



Summary Technical Data Sheet

Ammonium Persulfate

Product Name: Ammonium Persulfate
Synonyms: Ammonium Persulphate, APS
CAS Number: 7727-54-0
Formula: $(\text{NH}_4)_2\text{S}_2\text{O}_8$
Molecular weight: 228.20 g/mol
Grade: Technical
Shelf life: 1 year

Typical Properties

- Appearance: white crystalline powder
- Odor: odorless
- Solubility: in water 41% (20°C)
- pH: (1% solution): typically 4.0
- Melting point: decomposes at 177°C
- Specific gravity: 1.98

Product Specifications

Properties	Specifications
Assay	≥ 98.5 %
Active oxygen	6.91%
Residue after ignition	≤ 0.02%
Chloride and chlorate	≤ 0.001%
Manganese	≤ 0.00005%
Iron	≤ 0.0005%
Heavy metals	≤ 0.0005%
Moisture	≤ 0.10%

Ammonium Persulfate is a strong oxidizing agent with many applications, including bleaching, etching, and polymer synthesis. It is used in the treatment of metal surfaces for the manufacturing of semiconductors, cleaning and etching of printed circuits, activation of copper and aluminum surfaces. Ammonium Persulfate is also used as a bleach activator - especially for cold bleaching in the textile industry and in hair bleaching formulations.

It is an initiator for the emulsion or solution polymerization of acrylic monomers, vinyl acetate, vinyl chloride etc. and for the emulsion co-polymerization of styrene, acrylonitrile, butadiene.

Other applications include chemical synthesis, disinfection, water treatment, waste gas treatment, paper (modification of starch, re-pulping particularly for cold bleaching).

Storage and Handling: Keep package tightly closed while inner bag sealed to avoid moisture absorption. Avoid high heat and store under dry conditions. Keep away from acids and combustibles materials.

Packaging: 55 lbs / 25 kg bags

Transport Regulations: UN Number: UN1444. Hazard Class 5.1. Packing Group III.

The above information, while not guaranteed, reflects our analysis and believed to be accurate. It is the end user's responsibility, prior to use of the above mentioned product to determine the suitability of the product. Aqua Bond shall not be, directly or indirectly responsible for damages of any nature whatsoever resulting from the use or reliance upon the above information.

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