**MS-752U**

**Ultrapure Specialty Fluid**

**Description**

Cleaning oxygen service parts is more critical than most other cleaning applications. Particles or residue left behind may hinder the operation of valves, sensors, or controls, causing excessive friction that may lead to potential ignition or explosion. MS-752U is an Ultra Pure grade of Vertrel™ MCA Cleaning Agent. This product is used for the final rinse of parts used in Oxygen Service. This product also can be used for precision and specialty applications in many industries such as Electronics, Military, Aerospace, and Communications. It is ideally suited for removing mineral oil, vacuum oil, wax, heavy grease, cutting oil, stamping oil, hydraulic oil, and gear oil. Vertrel™ MCA is listed by the Compressed Gas Association Inc. in the Directory of Cleaning Agents for Oxygen Service.

**ADVANTAGES:**

* Evaporates quickly; Leaves no residue
* < 1ppm particulate and NVR levels
* Approved by major gas and aerospace manufacturers
* Listed by ASTM and CGA (ASTM G93; CGA Directory of Cleaning Agents for Oxygen Service)
* PASSES LOX Impact test (NFEN 1797)
* Nonflammable; Non ozone depleting
* Compatible with most plastics, elastomers and metals
* RoHS compliant

|  |  |  |
| --- | --- | --- |
| **Properties** | **Unit** | **Specifications** |
| Vertrel XF | wt% | 62.0 ± 1.0 |
| Trans-1,2-dichloroethylene | wt% | 38.0 ± 1.0 |
| Specific Gravity | g/mL | 1.41 |
| pH |  | 6.5 – 7.2 |
| Total Purity | wt%  | 99.999 min |
| Non-Volatile Residue | ppm, wt | ≤1.0 ppm |
| Particle count | mg/L | 0.00 |
| Moisture | ppm wt | 75 ppm max |
| Acidity (as HCl) | ppm wt | 1.0 max |
| Appearance |  | Clear, colorless |

**PROPERTIES OF SOLVENT:**

Boiling Point………………………………………...102°F/39°C

Liquid Density……………………………………….....1.41 g/cc

Vapor Pressure……………………. ………………...464 mmHg

Surface tension…………………………………..….15.2 dyn/cm

Viscosity……………………………….……………..…0.49 cPs

**PLASTIC COMPATIBILITY:**

(Immersion: 15 minutes at Room Temperature)

|  |  |
| --- | --- |
| * Acetal
 | * Polyethylene
 |
| * Polypropylene
 | * Polyester, PBT, PET
 |
| * PEK, PEEK
 | * Epoxy-Phenolcs
 |
| * Polyimides
 | * Polyvinylchloride
 |
| * PTFE
 | * Liq. Crystal Polymer
 |

**NOTE:** Acrylic, ABS, and polycarbonate, if under stress, may show slight cracking or crazing damage. Test for compatibility before use.

**ELASTOMER COMPATIBILITY:**

(Immersion: 15 mins at Room Temperature)

|  |  |
| --- | --- |
| * Butyl Rubber
 | * Natural Rubber
 |
| * Polysulfide
 | * EPDM
 |
| * Buna S
 | * Buna N
 |
| * Neoprene
 | * Urethane
 |
| * Chlorosulfonated PE
 | * Silicone
 |
| * Viton™
 |  |

**NOTE:** Elastomer swelling and shrinking will, in most cases, revert to within a few percent of original size after air drying. Swell, shrinkage, and extractables are strongly affected by the compounding agents, plasticizers, and curing used in the manufacture of the elastomers. Test for compatibility before use.

**METAL COMPATIBILITY:**

(Immersion: 2 weeks at 99°F/37°C)

* Aluminum
* Copper
* Iron

**Purity Specifications:**