting and corrosion
- high resistance to emulsion formation
- very easy separation from water
- good misting properties
- inventory control
- elimination of misapplication of improper lubricant

### Approvals and Recommendations

- ANSI/AGMA 9005-D94
- US Steel 224
- Cincinnati Machine (appropriate viscosity grades)
- Joy Technologies TO-LEP (Omala Oil 68)
- DIN 51517 (Part 3)
- David Brown SL 53.101

## Typical Properties of Shell Omala Oils

	Test Method	ISO Viscosity Grade									
		68	100	150	220	320	460	680	1000	1500	3200
AGMA Grade		2EP	3EP	4EP	5EP	6EP	7EP	8EP	--	9	10
Product Code		65101	65103	65104	65105	65107	65108	65109	65541	65542	65543
Gravity, °API	D 1298	28	28	27	27	27	25	25	22.8	22.2	19.5
Viscosity:											
@ 40°C, cSt	D 445	68	100	150	220	320	460	680	1000	1500	3200
@ 100°C, cSt	D 445	8.4	11.2	14.5	18.3	23	29	37	50.0	61.4	88.6
@ 100°F, SUS	(calc)	340	520	780	1070	1560	2240	3410	5439	8252	18005
@ 210°F, SUS	(calc)	54	64	76	91	111	138	174	243	299	433
Viscosity Index	D 2270	97	97	95	96	97	96	95	95	91	83
Flash Point, COC, °F	D 92	400	420	420	420	450	440	475	475	505	480
Pour Point, °F	D 97	-15	-10	-10	0	0	10	10	15	20	40
Channel Point, °F	D 3456	-30	-30	-30	0	20	20	20	--	--	--
Copper Corrosion @ 212°F	D 130	1	1	1	1	1	1	1	1	1	1
Foam, tendency/stability, ml	D 892	0/0	0/0	0/0	0/0	0/0	0/0	0/0	--	--	--
FZG Load Stage, pass	D 5182	12	12	12	12	12	12	12	--	--	--
Timken, lbs, pass	D 2872	60	60	60	60	60	60	60	60	60	60
Four-Ball EP, Scar Diameter, mm <sup>2</sup>	D 2783	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Four-Ball EP											
Load Wear Index, kgf	D 2783	45	45	45	45	45	45	45	45	45	45
Weld Point, kgf		250	250	250	250	250	250	250	250	250	250
Demulsibility	D 2711										
Free water, ml		80.2	85.2	85	83.0	84.9	80.1	86.2	--	--	--
Emulsion, ml		1.0	Trace	Trace	Trace	Trace	Trace	Trace	--	--	--
Rust Protection, distilled water	D 665A	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

### Handling & Safety Information

For information on the safe handling and use of this product, refer to its Material Safety Data Sheet at <http://www.equivashellmsds.com>. For more information and availability, call 1+800-782-7852 or visit the World Wide Web: <http://www.shell-lubricants.com/>.