



Introduction

AL151 is a clear, colorless, strongly alkaline liquid with smell and being very sensitive to hydrolysis. The chloride content ranges in the lower ppm-level.

AL151 is used as adhesion promoter at organic/inorganic interfaces, for modification of surfaces (corrosion prevention, component of primers) or as a moisture crosslinker of silicone polymers. The application as "coupling agent" leads in general to an improvement of mechanical and electrical product properties above all under exposure to heat and/or moisture.

Typical Physical Properties

Chemical Name	N-2-(Aminoethyl)-3-aminopropyl-trimethoxysilane
Formula	C ₈ H ₂₂ N ₂ O ₃ Si
Molecular Weight	222.4
Boiling Point	259° C (760 mmHg)
Refractive Index	1.446 (25° C)
Density 25/25 °C	1.025
Viscosity 25 °C	4.5mm ² /s
Min. Purity	97.0%
Amine number	>8.8
CAS No.	1760-24-3
EINECS No.	212-164-2

Solubility

AL151 is unlimited miscible with water with spontaneous hydrolysis occurring. **Caution:** Due to solution enthalpies mixing water is exothermic. Always stir AL151 into water. With alcohols miscibility is, in general, possible with self-catalyzed exchange of the alkoxy-groups. In aliphatic and aromatic hydrocarbons and (moisture-free!) ethers or esters AL151 is easily soluble at differing levels. With ketones and various halogenated compounds a slow reaction can occur.

Applications

- Excellent integral adhesion promoter for Epoxy, SPURsm, MS Polymer[®], RTV Silicone & PVC-based sealants, polyurethane sealants and primer systems
- Additive to phenolic binders for fiber insulation.
- Additive in phenolic and epoxy molding compounds.