

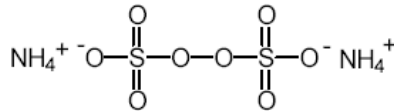
# Technical Data Sheet

## Ammonium persulfate (ammonium peroxydisulfate)

with 0.3 % silicic acid CAS#7727-54-0

Technically pure, salt

### Structural Formula



### Description

Ammonium persulfate is a white, crystalline, odourless salt consisting of technically pure ammonium peroxodisulfate and silicic acid to enhance free flowing properties. It is used as an initiator (source of free radicals) for the polymerisation of monomers and as a strong oxidizing agent in many applications. It has the particular advantage of having a good storage stability as a result of its extremely high purity and of being easy and safe to handle. Due to its hygroscopic character Ammonium Persulfate tends to lumping, especially in humid atmosphere and can be optionally supplied with an addition of silicic acid.

### Technical Data

Appearance	White crystalline salt
APS content (typically)	Ca. 99.5 % w/w
Active oxygen (typically)	Ca. 7.0 % w/w
Acid content (based on H <sub>2</sub> SO <sub>4</sub> , typically)	Ca. 0.05 %
Iron content (typically)	Ca. 1 mg/kg
Bulk density (typically)	Ca. 1100 g/l
Melting point	(decomposition)
Solubility in water at 10/20/40/60°C	Ca. 550/620/700/835 g/l
pH of a 1% solution in water (typically)	Ca. 4.0
pH of a 10% solution in water (typically)	Ca. 3.1
Decomposition of the product as supplied	At above 60 °C
Recommended storage temperature	Below 30 °C
Storage stability as from date of delivery	12 months
Moisture content (typically)	< 0.03 %

This product is in compliance with the ElektroG (EU-Directives: RoHS 2002/95/EG, WEEE 2002/96/EG)

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## Application

### Polymerisation:

Initiator for the emulsion or solution polymerisation of acrylic monomers, vinyl acetate, vinyl chloride etc. and for the emulsion copolymerisation of styrene, acrylonitrile, butadiene etc. Dosage: 0.1-0.5% Ammonium Persulfate. Temperature: 75-95°C. In combination with redox systems (ascorbic acid, Rongalit, sulfites or sugar - possibly in combination with heavy metal salts such as Fe<sup>2+</sup> it can also be used for polymerisation reactions carried out at lower - and even at ambient - temperatures.

Cosmetics: Essential component of bleaching formulations.

Textile: Desizing agent and bleach activator - particularly for cold bleaching.

### Others:

- Chemical synthesis
- Water treatment (decontamination)
- Waste gas treatment, oxidative degradation of harmful substances e.g. Hg)
- Disinfectant

## Storage

Ammonium Persulfate is hygroscopic and must be stored under dry conditions. It has to be protected from direct sunlight and from any other source of heat.

## Standard Packaging

The standard packaging is 1000 kgs superbag.

## Disclaimer

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