

Coventry 12803 Heptane Precision Swelling and Cleaning Solvent

Product # 12803

Product Description

Coventry™ Heptane Solvent is a highly purified grade of n-heptane, providing the cleanest chemical grade available. This high-purity solvent was developed to swell silicone and urethane elastomers and tubing for fitment onto components, and then evaporate allowing the tubing to shrink back to its original dimensions. It is also used as a silicone lubricant carrier fluid for devices. Coventry Heptane Precision Cleaning Solvent is engineered to offer a low residue, high purity grade of solvent excelling in operations that require high solvency and very low residue. Heptane is not water-soluble, colorless and volatile liquid with a hydrocarbon odor.

- Exceeds reagent grade purity
- Swelling of platinum and peroxide cured silicone
- Deposition of silicone lubricants
- Cleaning solvent for critical cleaning applications
- Removes greases and waxes from hard impervious surfaces
- No ozone depleting chemicals
- Removes particulates and debris
- Low surface tension
- Fast drying
- Very low non-volatile residue

Typical Applications

Coventry Heptane Precision Cleaning Solvent is used to clean and prepare a variety of surfaces within critical environments:

- Swelling elastomers
- Carrier fluid for depositing silicone lubricants
- Cleaning
- Extraction
- Drying agent



Typical Product Data and Physical Properties

Purity	>=99.75%
Boiling Point	209.1°F/98.4°C
Solubility in Water	<0.01%
Specific Gravity	0.68
Vapor Pressure @68°F	40 mm Hg @72F
Vapor Density (air=1)	3.45
Appearance	Clear, colorless liquid
Odor	hydrocarbon
Surface Tension (dynes/cm @ 73°F)	19.7
Flash Point (TCC)	25°F/-3.9°C
Evaporation Rate (butyl acetate =1)	2.0
Molecular Weight	100.2
VOC* Content	
CARB	100%
SCAQMD	679 g/L
Federal	100%
Shelflife	2 years from DOM unopened
RoHS Compliant	Yes

*Volatile Organic Compound (VOC) information is calculated on a weight basis using the VOC definition of California Air Resources Board (CARB) Consumer Product Regulations, South Coast Air Quality Management District (SCAQMD) Rule 102 and the Federal definition published in 40 CFR 51.100(s).

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Typical Product Data (cont.)

Moisture Content (ASTM D-3401)	<50 ppm by weight
NVR (ASTM-D-2109)	<20 ppm by weight
Aromatic Content (% wt)	0.10 max.

Compatibility

Coventry™ Heptane Precision Cleaning Solvent is compatible with most metals and plastics. As with any solvent, compatibility with substrate should be determined on a non-critical area prior to use. Long term compatibility with materials used during manufacturing must be evaluated as there is potential for plasticizers to be leached from plastic funnels, syringes, housings, bottles, etc.

Material	Compatibility
Aluminum	Excellent
Buna-N	Excellent
CPVC	Excellent
Copper	Excellent
Epoxy	Excellent
Neoprene	Good
Noryl®	Good
Phenolic	Excellent
Cross-Linked PE	Good
Polycarbonate	Good
Polypropylene	Fair
Polystyrene	Not recommended
PVC	Fair
Teflon™	Excellent
Tygon™	Fair
Viton™	Excellent

Usage Instructions

For industrial use only. Read MSDS carefully prior to use.

Read MSDS carefully prior to use. Keep away from ignition sources. Use only in a well-ventilated area. No special surface preparation is required prior to applying Coventry™ Heptane Precision Cleaning Solvent.

For optimum cleaning results, apply using Coventry Cleanroom Swabs to quickly and safely remove oxides, dust and other contaminants. Use Coventry Cleanroom Wipes for lint-free wiping of large areas.

For coating operations, the solution should be agitated during coating to insure homogeneity in the solution in order to provide a uniform coating. For silicone swelling applications, submerge the part in solvent for a minute, or until the desired swelling is obtained. Remove and assemble.

Availability

12803 1 gal. / 3.8 L liquid

Technical and Application Assistance

Chemtronics provides a technical hotline to answer your technical and application related questions.

The toll free number is: 1-800-TECH-401.

Note:

This information is believed to be accurate. It is intended for professional end users having the skills to evaluate and use the data properly. CHEMTRONICS does not guarantee the accuracy of the data and assumes no liability in connection with damages incurred while using it.