

Painting Activities & Inland Technology

EP-921[®] Solvent Solution: Key Facts

- ✓ Non-Hazardous
- ✓ Non-Toxic
- ✓ Re-Use possibilities with Inland Technology reclamation equipment
- ✓ Compliant with USA-OSHA 29 CFR 1910.107 (g)(5) that limits solvent usage in painting activities and in the paint booth to at least 100F (38C)
- ✓ Originally created for General Dynamics to replace MEK in painting activities
- ✓ Proven to reduce hazardous waste generation by 50% or greater

Boeing & EP-921®

- EP-921® was first adopted at Boeing Defense in San Antonio, TX and then Boeing Commercial Aircraft at Charleston, SC for the new 787 Dreamliner factory.
- EP-921® is listed on BAC 5750 as a General cleaner for dykem dye, part mark and other ink removal activities where general use is applicable.
- Due to the significant environmental benefits seen at Charleston, Boeing has decided to promote use throughout the Boeing factories at the Enterprise level, through their EHS Department and supported by the Vice President of EHS, Ms. Kim Smith.



Solving for solvents: South Carolina cuts paint cleanup waste in half

Related links:

- [Boeing South Carolina Delivery Center receives environmental award](#)
- [Boeing reports substantial five-year environmental progress](#)
- [Boeing South Carolina earns honor for clearing the air](#)

New cleanup process yields big wins for health, safety, environment



BSC airplane painter Kelsey Jennings pours EP-921 into one of the solvent reclamation units, which filter the solvent and allow it to be reused multiple times. (Alan Marts photo)

A new process for cleanup in Boeing South Carolina's Paint Operations, which [earned a Boeing Conservation Award](#) in May, is yielding big wins for employee health and safety, the environment and the bottom line.

Boeing – Charleston, at the 787 Dreamliner plant, won state of South Carolina and internal environmental awards for their reduction in hazardous waste and elimination of MEK (which is considered a state Hazardous Air Pollutant)

Boeing has found such tremendous benefit with our EP-921[®] solvent solution, that it is showcased in their 2014 Environmental Report posted online at the Boeing website for everyone to review



http://www.boeing.com/aboutus/environment/environment_report_14/5.5_waste.html

Process-oriented involvement for successful implementation of EP-921®

- Introductory assessment of current processes
- Evaluation of EP-921® on paint & coating types for performance confirmation
- Initial testing and offline usage
- Controlled, online testing
- Development of site-specific, Standard Operating Procedure (SOP)
- Maintenance Detail Plan (MDP) established

Proper introduction, implementation and support will assure maximum cost reduction and environmental benefits.

EP-921[®] is currently used by:

Boeing
US NAV-AIR (Military)
US ARMY
Sikorsky Helicopter
Qatar Airways
Qatar Petroleum (QAFCO)
And many more..!

It is also used by the maintenance group for Air Force One & Marine One!



INLAND TECHNOLOGY INCORPORATED
TECHNICAL DATA SHEET



EP-921™

EP-921™ is a unique cleaning compound designed as a substitute for MEK, MEK/Toluene blends, and lacquer washes. EP-921™ functions well as a low volatility surface preparation solvent and is excellent for resin and paint application equipment clean up.

EP-921™ is a lightly regulated, low VOC, low toxicity, high flash point formulation that is ideal for functioning within the modern regulatory climate. In fact, the emission limitation inherent in its formation may qualify it as a Maximum Available Control Technology (MACT). Its use without vapor collection will compete favorably with the use of MEK and a 99.7% efficient vapor collection system. Users should check with local air pollution control jurisdictions for a determination.

The formulation of EP-921™ is outside the RCRA hazardous waste regulations. None of its components are listed in SARA, Title III, Sections 302 or 313. None of its components are listed under CERCLA.

EP-921™ is the only compound utilized for paint operations cleanup that enjoys a toxicity clearance from the U.S. Army Center for Health Promotion and Preventative Medicine (CHPPM), 1 December, 1998.

EP-921™ enjoys the following specifications:

NAVAIR

- Naval Air Systems Command Technical Manual 01-1A-509-1—Environmentally Compliant Solvent for paint equipment cleaning

U.S. AIRFORCE

- Tech Order to replace 1,1,1 Trichloroethane regarding maintenance for the Advance Cruise Missile

ROCKET RESEARCH (OLIN AEROSPACE DIVISION)

- RRC-M&P-0005, Solution 017—Ultra-sonic cleaning and hand wiping

GENERAL DYNAMICS MISSILE SYSTEMS SPECIFICATION

- 0-75173—Process specification for spot and seam resistance welding
- 5-73509—Process specification for cleaning corrosion resistant steels and nickel based alloys prior to spot and seam resistance welding or manual and machine fusion welding

BOEING AIRCRAFT COMPANY

- BAC 5750—General solvent cleaning

Physical/Chemical Characteristics:

Boiling Point: >340°F
Vapor Pressure (mmHg @ 25°C): <1
Vapor Density (air = 1): >4.7
Specific Gravity (H₂O = 1): .98
VOC per SCAQMD Rule 1173 (ASTM D-86): <0.1% by weight