



T2 Laboratories Inc.
 3043 Faye Road
 Jacksonville, FL 32226 USA
 Phone 904-632-2172 Fax 904-632-2182
 Email ecotane@T2Labs.com

Ecotane® Treatment Rates in Gasoline



What is Ecotane®

Ecotane® is a lead-free and iron-free performance additive that economically reduces tailpipe emissions and simultaneously adds up to 2 octane numbers to straight-run gasoline, lead-replacement gasoline, or unleaded gasoline. Because it is based on manganese, it has low toxicity, does not pollute the environment, and is a drop-in replacement for other octane boosters. It is compatible with all oxygenated and aromatic blending components. See the Ecotane® product data sheet(s) and MSDS for additional information.

Ecotane® Product Options

Octane response is related to the concentration of manganese (Mn) added to gasoline. Ecotane® is available in (2) manganese concentrations, 15.1wt% and 24.4% wt%. Either of these concentrations will produce exactly the same octane response at the same manganese concentration. If the concentration of manganese in Ecotane® is lower, a higher concentration of Ecotane® is required to add the equivalent amount of manganese to gasoline. The choice of concentration is up to the user. The performance is identical at equivalent manganese concentration in gasoline. Additional product options can be available upon request.

	Equivalent To	Mn Conc. (wt%)	Mn Conc. (g/liter)	Mn Conc. (g/kg)	Density (kg/liter @ 20°C)
Ecotane® 3000	HiTec® 3000	24.4	337	244	1.38
Ecotane® 3062	HiTec® 3062	15.1	168	151	1.11

Ecotane® is a registered trademark of T2 Laboratories Inc. HiTec® is registered trademark of the Afton Chemical Corporation.

Treatment Rate

The recommended treatment rate for Ecotane® is 18 mgMn/liter of gasoline. At this level, Ecotane® adds between 2-3 octane numbers to gasoline. The following table lists the quantity of Ecotane® required to achieve that 18 mgMn/liter concentration in a variety of units. Exceeding this treatment rate can result in malfunction and possible damage to the automobile pollution control systems.

To add 18mgMn/liter:	Ecotane® 3062	Ecotane® 3000
Treat rate (g additive/liter gas)	0.119	0.074
Treat rate (ppm wt additive in gas)	162	100
Treat rate (mg metal/gal gas)	68.1	68.1
Treat rate (g metal/gal gas)	0.068	0.068
Treat rate (32nds of a g metal/gal gas)	2.2	2.2
Treat rate (mg additive/gal gas)	451.2	279.2
Treat rate (g additive/gal gas)	0.451	0.279
Treat rate (lb additive/gal gas)	0.00099	0.000615
Treat rate (lb additive/bbl gas)	0.0417	0.0258
Treat rate (mg additive/liter gas)	119.2	73.8
Treat rate (ml additive/liter gas)	0.107	0.053
Treat rate (ml additive/bbl gas)	17.1	8.5
Treat rate (ml additive/10 gal gas)	4.1	2.0
Treat rate (fluid ounces/10 gal gas)	0.14	0.07
Treat rate (teaspoon additive/10 gal gas)	0.82	0.41