

TECHNICAL DATA BULLETIN

PRODUCT TECHNICAL INFORMATION AND APPLICATIONS

PROCURE[®] 722SL

"Propamocarb HCl 722 g/L (SL)"

1 INTRODUCTION:

Procure 722SL is a specific fungicide with a protective activity against several *Oomycete* species which cause seed, seedling, root and stem rots and foliar diseases in many edible crops and ornamental plants. The mode of action is different compared to other *Oomycete* fungicides, which provides for efficacy against strains that have developed resistance to other fungicides. It is absorbed by the roots and leaves, and transported acropetally and can be used for specific control of phycomycetous diseases (*Pythium*, *Phytophthora*, *Aphanomyces*, *Bremia*, *Peronospora*, and *Pseudoperonospora* spp.). In particular, control of *Pythium* and *Phytophthora* spp. in vegetables, ornamentals, glasshouse tomatoes, glasshouse cucumbers, tulips, tobacco, and in forestry seedbeds; *Pythium* blight on turf; downy mildew on lettuce, cucurbits and cabbages; *Phytophthora infestans* in potatoes and tomatoes; *Phytophthora cactorum* on strawberries; etc. Applied to the soil, or used as a dip treatment (for bulbs and tubers) or seed treatment, and as a foliar spray in late-season applications

2 ACTIVE INGREDIENT:

	Propamocarb	Propamocarb HCl
CAS #	24579-73-5	25606-41-1
Chemical Name (IUPAC)	propyl 3-(dimethylamino) propylcarbamate	propyl 3-(dimethylamino) propylcarbamate hydrochloride
Molecular Formula	C ₉ H ₂₀ N ₂ O ₂	C ₉ H ₂₁ ClN ₂ O ₂
Structural Formul	$\begin{array}{c} \text{CH}_3 \\ \\ \text{N}(\text{CH}_2)_3\text{NHCO}_2(\text{CH}_2)_2\text{CH}_3 \\ \\ \text{CH}_3 \end{array}$	$\begin{array}{c} \text{CH}_3 \\ \\ \text{N}(\text{CH}_2)_3\text{NHCO}_2(\text{CH}_2)_2\text{CH}_3 \cdot \text{HCl} \\ \\ \text{CH}_3 \end{array}$
Molecular weight	188.3	224.7
Vapor pressure:	730 mPa (25 °C)	8 x 10 ⁻⁴ Pa at 25°C
K_{ow} Log P	0.84 (20°C)	-2.6
Appearance / Form	Colourless Crystals	Colourless, faintly aromatic, hygroscopic crystals
Density/Specific gravity	NA	1.085 gm / ml 20°C
Solubility in water	>900 g/l (pH 7.0, 20 °C).	1005 g/L at pH 7

3 PHYSIOCHEMICAL PROPERTIES OF THE PRODUCT:

Appearance:	Clear, yellow liquid free of visible impurities.
Odour:	Slightly aromatic.
Boiling Point:	Not available.
Melting Point:	Not applicable
Density:	1.0855
pH as is basis	5.1
Acidity as H₂SO₄:	0.05 g/ Kg
Flash point:	Not applicable
Water content:	Not applicable
Solubility in water:	100 % soluble.

Toxicity class WHO (a.i.) III (Table 5); EPA (formulation) IV

4 MODE OF ACTION:

Procure 722SL Multi-site inhibitor Systemic fungicide with protective action. Absorbed by the roots and leaves, and transported acropetally.

5 USES:

Procure 722SL Systemic fungicide with protective action, used for control of phycomycetous diseases (*Pythium*, *Phytophthora*, *Aphanomyces*, *Bremia*, *Peronospora*, and *Pseudoperonospora* spp.). In particular, control of *Pythium* and *Phytophthora* spp. in vegetables, ornamentals, glasshouse tomatoes, glasshouse cucumbers, tulips, tobacco, and in forestry seedbeds; *Pythium* blight on turf; downy mildew on lettuce, cucurbits and cabbages; *Phytophthora infestans* in potatoes and tomatoes; *Phytophthora cactorum* on strawberries; etc. Applied to the soil, or used as a dip treatment (for bulbs and tubers) or seed treatment, and as a foliar spray in late-season applications

6 COMPATIBILITY:

Procure 722SL is compatible with most other insecticides except strong alkaline or acids. However, it is preferable to run a compatibility test before mixing large quantities.

7 APPLICATION:

Procure 722SL Carbamate compound used as a systemic soil and foliar fungicide for control of Oomycete diseases

The following table can be used as a guide for the application of **Procure 722SL**

<i>Recommendations for Use</i>		
Crop	Applications	PHI
Vegetables	<ul style="list-style-type: none"> • Seeds: 25 ml / 10 L water after sowing (2-4L/m²). • Transplants: 25 ml / 10 L water, soil spray before transplanting. • Seedlings: 10 ml/ 10 L water through irrigation (200ml/plant) • Foliar Spraying: 100 ml/ 100 L water 	14 days (lettuce 21 days)
Cucumber	<ul style="list-style-type: none"> • Seeds & Transplantations: See above recommendations. • Foliar Spraying: 150 ml/ 100 L water 	14 days
Ornamentals	<ul style="list-style-type: none"> • Seeds & Transplants: See above recommendations. • Root stocks: 5-15 ml/10 L water (5-8 L/ m²) 	

8 HANDLING, STORAGE AND TRANSPORTATION:

Procure 722SL should be transported its original labeled, tightly closed container and stored in a dry well ventilated store at room temperature and away from direct sunlight. It should also be kept away from children, animals, food, feed and drinks and unauthorized personnel. Personnel involved in handling this material should wear protective gloves, clean protective clothing and a facemask.