

SOLVON® AER

U.S. PATENT 6,660,701

DESCRIPTION BITUMEN-SPECIFIC APPROVALS COMPATIBILITY

Solvon® AER is an ultra-high purity, next generation solvent. It is designed to achieve exceptional results without compromising chemical stability and cost targets.

Solvon® AER has the same characteristics and similar physical properties of other halogenated solvents, such as 1,1,1-trichloroethane and trichloroethylene but without the adverse environmental hazards. In most applications, switching to Solvon® AER is as simple as replacing your old solvent, end of story.

- **Non-Regulated**
- **Non-Hazardous Waste**
- **SNAP approved by the EPA.**
- **Non-Flammable**
- **Near-zero ozone depleting potential**

Solvon® AER had been tested and met the following specifications:

- **ASTM D2172** Bitumen extraction
- **ASTM D5404** Asphalt Recovery using Rotary Evaporator
- **AASHTO TP2** Recovery of Asphalt Binder
- **AASHTO T164** Extraction of Asphalt Binder from Hot Mix Asphalt (HMA)
- **AASHTO R59 (replaced T170)** Recovery from Solution

Various metals have been tested for compatibility with Solvon® AER, in accordance with Mil-T-81533A. The metal corrosion test - 24 hours exposure to boiling solvent, has yielded no sign of corrosion on the following metals:

- ✓ **Aluminum**
- ✓ **Brass**
- ✓ **Carbon steel**
- ✓ **Copper**
- ✓ **Inconel**
- ✓ **Magnesium**
- ✓ **Monel**
- ✓ **Stainless Steel**
- ✓ **Titanium**

APPLICATIONS PHYSICAL PROPERTIES

Solvon® AER is widely used in various applications such as:

- ✓ **Metal Cleaning**
- ✓ **Adhesion Promoter**
- ✓ **Aerosol Cleaning**
- ✓ **Solids Dispersion**
- ✓ **Asphalt Extraction**
- ✓ **Lubricant Carrier**
- ✓ **Precision Coating**

The patented stabilizer of Solvon® AER gives it the highest purity-to-mileage ratio in its class. Solvon® AER will withstand breaking down when other solvents give up, including other nPB formulas.

An evaluation and comparison between Solvon® AER and other common solvents:

	Solvon® AER	1,1,1-TCA	TCE	MeCL	HCFC-141b
Boiling Point °C	70	74	87	40	32
Specific Gravity, 25°C	1.33	1.32	1.46	1.33	1.24
Viscosity, 25°C, cps	0.49	0.79	0.54	0.43	0.43
S. Tension dy/cm, 20°C	24.2	25.6	26.4	28.2	19.3
Vapor Pressure, 20°C	110.8	100	57.8	349	518
Specific Heat, 25°C	0.27	0.25	0.22	0.28	---
Latent Heat, cal/gm	58.8	57.5	57.2	78.7	52.3
Solubility in Water, w%	0.24	0.07	0.11	0.14	0.18
Flash Point, TCC	None	None	None	None	None
Flammability limits, v%	4-7.8	7.4-16.5	8.3-12.5	14.6-21.8	7.6-17.7
Kauri Butanol Value	125	124	129	136	56
Life Span in air	2 weeks	5 years	1 year	1 year	10 years
ODP	0.008	0.1	0		0.1
PEL, ppm	100*	350	50	25	500

*(mfg recommended), based on study by independent sources.

TECHNICAL DATA SHEET

SAFETY

- Solvon® AER is **not regulated as a hazardous waste** under RCRA.
- Solvon® AER is **not regulated as hazardous air pollutant** under NESHAP.
- Solvon® AER is still considered VOC and **must be used according to VOC regulations**.

For complete safety information, please refer to Solvon® AER Safety Data Sheet.

PACKAGING

Solvon® AER is available in 565 lb. drums. Other packaging, such as 52 lb. pails, available upon request.

The product should be stored in the original containers in a cool, dry and ventilated place. Do not expose to temperatures higher than 120°F.

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