

Product Name:	Imazapyr
Product Number:	I012
CAS Number:	81334-34-1
Molecular Formula:	$C_{13}H_{15}N_3O_3$
Molecular Weight:	261.28
Appearance:	White powder
Source:	Synthetic
pH:	2.0-4.0
Melting Point:	128-130 °C
Storage Conditions:	2-8 °C
Description:	Imazapyr is an insoluble herbicide which belongs to the imidazolinone family.
Mechanism of Action:	Imazapyr inhibits acetolactate synthase (ALS) which plays an essential role in the biosynthesis of branched chain amino acids.
Plant Biology Applications	Imazapyr is most effective post-emergence to kill broadleaf weeds and grasses less than 10 cm in height (Armel, 2003). ALS inhibiting herbicides account for approximately 17.5% of the global herbicide usage in corn and other agricultural goods (Green, 2008).
References:	<p>Armel G.R., Wilson H.P., Richardson R.J. and Hines T.E., 2003, Use of Mixtures of Mesotrione, Imazethapyr, and Imazethapyr Plus Imazapyr in Imidazolinone-Resistant Corn (<i>Zea mays</i>). <i>Weed Technology</i>, Vol. 17, No. 4 (Oct. - Dec., 2003), pp. 674-679</p> <p>Green J.M., Hazel C.B., Forney D.R. and Pugh L.M., 2008, New multiple-herbicide crop resistance and formulation technology to augment the utility of glyphosate. <i>Pest Manag Sci</i> 64:332–339 (2008)</p> <p>Menne H. and Kocher H., 2007, HRAC Classification of Herbicides and Resistance Development. <i>Modern crop protection compounds</i>.</p>