Technical Data Sheet

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Silfluo LS-AT102

Methyltriacetoxysilane (Standard Acetoxy Crosslinker)

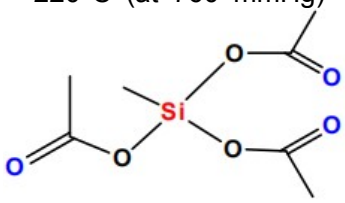
Description:

Silfluo LS-AT102 is Methyltriacetoxysilane, an acetoxy-functional silane.
The molecule contains one methyl group and three acetoxy groups attached to silicon.
The acetoxy groups hydrolyze under moisture-curing conditions and release acetic acid.
Supplied as colorless to light yellow, low-viscosity liquid with a low crystallization point; remains liquid above 5°C.
Used alone or in blends with liquid acetoxy silanes such as ethyltriacetoxysilane to adjust handling, crystallization tendency, and processing behavior.
Used as crosslinking component in acetoxy-cure RTV silicone sealants, acetoxy crosslinker blends, and related silicone elastomer formulations.
Cure profile, storage stability, adhesion, mechanical properties, and processing behavior require verification in the target formulation.

Typical Physical Properties

Silfluo Code:	LS-AT102
Chemical Name:	Methyltriacetoxysilane
Synonyms	Methylsilanetriyl triacetate; Triacetoxy(methyl)silane
CAS No. :	4253-34-3
EINECS No. :	224-221-9
Molecular Formula:	$C_7H_{12}O_6Si$
Molecular Weight:	220.25
Appearance:	Colorless to light yellow transparent liquid
Active Content wt%:	90.0%min.
Density (20°C, g/cm^3):	1.12
Refractive Index (25°C):	1.4000
Boiling Point:	<220°C (at 760 mmHg)

Chemical Structure:



Applications:

1. Acetoxy-cure RTV silicone sealants

Used as crosslinking component in one-component acetoxy-cure RTV silicone sealants including sanitary, glazing, window, and general-purpose construction systems. Verify skin-over time, through-cure, modulus, elongation, adhesion, and storage stability in the target formulation.

2. Acetoxy crosslinker blends

Blended with ethyltriacetoxysilane, propyltriacetoxysilane, or other acetoxy silanes to adjust melting

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behavior, crystallization tendency, viscosity, and processing convenience. Determine blend ratio per storage temperature, production conditions, and formulation requirements.
3. Liquid crosslinker systems
Used as component in liquid acetoxy crosslinker blends for improved pumping, dosing, or low-temperature handling. Verify compatibility with fillers, plasticizers, catalysts, and base polymers before scale-up.
4. Silicone elastomer formulation adjustment
Used as crosslinking component in silicone elastomer formulations. Verify cure speed, by-product profile, mechanical properties, and aging behavior in the final system.
5. Acetoxy-functional intermediate use
Used as acetoxy-functional silane intermediate in organosilicon synthesis or formulation development work. Verify reaction conditions, by-products, and final structure by analytical testing.

Packing

In 25kg pail, 200kg drum and 1000kg IBC.

Safety and Storage

Store in a cool, dry, well-ventilated environment. Keep away from direct sunlight, heat, and open flames.
Keep isolated from water, alcohols, strong acids, and alkalis; contact causes hydrolysis and acetic acid release.
Hydrolysis releases acetic acid; corrosive to acid-sensitive metals and substrates. Assess VOC and workplace exposure per local regulations.

Shelf life: 12 months minimum from manufacture date when stored at ⩽25°C in original tightly sealed unopened containers.

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