

# TECHNICAL DATA SHEET (TDS) ASI-7200

### **Product Description:**

ASI-7200 is a clear, colorless, and low-odor fluorinated liquid designed as a sustainable alternative to ozone-depleting substances (ODS), high-GWP compounds, and chlorinated solvents. With a higher boiling point than most CFCs, HCFCs, and HFCs, it significantly reduces evaporative loss.

Its low surface tension, low viscosity, and superior wettability make it ideal for precision cleaning, vapor degreasing, anti-fingerprint coatings, cosmetic wetting, and cold cleaning. It also features excellent heat transfer capabilities, electrical insulation, and broad compatibility with plastics, elastomers, and metals.

### **Key Features**

- Non-flammable, colorless, and low odor
- Excellent thermal and chemical stability
- Low surface tension for superior wetting
- Electrically insulating
- Environmentally responsible: ODP = 0, GWP = 55
- Compatible with a wide range of materials
- Mild solvency for fluxes and light oils

## **Main Applications**

- Cold cleaning of PCBs and components
- Vapor degreasing (cleaning and rinsing stages)
- Solvent for light-duty removal of oils and particulates
- Carrier fluid for fluorinated, silicone, and hydrocarbon lubricants
- Dispersion, extraction, and specialty reaction solvent
- Heat transfer medium for semiconductor testing, wafer packaging, and etching
- Replacement for legacy CFC/HCFC/HFC fluids
- Spray contact cleaner for electronics









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## **Typical Physical Properties**

| Property                         | Value                      |
|----------------------------------|----------------------------|
| Appearance                       | Colorless, transparent     |
| Odor                             | Faint                      |
| Molecular Mass                   | 264                        |
| Liquid Density (25 °C)           | 1.432 g/mL                 |
| Boiling Point (1 atm)            | 76 °C                      |
| Freezing Point                   | -138 °C                    |
| Operating Temp. Range            | -105 °C to 65 °C           |
| Flash Point                      | None                       |
| Autoignition Temperature         | 375 °C                     |
| Vapor Pressure (25 °C)           | 14.5 kPa                   |
| Latent Heat of Vaporization      | 125.6 kJ/kg                |
| Thermal Conductivity (25 °C)     | 0.0631 W/m·K               |
| Kinematic Viscosity (25 °C)      | 0.4832 mm²/s               |
| KB Value                         | 3.57                       |
| Dielectric Constant (1 MHz)      | 9.63                       |
| Dielectric Loss (1 MHz)          | 0.00063                    |
| Volume Resistivity (25 °C)       | 2.99×10 <sup>10</sup> Ω·mm |
| Dielectric Strength (2.5 mm gap) | ≥29.9 kV                   |
| Surface Tension (25 °C)          | 14.12 mN/m                 |
| Flammability Range (in air)      | 2.4–12.4%                  |
| Acute Inhalation Toxicity (LC₅₀) | >20,407.7 mg/m³            |
| Global Warming Potential (GWP)   | 55                         |
| Ozone Depletion Potential (ODP)  | 0                          |







## **TECHNICAL DATA SHEET (TDS) ASI-7200**

### **Storage & Transportation:**

- Store in a clean, dry, well-ventilated facility
- Avoid heat, direct sunlight, strong acids, bases, and oxidizers
- Product is volatile ensure containers are tightly sealed
- Handle gently to prevent agitation or inversion during transport

### **Safety & Handling Precautions:**

- Use only in well-ventilated areas
- Avoid inhaling vapors from thermal decomposition
- Prevent contact with hot material and oxidizers (e.g., chlorine, chromic acid)
- Do not eat, drink, or smoke during use
- Refer to SDS for full safety instructions
- Not intended for medical, food, or cosmetic applications without prior approval

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