

TECHNICAL DATA SHEET (TDS) ASI 7100

Product Description:

ASI 7100 is a high-purity, colorless fluorinated fluid featuring low surface tension, excellent wettability, and high thermal and chemical stability.

It is suitable for use as:

- A solvent for anti-fingerprint coatings on electronic display glass
- A wetting agent in cosmetic formulations
- A heat transfer and cleaning fluid in semiconductor manufacturing

The fluid delivers superior electrical insulation, rapid drying, broad material compatibility, and is environmentally safe for precision electronic cleaning and processing.

Key Features

- Colorless, odor-stable, water-insoluble
- Strong thermal stability and low viscosity
- Low surface tension for excellent wetting
- Wide operating temperature range: -105°C to 50°C
- Non-flammable, chemically stable, and electrically insulating

Advantages

- Safe for use with sensitive electronics
- Leaves no residue and does not damage PCBs or micro-components
- Environmentally friendly: ODP = 0, low GWP = 320
- Can dissolve light flux and oils enhancing cleaning efficiency



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Typical Physical Properties

Property	Value
Appearance	Colorless liquid
Odor	Slight ether-like
Density	1.5283 g/mL
Boiling Point	61°C
Freezing Point	-135°C
Operating Temp Range	-105°C to 50°C
Vapor Pressure (25°C)	26.6 kPa
Latent Heat of Vaporization	119.4 kJ/kg
Volume Resistivity	1.54 × 10 ¹¹ Ω⋅cm
Thermal Conductivity (25 °C)	0.0637 W/m⋅K
Specific Heat (25 °C)	1.409 J/g⋅K
Kinematic Viscosity (25 °C)	0.487 mm²/s
Surface Tension (25 °C)	14.15 mN/m
Dielectric Strength	≥41.9 kV (2.5 mm gap)
Dielectric Constant	8.2 (at 1 MHz)
Dielectric Loss	0.00033 (at 1 MHz)
LC50 (4h)	>20,477 mg/m³
GWP	320
ODP	0







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Applications:

- Solvent for anti-fingerprint coatings applied to electronic display glass
- Wetting agent in cosmetic formulations, supporting broad compatibility and low surface tension
- Heat transfer medium in semiconductor processes, including testing and assembly
- Cleaning agent for precision electronics and semiconductor components

Storage & Transportation:

- Store in a cool, dry place away from direct sunlight and reactive substances (acids, alkalis, oxidizers)
- Transport as a non-hazardous product avoid strong impacts or inversion
- Keep container sealed to prevent vapor loss due to volatility

Safety & Handling Precautions:

- Use in well-ventilated areas
- Avoid inhalation of thermal decomposition products
- Avoid contact with oxidizers (e.g., chlorine, chromic acid)
- Follow chemical safety guidelines and refer to the MSDS
- Not for use in food, cosmetics, or medical products without prior written approval

For additional technical details or purchasing inquiries, please contact ASI Technologies.