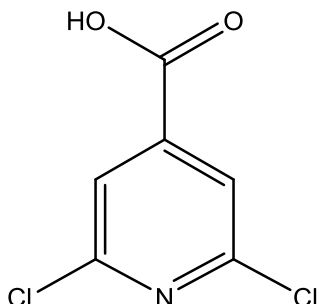




## Product Information Sheet

**D2181**

### 2,6-Dichloroisonicotinic Acid



Synonyms: 2,6-Dichloropyridine-4-carboxylic Acid; INA  
CAS: 5398-44-7  
Formula: C<sub>6</sub>H<sub>3</sub>Cl<sub>2</sub>NO<sub>2</sub>  
Mol. Weight: 192.00

#### Properties

Form: Powder  
Appearance: White to Off-white to Faint Yellow to Beige  
Application: Plant Defense  
Solubility: Methanol, Ethanol  
Storage Temp: -20°C  
Typical Working Concentration: Varies: 0.7 mM (Vernooij *et al.*, 1995)  
0.53 to 530 µM (Schweizer *et al.*, 1997)  
Other Notes: Plant tissue culture tested

#### Application Notes

2,6-Dichloroisonicotinic acid was the first synthetic chemical found to induce SAR (systemic acquired response) (Ward *et al.*, 1991). The mechanism by which this works is 2,6-Dichloroisonicotinic Acid binds the SA-binding protein/catalase and inhibits its enzymatic activity (Conrath *et al.*, 1995).

#### References

Conrath U, Chen Z, Ricigliano JR, Klessig DF (1995) Two inducers of plant defense responses, 2,6-dichloroisonicotinic acid and salicylic acid, inhibit catalase activity in tobacco. *PNAS* 92(16):7143–7147.

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## Product Information Sheet

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- Vernooij B, Friedrich L, Ahl Goy P, Staub T, Kessmann H, Ryals J, (1995) 2,6-Dichloroisonicotinic acid-induced resistance to pathogens without the accumulation of salicylic acid. *Molecular Plant–Microbe Interactions* 8(2), pp.228-34.
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