

Technical Data Sheet

SILVERNITRATE

Principal uses

Film- and Photographic industry	films, X-ray films
Glass industry	reflective coatings, manufacturing of mirrors pastes, AgNO ₃ in bars (former Degussa) for the elimination of warts
Cosmetic industry	fingerprints, securing of evidence, for the elections in India
Crime technology	(about 350 kg AgNO ₃ needed every 3 years)
Food industry	use of the germ-killing properties
Pharmaceutical industry	tablets, germ-killing pastes, eye drops, burn ointments
Textile industry	textile finishing by means of a thin silver layer use of the germ-killing properties (prevents the overgrowth of algae in swimming pools)
Water treatment	

Physical data

Appearance

Form	crystalline < 1 mm
Colour	white
Odour	odourless

Safety data

pH	4,0 – 6, 0 (20°C) - (as aqueous solution)
Melting point/range	ca.210°C
Boiling point/range	not investigated
Flash point	not determined
Flammability	not investigated
Ignition temperature	not determined
Autoinflammability	not determined
Oxidizing properties	oxidizing
Explosiveness	not determined
Vapour pressure	not determined
Density	ca.4,35 g/cm ³ (20°C)
Bulk density	2000 – 2500 kg/m ³
Water solubility	ca.2,16 kg/l (20°C) ca. 10,24 kg/l (100°C)
Partition coefficient (n-octanol/water)	not investigated
Viscosity, dynamic	not determined

Grade & Typical Analysis	Specified Contents:			Limits		Meth.
	No	Elements/Properties				
	1	AgNO ₃	Silver	>= 99,9	%	A
	2	Ca	Calcium	<= 5	µg/g	B
	3	Cd	Cadmium	<= 1,0	µg/g	B
	4	Cu	Copper	<= 1,0	µg/g	B
	5	Fe	Iron	<= 1,0	µg/g	B
	6	K	Potassium	<= 5	µg/g	B
	7	Na	Sodium	<= 5	µg/g	B
	8	Pb	Lead	<= 1,0	µg/g	B
	9	SO ₄	Sulphate	<= 20	µg/g	B
	10		pH (10% w/w) (water solution)	>= 4,0	<= 6,0	
	11		Turbidity (50% w/w) (water solution)	<= 2,5	NTU	D
	12		Moisture	<= 0,1	%	C

Methods:

- A Titrimetric analysis
- B OES
- C Gravimetric analysis
- D Nephelometric
analysis

Remarks:

All positions based on
product.

Shapes	10 kg bags	width: 240 mm height: 450 mm
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Packing	tbc
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