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Product Information Sheet

\$7777 Silwet[®] L-77

Synonym: 3-(2-methoxyethoxy)propyl-methyl-bis(trimethylsilyloxy)silane

CAS: 27306-78-1 Formula: $C_{13}H_{34}O_4Si_3$

Molecular Wt: 338.66 g/mol

Properties

Form: Liquid

Appearance: Pale yellow

Application: Floral Dip Transformation

Density: 1.007 g/mL

Solubility: Dispersible in water

Typical Working

Concentration: 0.1% (v/v) is most common, but applications range from 0.001-0.3% (v/v)

Surface Tension: 20.5 mN/m [0.1% (v/v)] Storage Temp: Room Temperature

Application Notes

Silwet L-77 is the tradename of the mixture of surfactants (84%) polyalkyleneoxide modified heptamethyltrisiloxane and (16%) allyloxypolyethyleneglycol methyl ether. These are non-ionic surfactants which reduce the surface tension of aqueous solutions.

Though the seminal paper of Clough and Bent used 0.05% (v/v) Silwet L-77 to transform *Arabidopsis* (1998); 0.1% (v/v) Silwet L-77 is the most common concentration used in floral-dip transformation with *Agrobacterium tumefacians*.

References

Clough SJ and Bent AF. 1998. Floral dip: a simplified method for Agrobacterium-mediated transformation of *Arabidopsis thaliana*. *The Plant Journal* Vol 16(6) pg. 735-743.

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