

Key Points

1. Average speed without SOD1 Plus:50.14km、 with SOD1Plus:50.51km – no real difference.
Time spent at each stopping point and waiting for traffic lights was recorded, and no big differences were apparent.



		A.Without SOD1 Plus									
		15/11/2022		17/11/2022		18/11/2022		19/11/ 2022			
No.	Stopping Point	Distance(km)	Stop time	Stop duration	Stop time	Stop duration	Stop time	Stop duration	Stop time	Stop duration	Av.speed
1	Gas Station ①		20:14		20:06		19:46		19:24		
2	Tobetsumachi 7-11	18.7	20:35	0:21	20:28	0:22	20:07	0:21	19:44	0:20	
3	Urausu Lawson store	57.5	21:12	0:37	21:07	0:39	20:44	0:37	20:21	0:37	
4	Shintotsugawa Seiko Mart	71.2	21:32	0:20	21:28	0:21	21:00	0:16	20:39	0:18	
5	Asahikawa Midori 7-11	126.8	22:36	1:04	22:35	1:07	22:04	1:04	21:42	1:03	
6	Gas Station ②	131.2	22:46	0:10	22:46	0:11	22:12	0:08	21:51	0:09	
7	Takigawa ramen store	178.1	23:28	0:42	23:42	0:56	23:05	0:53	22:51	1:00	
8	Iwamizawa Bikkuri Donkey	219.0	0:22	0:54	0:28	0:46	23:52	0:47	23:37	0:46	
9	Atsubetsu Police Station	253.4	1:00	0:38	1:12	0:44	0:36	0:44	0:17	0:40	
10	Gas Station	268.3	1:28	0:28	1:40	0:28	1:03	0:27	0:44	0:27	
Time travelled			5:14		5:34		5:17		5:20		
Av. speed (km) (Distance/Time)			51.27		48.20		50.78		50.31		50.14

		B.With SOD1Plus added									
		21/11/ 2022		22/11/ 2022		23/11/ 2022		24/11/ 2022			
No.	Stopping Point	Distance(km)	Stop time	Stop duration	Stop time	Stop duration	Stop time	Stop duration	Stop time	Stop duration	Av. speed
1	Gas Station①		19:27		19:24		18:40		19:28		
2	Tobetsumachi 7-11	18.7	19:49	0:22	19:47	0:23	19:00	0:20	19:49	0:21	
3	Urausu Lawson store	57.5	20:26	0:37	20:25	0:38	19:36	0:36	20:27	0:38	
4	Shintobetsugawa Seiko Mart	71.2	20:45	0:19	20:45	0:20	19:53	0:17	20:48	0:21	
5	Asahikawa Midori 7-11 store	126.8	21:47	1:02	21:49	1:04	20:53	1:00	21:52	1:04	
6	Gas Station ②	131.2	21:57	0:10	21:58	0:09	21:03	0:10	22:01	0:09	
7	Takigawa ramen store	178.1	22:51	0:54	22:51	0:53	21:58	0:55	22:55	0:54	
8	Iwamizawa Bikkuri Donkey	219.0	23:39	0:48	23:38	0:47	22:43	0:45	23:41	0:46	
9	Atsubetsu Police Station	253.4	0:18	0:39	0:16	0:38	23:23	0:40	0:22	0:41	
10	Gas Station	268.3	0:44	0:26	0:43	0:27	23:54	0:31	0:53	0:31	
Time travelled			5:17		5:19		5:14		5:25		
Av. speed (km) (Distance/Time)			50.78		50.46		51.27		49.53		50.51

※268.3Km =Google Map distance

※Although there were minor differences in conditions they were not material.

In-house test report on fuel consumption of SOD-1 Plus

SOD-1 Plus added to transmission and diff drivetrain

D1 Chemical Co
Hokkaido Branch

Summary of Test Results

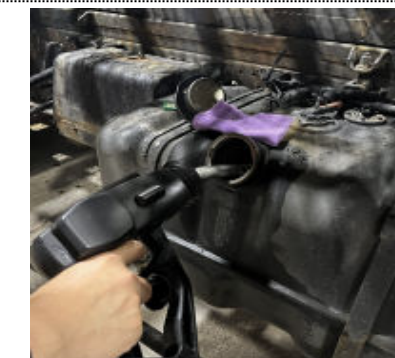
✓ Fuel consumption saving **4.79%** Confirmed

✓ Per vehicle expected annual saving **A\$2,963** See preconditions

✓ Test Method Full tank method (Same time, route, distance)
Test vehicle: Isuzu 4t truck
Hokkaido(Sapporo-Asahikawa-Sapporo round trip 268.3km
4-day comparison with and without SOD1 Plus added



Total distance 2,146km



Full tank method can cause differences so fuel was added with great care.

Fuel consumption analysis: Adding SOD1Plus to transmission and differential

Result

Fuel consump. improvement

4.79% confirmed

※Without freight (no freight was carried during the test, so further savings may be possible with freight).

Expected annual saving per truck

A\$2,963

Calculation: ann. fuel cost x improvement ratio

Calculation factors: 10t truck
Annual fuel cost ¥5.6mil (A\$61,837)
(kms driven/year: 120,000km、Fuel consump w/out SOD1Plus: 3km/L、fuel co

▼Test content

Aim	Compare fuel consumption of same journey without and then with SOD-1 Plus added to the transmission/diff.
Test method	Full tank method
Test Course	Hokkaido – Sapporo to Asahikawa to Sapporo (268.3km round trip) ※See table for stopping points (268.3km)
Background	We cooperated with a freight company to do the test. It's very unreliable to use same month/previous year comparisons because different conditions will exist. So using our own truck, we replicated a standard delivery journey both without and with SOD-1 Plus added to the transmission/diff.
Test period	W/out SOD1Plu 15/11/2022~19/11/2022 (4 days) With SOD1Plus 21/11/2022~24/11/2022 (4 days)

Test vehicle info



Model : Isuzu
Year : May 2010
Type : PKG-NPR75N
Engine : 4HK1
Transmission : N.A.
Load capacity : 4,400kg

Oil capacity
Transmission : 3.8L
Diff : 4.0L

SOD-1Plus addition ratio 10%
Transmission : 380cc
Diff : 400cc



No.	Item		A. Without SOD1Plus					B. With SOD1Plus					
			15/11/ 2022	17/11/ 2022	18/11/ 2022	19/11/ 2022	A. average	21/11/ 2022	22/11/ 2022	23/11/ 2022	24/11/ 2022	B.average	
1	Trip start	a	182,098 km	182,373 km	182,649 km	182,924 km		183,256 km	183,531 km	183,864 km	184,139 km		
	Trip finish	b	182,367 km	182,642 km	182,917 km	183,192 km		183,524 km	183,799 km	184,132 km	184,407 km		
2	Trip distance ※1	c=b-a	268.3 km	268.3 km	268.3 km	268.3 km	268.3 km	268.3 km	268.3 km	268.3 km	268.3 km	268.3 km	
3	Trip duration	d	5:14 hrs	5:34 hrs	5:17 hrs	5:20 hrs	5:21 hrs	5:17 hrs	5:19 hrs	5:14 hrs	5:25 時間	5:18 hrs	
4	Fuel used	Point①	e	16.07 L	15.02 L	16.57 L	16.97 L		15 L	14.27 L	15.84 L	14.25 L	
		Point②	f	17.31 L	18.07 L	18.1 L	17.16 L		17.91 L	17.11 L	17.03 L	17.73 L	
		Total	g=e+f	33.38 L	33.09 L	34.67 L	34.13 L	33.82 L	32.91 L	31.38 L	32.87 L	31.98 L	32.29 L
5	Round trip fuel used	h=c/g	8.04 km/L	8.11 km/L	7.74 km/L	7.86 km/L	7.93 km/L	8.15 km/L	8.55 km/L	8.16 km/L	8.39 km/L	8.31 km/L	
	Divergence from av.	i	1.36%	2.25%	-2.41%	-0.87%		-1.89%	2.89%	-1.78%	0.96%		
6	Weather condition	Temp.	4.5 °C	5.1 °C	6.6 °C	6.0 °C	5.55 °C	9.3 °C	4.0 °C	4.8 °C	6.3 °C	6.1 °C	
		Sky	Sunny ○	Sleet ×	Rain ×	Cloudy ○		Cloudy ○	Cloudy ○	Rain ×	Rain ×		

Fuelconsumption improve.ratio
4.79%

※1 Odometer reading (268.3km = Google Calendar distance)
※2 Weather at trip start point
※Some small differences but not material

◆ W/out SOD1Plus
Best fuel consump. : **8.11km/L**
Worst fuel consump. : **7.74km/L**

◆ With SOD1Plus
Best fuel consump. : **8.55km/L**
Worst fuel consump. : **8.15km/L**
Better than best w/out SOD1Plus

Same condition-1 During trip	1.Trip distance 268.3km 2.Fuel (full tank) method, filled until small overflow 3.Fixed stopping points 4.Trip speed : fixed at 10km/h over limit; highest speed 70Km/h air conditioning (only heater) 6.Exhaust brake usually O N 7.Night-time driving, so no traffic changes	Same condition-2 Maintenance	※In both tests new oil and fluid was used in engine, transmission, and diff. W/out SOD Before trip new oil in engine, transmission, diff. With SOD Before trip new oil used in engine, transmission and diff, SOD1Plus added 10% ratio Pre-trip inspection Tire pressure checked
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※Above results (includ. trip conditions) are based on test vehicle data. Where that differs, beware a different result may occur.