

TECHNICAL DATA SUMMARY

AeroTron[®]-100

**NON-FLAMMABLE
PRECISION CLEANING &
VAPOR DEGREASING SOLVENT**

Outstanding Performance, Excellent Health & Safety Profile, Simple Change Over

AeroTron-100 is the next generation **non-flammable** solvent specifically engineered to **replace TCE and n Propyl Bromide**. AeroTron is designed for the most demanding of vapor degreasing, ultrasonic, cold immersion and hand wipe cleaning applications. AeroTron has a very favorable health and safety profile, performs or **outperforms TCE and n Propyl Bromide**, is fairly economical and is **simple to switch over** if using most NESHAP compliant vapor degreasing equipment. Further advantages in bath life, mild odor, and stability in the presence of water and AeroTron's excellent regulatory profile make the use of AeroTron-100 a better choice than conventional non-flammable solvents.

ADVANTAGE CHECKLIST



IMPROVED HEALTH & SAFETY PROFILE

- All components of **AeroTron-100** are **US-EPA SNAP** Program Approved
- **Excellent Health and Safety Profile**—No cancer or reproductive toxicity impacts
- **Excellent Workplace Recommendation** —**150ppm (8 hr. TWA)** based on OSHA PEL and US EPA recommendations for product components



OUTSTANDING PERFORMANCE

- **Non-Flammable**; specifically engineered for Precision Vapor Degreasing/Cleaning
- **Distillable / Recyclable**
- Highly effective at **removing hydrocarbon contaminates** from metal parts
- Broadly compatible with metals and many plastics
- Excellent for use in conjunction with ultrasonic cleaning for removal of inorganic materials —metal fines, abrasives and fabricating debris and dirt
- **Highly stable** in the presence of water / **Mild Odor**



REDUCED REGULATORY REQUIREMENTS

- US EPA SNAP Program Approved
- Effective Replacement for TCE, n Propyl Bromide (nPB), MCL, & PERC
- Easy to Ship—Not Regulated by DOT for Transportation
- Reduced Reporting—Not NESHAP Regulated
- Non-Hazardous—Not Regulated under SARA, CERCLA or RCRA as hazardous for disposal



ECONOMICAL FOR USE

Favorable price, recyclability, simple disposal and standard carrier shipping make AeroTron-100 an economical alternative for your cleaning application.



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IDEAL FOR PRECISION CLEANING APPLICATIONS

- **High Solvency Power** on a wide variety of industrial contaminants: Oils, Greases, Silicone Fluxes, Lubricants, Coolant Residues, Waxes, Fingerprints, Adhesives, Polar/Non-polar Contaminants and Surface Particles.
- **Quick & Full Evaporation** leaving no AeroTron residue on the surface.
- **Low Surface Tension** to penetrate complex part surfaces, small diameter blind holes, threads and spaces where one part lays upon another.



► DESIGNED FOR ULTRASONIC CLEANING & VAPOR DEGREASING



Performance Properties	AeroTron-100
Boiling Point	116° F / 47° C
Flash Point, by ASTM D93-TCC	None
Evaporation Rate	Quickly and Completely
Azeotropic Composition for Vapor Degreasing	Yes
Broad Metal Compatibility	Yes
Hydrolysis	Highly Stable
Distillable	Yes
Kauri Butanol Value	93
Non-Volatile Residue	< 10 ppm
Water Content, max.	50 ppm
Odor	Very Mild

Technical Physical Properties	AeroTron-100
Specific Gravity, 25/25°C	1.28 to 1.32
Specific Heat, 25°C, cal/g	0.27
Latent Heat, cal/g	66.9
Viscosity, 25°C, cps	0.49
Vapor Pressure, atm	0.52
Vapor Density (Air =1)	5.2
Water Solubility (g/100 ml)	0.15
Surface Tension (dyn/cm)	19.5
Flammability Limits LEL/UEL	7% - 14.0%

Environmental, Regulatory & Health Profile	AeroTron-100
US-EPA SNAP Program	Approved for Solvent Cleaning
Global Warming Potential (GWP)	All components deemed acceptable by US-EPA SNAP Program— No phase out pending
Ozone Depletion Potential (ODP)	0
Volatile Organic Compound (VOC)	>75%
NESHAP—Halogenated Solvent Cleaning Regulations	Not Regulated
Transportation	Not regulated for transport in 1, 5, 30 & 55 gallon containers
IARC Cancer Classification	None – Not Listed
Manufacturer's Overall Workplace Exposure Guideline	150 ppm—8 hour TWA; 300 ppm—15 minute ceiling (see SDS for further details)

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GETTING STARTED WITH AEROTRON IS EASY! With these Performance Validation Options:

1. Complimentary Test Cleaning of Sample Parts By Vapor Degreasing Reliance has a complete test cleaning lab outfitted with our **ULTRA Vapor Degreasing Systems** which include ultrasonic immersion, vapor rinse, spray, automated basket handling, rotation and multi-dip cleaning process capabilities. We will clean your sample parts in our Part Cleaning Lab in the AeroTron-100 solvent and return your sample parts to you for your performance evaluation along with an **AeroTron-100 Part Cleaning Report** and a reference **video** of the cleaning.

2. Complimentary Sample of AeroTron-100
Reliance is pleased to provide you with a sample of AeroTron-100 for comparative testing at your facility.

3. Vapor Degreaser Rentals Reliance has an extensive inventory of Reliance Vapor Degreasing Systems for rent to assist with validation testing of the AeroTron-100 solvent at your facility.

4. Come to Reliance and Visit Together, we can clean your parts in an **ULTRA Vapor Degreaser** filled with **AeroTron-100** and discuss your application, assess process steps, determine optimal processing time frames and validate the advantages and performance of AeroTron-100 in person.



Reliance manufactures a comprehensive vapor degreasing offering: The ULTRA state-of-the-art vapor degreaser system and AeroTron Solvents.

Made in the USA by:


Reliance
Specialty Products, Inc.

AEROTRON-100 TECHNICAL SUPPORT ADVANTAGE: RELIANCE VAPOR DEGREASING EXPERTS WHO KNOW VAPOR DEGREASING EQUIPMENT, SOLVENT AND PROCESS OPTIMIZATION.

Reliance is a long established manufacturer of precision cleaning solvents and the ULTRA brand of vapor degreasing and ultrasonic cleaning systems (including automation) primarily in service of the aerospace, electronics, optics, metal fabricating and metal finishing industries. We take a very interactive, practical and hands-on approach to working with our customers.

We invite you to utilize our expertise and experience to support your success.

- **Container Sizes:** AeroTron-100 is available in 1, 5, 20, 30 and 55 gallon drums.
- **Shipping:** AeroTron-100 is NOT hazardous for shipment by the DOT. AeroTron can be shipped by LTL ground common carrier, or by UPS, FedEx Standard or Overnight. AeroTron-100 is considered as Class 70 for DOT shipping.
- **Availability:** AeroTron-100 is manufactured by Reliance in Illinois and is a stock item in all sizes. Orders received by 11:00 CST typically ship the same



GIVE US A CALL AT: 847.640.8923

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TYPICAL APPLICATIONS BY INDUSTRY

► AEROSPACE

Complete removal of greases, oils, silicone, masking waxes, masking lacquers, NDT dye penetrants, drawing lubricants, coolant residues and adhesives. Also ultrasonic vapor degreasing for removal of metal fines, polishing abrasives, and blasting media.

► ELECTRONICS

Effective removal of flux and flux residues, polar and non-polar contamination, and cleaning of electrical assemblies and fingerprints.

► OPTICS

Fast cleaning of potting and masking waxes and fingerprints.

► METAL FABRICATION & COATING

Excellent for cleaning prior to coating, welding, brazing or adhesive bonding.

Use for vapor degreasing, ultrasonic cleaning and cold wipe cleaning processes to achieve near residue free surface cleanliness prior to plating, painting, physical vapor deposition (PVD), robotic welding, vacuum brazing, or adhesive bonding of metal parts.

AEROTRON-100 METAL COMPATIBILITY TESTING

METAL	AeroTron-100 Compatible
Aluminum 1050	Yes
Al -Bronze 614	Yes
Copper	Yes
Naval Brass 464	Yes
Tin – Bronze 903	Yes
Tin	Yes
Hastalloy –B	Yes
Inconel 600	Yes
Nickel	Yes
Zinc	Yes
Lead	Yes
Magnesium	Yes
Mild Steel	Yes
Carbon Steel	Yes
Stainless 303	Yes
Stainless 316	Yes
Stainless 330	Yes
Tungsten Carbide	Yes
5 Sn/ 95Pb	Yes
70 Sn/30Pb	Yes
Titanium 5-2.5	Yes
Silver Solder B AG8	Yes
Silver	Yes
Gold	Yes

AEROTRON-100 PLASTIC COMPATIBILITY TESTING

PLASTIC	AeroTron-100 Resistance
POM	Excellent
ABS	Poor
CPVC	Fair
ETFE	Excellent
NYL	Excellent
PBT	Excellent
PEEK	Excellent
PVDF	Excellent
PC	Fair
HDPE	Excellent
PEI	Excellent
PPO	Poor
PP	Fair
PS	Poor
PSU	Poor
PVC	Poor
PU	Fair
PTFE	Excellent

Made in the USA by



Specialty Products, Inc.

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