



ELRASA - ACNT™ (Acetonitrile)

Technical Datasheet

1. Technical Datasheet

Property	Specification
Physical Properties	
Appearance	Colorless, flammable liquid with a faint ethereal odor
Physical Form	Liquid
Odor	Aromatic odor
Molecular Weight (g/mol)	41.05
Density or Specific Gravity	0.787 at 68 °F
Viscosity	0.35 cP at 20 °C
Refractive Index	1.3588 at 20 °C/D
Chemical Properties	
Water Solubility	>800 g/L at 25 °C
Thermal Properties	
Melting Point	-49 °F
Boiling Point	178.9 °F at 760 mmHg
Flash Point	42 °F
Autoignition Temperature	975 °F

2. Processing Methods

Fragrance Spray

Incorporate Acetonitrile in the final solvent blending phase at room temperature to prevent volatility loss. Ensure all fragrance components are pre-dissolved or solubilized.

Key Ingredients	Indicative Dosage (% w/w)
Deionized Water	71%
Fragrance Blend	1.5%
Acetonitrile	12%
Acetone	5%
Propylene Glycol n-Propyl Ether	10%



Lithium-Ion Battery Electrolyte

Acetonitrile (ACN) can be used at 10-30% as a co-solvent to enhance ionic conductivity due to its high dielectric constant and low viscosity.

Key Ingredients	Indicative Dosage (% w/w)
Lithium bis(trifluoromethanesulfonyl)imide (LiTFSI)	20%
Acetonitrile	15%
1,1,2,2-Tetrafluoro-1-(trifluoromethoxy)ethane (low-freezing co-solvent)	60%
Performance-enhancing additives (e.g., methyl trifluoroethyl carbonate, vinylene carbonate)	5%

Metal-Cleaning Solvent

Acetonitrile is highly volatile and should be added during the final blending stage at room temperature (under 25°C) to minimize solvent loss and vapor accumulation. Acetonitrile is hygroscopic, formulate in a moisture-free environment or include a desiccant or drying step to prevent water pickup.

Key Ingredients	Indicative Dosage (% w/w)
Acetonitrile	92%
Acetylacetone	4%
Triethylamine	4%

3. Dosing by Application

Products	Typical dosage %
Electrolyte in Lithium Batteries	10-30%
Perfume/Cosmetic Production	10-30%

The information and data contained herein are believed to be accurate but may not be all inclusive and should only be used as a guide. The information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the product for his particular use and on condition that they assume the risk of the use thereof.

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