

Product Name:	Chlorimuron ethyl
Product Number:	C109
CAS Number:	90982-32-4
Molecular Formula:	$C_{15}H_{15}ClN_4O_6S$
Molecular Weight:	414.82
Form:	Powder
Appearance:	White powder
Source:	Synthetic
Water Content (Karl Fischer):	≤0.5%
pH:	3.0-5.0
Storage Conditions:	2-8 °C
Description:	Chlorimuron ethyl is a sparingly soluble (1.2 mg/mL) sulfonyleurea herbicidal agent.
Mechanism of Action:	Chlorimuron ethyl inhibits acetolactate synthase (ALS), an enzyme involved in synthesis of branched chain amino acids including valine, leucine, and isoleucine.
Plant Biology Applications	Inhibition of ALS can lead to oxidative stress and a decrease in root nodule formation. Compared to other herbicides, chlorimuron ethyl is a very potent herbicide.
References:	<p>Tomaro, M. L. "Effect of Chlorimuron-ethyl on Bradyrhizobium Japonicum and Its Symbiosis with Soybean." Pest Management Science 61.10 (2005): 1003-008. www.ncbi.gov. Web. 5 Sept. 2012.</p> <p>Zhou, Q. "Effects of Herbicide Chlorimuron-ethyl on Physiological Mechanisms in Wheat (Triticum Aestivum)." Ecotoxicology and Environmental Safety 64.2 (2006): 190-97. www.ncbi.gov. Web. 5 Sept. 2012.</p>