TO THE DATA! The Truth Shall Set your Friction Free!

Cost to Run per 10,000km - Road roading mixed conditions (based on wear rate data from main 5000km test with dry and wet contamination blocks)

(NOTE - "I.P" = wear rate results impacted by significant initial penetration issues which resulted in very high wear rates in block 1 of test. Wear rate results + cost to run calcs can be much lower if initial penetration issue negated - ie via immersive application vs manufacturer application instructions. "D.A" = lubricant was re applied at double the rate vs standard test protocol intervals due to short treatment lifespan. In the case of immersive waxes, bags of wax used was not doubled, simply the number of re-waxes)

*Note that the modelling may still be breaking down a bit for lubricants that performed very poorly in the main test, and as such the test may have stopped at end of block 2 or 3 due to already exceeding wear rate allowance. This means that the data for blocks 4, 5 and 6 are extrapolated from that point. Whilst using extrapolations based on the average for that lubricant type (wet or wax etc) - we are still extrapolating a) from a very high wear mark, and b) multiple block extrapolations compound accuracy concerns. Also, in reality it is unlikely any cyclist would be replacing chains / cassettes at the rate noted for those lubricants, what would really happen is they would use them to 1 or 2% wear - so their cost to run would not match the below, which is modelled on components being replaced at recommended wear replacment marks. As such this is a like for like comparison / benchmark of wear rate performance in to cost to help highlight the difference - it is not what in reality would be the actual cost to run for the poor performing products which in reality will just be used well past the 0.5% test wear marks.

Dura Ace 11spd Components	Total Cost Per 10,000km	Lubricant Cost	Number of chains worn	Chains Cost	Number of Cassettes Worn	Cassettes Cost	Chainrings Worn	Chain rings cost
Molten Speed Wax New Formula	$ 255.90	$ 59.90	0.40	$ 36.00	0.40	$ 132.00	0.07	$ 28.00
Silca Hot Melt	$ 275.90	$ 79.90	0.40	$ 36.00	0.40	$ 132.00	0.07	$ 28.00
Rex Black Diamond Wax - 11+1 blend	$ 285.90	$ 89.90	0.40	$ 36.00	0.40	$ 132.00	0.07	$ 28.00
Candle wax	$ 387.60	$ 4.00	0.78	$ 70.20	0.78	$ 257.40	0.14	$ 56.00
Rex Black Diamond Wax - 4+1 blend	$ 391.10	$ 189.70	0.42	$ 37.80	0.42	$ 138.60	0.07	$ 25.00
Effetto Mariposa Flower Power wax	$ 498.83	$ 22.43	0.98	$ 88.20	0.98	$ 323.40	0.16	$ 64.80
Silca Hot Wax X	$ 565.19	$ 289.99	0.56	$ 50.40	0.56	$ 184.80	0.10	$ 40.00
Ceramic Speed UFO Drip New Formula	$ 626.43	$ 84.43	1.10	$ 99.00	1.10	$ 363.00	0.20	$ 80.00
Silca SS Drip	$ 810.92	$ 80.92	1.50	$ 135.00	1.50	$ 495.00	0.25	$ 100.00
Tru Tension Tungsten All Weather (I.P)	$ 902.00	$ 68.00	1.70	$ 153.00	1.70	$ 561.00	0.30	$ 120.00
Silca Synergetic	$ 925.46	$ 49.46	1.80	$ 162.00	1.80	$ 594.00	0.30	$ 120.00
Rex Black Diamond	$ 960.79	$ 17.99	1.94	$ 174.60	1.94	$ 640.20	0.32	$ 128.00
Smoove (I.P)	$ 1,134.20	$ 25.00	2.26	$ 203.40	2.26	$ 745.80	0.40	$ 160.00
Rex Domestique	$ 1,161.00	$ 35.00	2.32	$ 208.80	2.32	$ 765.60	0.38	$ 152.00
Allied Grax (I.P)	$ 1,167.40	$ 16.20	2.36	$ 212.50	2.36	$ 778.80	0.40	$ 160.00
Tru Tension Tungsten Race (D.A)	$ 1,191.84	$ 399.84	1.60	$ 144.00	1.60	$ 528.00	0.30	$ 120.00
Session Components S-Wax (I.P)	$ 1,201.10	$ 49.90	2.4	$ 212.40	2.4	$ 778.80	0.4	$ 160.00
Nix Frix Shun	$ 1,278.85	$ 14.85	2.60	$ 234.00	2.60	$ 858.00	0.43	$ 172.00
Squirt - (I.P)	$ 1,378.75	$ 18.75	2.80	$ 252.00	2.80	$ 924.00	0.46	$ 184.00
Boeshield T-9 Aerosol	$ 1,497.49	$ 37.49	3.00	$ 270.00	3.00	$ 990.00	0.50	$ 200.00
Revolubes	$ 1,530.20	$ 45.00	3.06	$ 275.40	3.06	$ 1,009.80	0.50	$ 200.00
Silca Synerg-E	$ 1,635.38	$ 24.98	3.32	$ 298.80	3.32	$ 1,095.60	0.54	$ 216.00
Wend wax 2 (Extrapolated Data)	$ 1,738.00	$ 112.00	3.30	$ 297.00	3.30	$ 1,089.00	0.60	$ 240.00
Finish Line Dry (red top bottle)	$ 1,741.98	$ 39.98	3.50	$ 315.00	3.50	$ 1,155.00	0.58	$ 232.00
Rock N Roll Gold	$ 1,798.07	$ 67.10	3.55	$ 319.50	3.55	$ 1,171.50	0.60	$ 240.00
Cycle Star Gold (Extrapolated Data)	$ 1,850.00	$ 140.00	3.50	$ 315.00	3.50	$ 1,155.00	0.60	$ 240.00
AB Graphene Wax (Extrapolated Data)	$ 2,155.90	$ 49.90	4.20	$ 378.00	4.20	$ 1,386.00	0.70	$ 280.00
Wolf Tooth WT-1 (Extrapolated Data)	$ 2,354.50	$ 18.50	4.80	$ 432.00	4.80	$ 1,584.00	0.80	$ 320.00
Dumonde Tech Lite (Heavily Extrapolated Data)	$ 2,519.39	$ 32.99	5.12	$ 460.80	5.12	$ 1,689.00	0.84	$ 336.00
Muc Off C3 Ceramic dry (HeavilyExtrapolated Data)	$ 2,557.99	$ 29.99	5.20	$ 468.00	5.20	$ 1,716.00	0.86	$ 344.00
Finish Line Wet (Green Top bottle)	$ 2,590.50	$ 12.50	5.30	$ 477.00	5.30	$ 1,749.00	0.88	$ 352.00
Muc Off Ludicrous AF (*Heavily extrapolated data)	$ 3,509.00	$ 297.00	6.60	$ 594.00	6.60	$ 2,178.00	1.10	$ 440.00
Prestacycle One (Heavily Extrapolated Data)	$ 3,853.95	$ 49.95	7.80	$ 702.00	7.80	$ 2,574.00	1.32	$ 528.00
Muc Off Hydro Dynamic (*Heavily extrapolated data)	$ 4,271.00	$ 99.75	8.60	$ 774.00	8.60	$ 2,838.00	1.40	$ 560.00
White Lightning Epic Ride (Heavily Extrapolated Data)	$ 4,458.00	$ 118.00	7.00	$ 630.00	7.00	$ 2,310.00	3.50	$ 1,400.00
Muc Off Nano Lube (*Heavily extrapolated data)	$ 4,830.00	$ 200.00	9.50	$ 855.00	9.50	$ 3,135.00	1.60	$ 640.00
Ab Graphene lube - TEST RESULTS LOCKED BY NDA								

Cost to Run per 10,000km - Gravel / MTB / CX - Dry dusty conditions - based on wear rate data from dry contamination test block

(NOTE - "I.P" = wear rate results impacted by significant initial penetration issues which resulted in very high wear rates in block 1 of test. Wear rate results + cost to run calcs can be much lower if initial penetration issue negated - ie via immersive application vs manufacturer application instructions. "D.A" = lubricant was re applied at double the rate vs standard test protocol intervals due to short treatment lifespan. In the case of immersive waxes, bags of wax used was not doubled, simply the number of re-waxes)

*Note that the modelling may still be breaking down a bit for lubricants that performed very poorly in the main test, and as such the test may have stopped at end of block 2 or 3 due to already exceeding wear rate allowance. This means that the data for blocks 4, 5 and 6 are extrapolated from that point. Whilst using extrapolations based on the average for that lubricant type (wet or wax etc) - we are still extrapolating a) from a very high wear mark, and b) multiple block extrapolations compound accuracy concerns. Also, in reality it is unlikely any cyclist would be replacing chains / cassettes at the rate noted for those lubricants, what would really happen is they would use them to 1 or 2% wear - so their cost to run would not match the below, which is modelled on components being replaced at recommended wear replacment marks. As such this is a like for like comparison / benchmark of wear rate performance in to cost to help highlight the difference - it is not what in reality would be the actual cost to run for the poor performing products which in reality will just be used well past the 0.5% test wear marks.

GRX 810 Components - Dry gravel / Mtb / Cx	Total Cost Per 10,000km	Lubricant Cost	Number of chains worn	Chains Cost	Number of Cassettes Worn	Cassettes Cost	Chainrings Worn	Chain rings cost
Effetto Mariposa Flower Power wax	$ 119.77	$ 33.64	0.6	$ 28.75	0.3	$ 37.38	0.1	$ 20.00
Mspeedwax New Formula	$ 164.85	$ 89.85	0.5	$ 25.00	0.25	$ 32.50	0.1	$ 25.00
Session Components S-Wax	$ 180.35	$ 74.85	0.7	$ 35.00	0.4	$ 45.50	0.1	$ 25.00
Silca SS Drip	$ 180.47	$ 91.72	0.6	$ 31.25	0.25	$ 32.50	0.1	$ 25.00
Candle wax	$ 184.00	$ 6.00	1.2	$ 60.00	0.60	$ 78.00	0.2	$ 40.00
Silca Synerg-E	$ 187.46	$ 37.46	1.0	$ 50.00	0.5	$ 65.00	0.2	$ 35.00
Silca Hot Melt	$ 202.35	$ 119.85	0.5	$ 25.00	0.25	$ 32.50	0.1	$ 25.00
Rex Black Diamond Wax - 11+1 blend	$ 209.85	$ 134.85	0.5	$ 25.00	0.25	$ 32.50	0.1	$ 17.50
Ceramic Speed UFO Drip New Formula	$ 226.65	$ 115.40	0.8	$ 37.50	0.4	$ 48.75	0.1	$ 25.00
Rex Black Diamond	$ 228.48	$ 26.98	1.4	$ 68.75	0.7	$ 87.75	0.2	$ 45.00
Tru Tension Tungsten All Weather	$ 289.75	$ 96.00	1.3	$ 62.50	0.6	$ 81.25	0.3	$ 50.00
Rex Black Diamond Wax - 4+1 blend	$ 359.50	$ 284.50	0.5	$ 25.00	0.25	$ 32.50	0.1	$ 17.50
Smoove	$ 362.50	$ 35.00	2.1	$ 106.25	1.1	$ 146.25	0.4	$ 75.00
Silca Synergetic	$ 366.72	$ 32.97	2.3	$ 112.50	1.1	$ 146.25	0.4	$ 75.00
Allied Grax	$ 358.30	$ 24.30	2.3	$ 112.50	1.1	$ 146.50	0.4	$ 75.00
Molten Speed Wax	$ 390.08	$ 167.58	1.5	$ 75.00	0.8	$ 97.50	0.3	$ 50.00
Squirt	$ 443.25	$ 27.00	2.2	$ 137.50	1.4	$ 178.75	0.5	$ 100.00
Silca Hot Wax X	$ 509.99	$ 434.99	0.5	$ 25.00	0.25	$ 32.50	0.1	$ 20.00
Nix Frix Shun	$ 541.05	$ 19.80	3.4	$ 168.75	1.8	$ 227.50	0.6	$ 125.00
Rock N Roll Gold	$ 627.69	$ 93.94	3.6	$ 181.25	1.8	$ 227.50	0.6	$ 125.00
Tru Tension Tungsten Race (D.A)	$ 642.28	$ 559.78	0.5	$ 25.00	0.3	$ 32.50	0.1	$ 25.00
Boeshield T-9 Aerosol	$ 651.23	$ 56.23	4.0	$ 200.00	2.0	$ 260.00	0.7	$ 135.00
Finish Line Dry (Red top bottle)	$ 712.22	$ 59.97	4.4	$ 221.25	2.2	$ 286.00	0.73	$ 145.00
Cycle Star Gold	$ 758.50	$ 196.00	4.0	$ 193.75	1.9	$ 243.75	0.6	$ 125.00
AB Graphene Wax	$ 790.18	$ 83.93	4.8	$ 237.50	2.4	$ 308.50	0.8	$ 160.00
Wend wax 2	$ 792.75	$ 154.00	4.3	$ 212.50	2.1	$ 276.25	0.8	$ 150.00
White Lightning Epic Ride (*Heavily extrapolated data)	$ 794.75	$ 166.00	4.3	$ 212.50	2.1	$ 276.25	0.7	$ 140.00
Rex Domestique	$ 797.50	$ 52.50	5.0	$ 250.00	2.5	$ 325.00	0.9	$ 170.00
Revolubes (Extrapolated Data)	$ 812.50	$ 67.50	5.0	$ 250.00	2.5	$ 325.00	0.9	$ 170.00
Finish Line Wet (Green Top bottle)	$ 1,706.88	$ 18.75	11.4	$ 568.75	5.7	$ 739.38	1.9	$ 380.00
Wolf Tooth WT-1 (*Heavily extrapolated data)	$ 995.24	$ 27.74	6.5	$ 325.00	3.3	$ 422.50	1.1	$ 220.00
Muc Off C3 Ceramic dry (HeavilyExtrapolated Data)	$ 1,186.23	$ 44.98	7.8	$ 387.50	3.9	$ 503.75	1.3	$ 250.00
Dumonde Tech Lite (Heavily Extrapolated Data)	$ 1,311.99	$ 49.49	8.5	$ 425.00	4.3	$ 552.50	1.4	$ 285.00
Prestacycle One (*Heavily extrapolated data)	$ 1,826.18	$ 74.93	11.8	$ 587.50	5.9	$ 763.75	2.0	$ 400.00
Muc Off Ludicrous AF (*Heavily extrapolated data)	$ 1,898.00	$ 445.50	9.9	$ 493.75	4.9	$ 633.75	1.6	$ 325.00
Muc Off Hydro Dynamic (*Heavily extrapolated data)	$ 1,955.00	$ 140.00	12.4	$ 618.75	6.1	$ 796.25	2.0	$ 400.00
Muc Off Nano Lube (*Heavily extrapolated data)	$ 2,738.50	$ 280.00	17.7	$ 708.00	8.9	$ 11.50	3.0	$ 600.00
Ab Graphene lube - TEST RESULTS LOCKED BY NDA								

Cost to Run per 10,000km - Gravel / MTB / CX - Wet abrasive conditions - based on wear rate data from wet contamination test block

(NOTE - "I.P" = wear rate results impacted by significant initial penetration issues which resulted in very high wear rates in block 1 of test. Wear rate results + cost to run calcs can be much lower if initial penetration issue negated - ie via immersive application vs manufacturer application instructions. "D.A" = lubricant was re applied at double the rate vs standard test protocol intervals due to short treatment lifespan. In the case of immersive waxes, bags of wax used was not doubled, simply the number of re-waxes)

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GRX 810 Components - Wet gravel / Mtb / Cx	Total Cost Per 10,000km	Lubricant Cost	Number of chains worn	Chains Cost	Number of Cassettes Worn	Cassettes Cost	Chainrings Worn	Chain rings cost
Rex Black Diamond Wax - 11+1 blend	$ 238.20	$ 134.85	0.7	$ 34.50	0.4	$ 44.85	0.12	$ 24.00
Mspeedwax New Formula	$ 247.35	$ 89.85	1.2	$ 60.00	0.6	$ 78.00	0.21	$ 42.00
Silca Hot Melt	$ 287.85	$ 119.85	1.2	$ 60.00	0.6	$ 78.00	0.15	$ 30.00
Candle wax	$ 319.50	$ 6.00	2.1	$ 105.00	1.1	$ 136.50	0.36	$ 72.00
Silca Synergetic	$ 674.96	$ 49.46	4.1	$ 202.50	2.1	$ 273.00	0.8	$ 150.00
Nix Frix Shun	$ 687.30	$ 19.80	4.5	$ 225.00	2.3	$ 292.50	0.8	$ 150.00
Rex Black Diamond Wax - 4+1 blend	$ 688.45	$ 284.50	2.7	$ 136.50	1.4	$ 177.45	0.5	$ 90.00
Effetto Mariposa Flower Power wax	$ 741.64	$ 33.64	4.8	$ 240.00	2.4	$ 312.00	0.8	$ 156.00
Session Components S-Wax	$ 750.30	$ 74.85	4.9	$ 244.50	2.5	$ 317.85	0.8	$ 162.00
Tru Tension Tungsten All Weather	$ 770.95	$ 96.00	4.7	$ 232.50	2.3	$ 292.50	0.8	$ 150.00
Ceramic Speed UFO Drip New Formula	$ 817.40	$ 115.40	4.8	$ 240.00	2.4	$ 312.00	0.8	$ 150.00
Rex Black Diamond	$ 868.33	$ 26.98	6.4	$ 319.50	3.2	$ 415.35	0.53	$ 106.50
Silca SS Drip	$ 900.22	$ 91.72	5.6	$ 277.50	2.7	$ 351.00	0.9	$ 180.00
Silca Hot Wax X	$ 945.74	$ 434.90	3.5	$ 172.50	1.7	$ 224.00	0.6	$ 114.00
Allied Grax	$ 978.00	$ 43.50	6.3	$ 315.00	3.2	$ 409.50	1.1	$ 210.00
Rex Domestique	$ 1,023.60	$ 52.50	6.6	$ 330.00	3.3	$ 425.00	1.1	$ 216.00
Squirt	$ 1,029.00	$ 27.00	7.4	$ 367.50	3.6	$ 468.00	1.2	$ 240.00
Smoove	$ 1,061.00	$ 35.00	6.8	$ 337.50	3.5	$ 448.50	1.2	$ 240.00
Cycle Star Gold (Extrapolated Data)	$ 1,113.50	$ 196.00	6.3	$ 315.00	3.2	$ 409.50	1.1	$ 210.00
Boeshield T-9 Aerosol	$ 1,124.23	$ 56.23	7.2	$ 360.00	3.6	$ 468.00	1.2	$ 240.00
Finish Line Dry (Red top bottle)	$ 1,241.97	$ 59.97	8.1	$ 405.00	3.9	$ 507.00	1.4	$ 270.00
Tru Tension Tungsten Race (D.A)	$ 1,395.28	$ 559.78	5.7	$ 285.00	2.9	$ 370.50	0.9	$ 180.00
Revolubes	$ 1,436.10	$ 67.50	9.2	$ 462.00	4.6	$ 600.60	1.5	$ 306.00
Wolf Tooth WT-1 (Extrapolated data)	$ 1,449.74	$ 27.74	9.6	$ 480.00	4.8	$ 624.00	1.60	$ 318.00
Rock N Roll Gold	$ 1,554.94	$ 93.94	9.8	$ 487.50	5.0	$ 643.00	1.7	$ 330.00
Wend wax 2	$ 1,630.00	$ 154.00	10.1	$ 502.50	5.0	$ 643.50	1.7	$ 330.00
Muc Off C3 Ceramic dry (Heavily Extrapolated Data)	$ 1,648.98	$ 44.98	10.8	$ 540.00	5.4	$ 702.00	1.8	$ 360.00
Silca Synerg-E	$ 1,679.96	$ 37.46	11.1	$ 555.00	5.6	$ 721.50	1.8	$ 366.00
Dumonde Tech Lite (Heavily Extrapolated Data)	$ 1,825.49	$ 49.49	12.0	$ 600.00	6.0	$ 780.00	2.0	$ 396.00
Muc Off Hydro Dynamic (extrapolated data)	$ 2,244.15	$ 140.00	13.5	$ 675.00	6.8	$ 877.50	2.8	$ 552.00
Finish Line Wet (Green Top bottle)	$ 2,288.25	$ 18.75	15.3	$ 765.00	7.7	$ 994.50	2.6	$ 510.00
Muc Off Ludicrous AF (Extrapolated data)	$ 2,316.00	$ 445.50	13.5	$ 675.00	6.8	$ 877.50	1.6	$ 318.00
AB Graphene Wax (Extrapolated data)	$ 2,387.93	$ 83.92	15.6	$ 780.00	7.8	$ 1,014.00	2.6	$ 510.00
White Lightning Epic Ride (Extrapolated data)	$ 2,389.00	$ 166.00	15.0	$ 750.00	5.0	$ 975.00	2.5	$ 498.00
Prestacycle One (*Heavily extrapolated data)	$ 2,431.43	$ 74.93	15.9	$ 795.00	8.0	$ 1,033.50	2.6	$ 528.00
Muc Off Nano Lube (Extrapolated Data)	$ 2,915.50	$ 280.00	17.7	$ 885.00	8.9	$ 1,150.00	3.0	$ 600.00
Ab Graphene lube - TEST RESULTS LOCKED BY NDA								