



Product Information Sheet

S7580 **Salicylic Acid, Sodium Salt**

Synonym: Sodium salicylate; SA; 2-Hydroxybenzoic acid sodium salt
CAS: 54-21-7
Formula: $C_7H_5NaO_3$
Molecular Wt: 160.10

Properties

Form: Powder
Appearance: White to Off-White
Application: Plant Defense and Immunity
Solubility: 1.25 g/mL in water
Storage Temp: Room Temperature
Other Notes: Keep protected from light

Application Notes

Sodium salicylate is a more water soluble form of SA (salicylic acid, Prod# S7530). In the early 1990s, SA was identified as an endogenous signaling chemical that accompanied systemic acquired response (Métraux *et al.*, 1990). Since then, it has been found to be a master regulator of local and systemic defense response in plants against pathogens (Loake and Grant, 2007).

SA is synthesized in plants through one of two pathways in different parts of the plant cell. The phenylpropanoid route occurs in the cytoplasm & the isochorismate pathway occurs in the chloroplast (Rivas-San Vicente and Plasencia, 2011).

SA has also been documented to induce flowering or flower bud formation in plants, specifically in tobacco callus at a 4 μ M concentration (Lee and Skoog, 1965), *Lemna gibba* (Cleland and Ajami, 1974), and multiple species in the Lemnaceae family at a concentration of 3-10 μ M (Khurana and Cleland, 1992).

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P.O. Box 12205; Shawnee Mission, KS 66282-2205

Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442

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