

Technical Data Sheet

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Coventry 12857 Nonflammable Swelling Solvent and Cleaner Product # 12857

Product Description

Coventry[™] 12857 Nonflammable Swelling Solvent and Cleaner is a low-VOC, nonflammable solution developed for safely swelling silicone near sensitive plastics. It is also effective at quickly removing oils, dirt, dust, and other contaminants from hybrid surfaces and assemblies. This highpurity solvent was developed for swelling silicone elastomers and tubing for fitment onto components while in proximity to titanium, PEEK and stainless materials without harming any of the materials. The solvent then evaporates allowing the elastomer to shrink back to its original dimensions. Utilizing novel VOC replacement chemistry that does not contain any hazardous air pollutants or ozone depleting compounds, this material provides the swelling and cleaning strength required for the most difficult jobs.

- Swelling of platinum and peroxide cured silicone, urethane
- Powerful cleaning agent to remove oils, dirt, grease, dust, and other contaminants
- Nonflammable
- Penetrates to clean hard to reach areas
- Evaporates quickly and leaves no residues, minimizes process time
- Noncorrosive, safe for sensitive metals

Typical Applications

Coventry[™] 12857 Nonflammable Swelling Solvent and Cleaner 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

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Boiling Point	118º F (48ºC)
Solubility in Water	<5%
Specific Gravity	1.28
Vapor Pressure @68°F	137 mm Hg
Appearance	Clear, colorless liquid
Odor	Mild
Flash Point (TCC)	None
Evaporation Rate	>1
(butyl acetate =1)	
Dielectric Strength	14 kV
Kauri-Butanol	95
(KB) Number	
VOC* Content	
CARB	100%
SCAQMD	627 g/L
Federal	49%
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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Compatibility

Coventry[™] 12857 Nonflammable Swelling Solvent and Cleaner 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
ABS	Not compatible
Buna-N	Fair
EPDM	Not compatible
Graphite	Excellent
HDPE	Excellent
LDPE	Excellent
Lexan [™]	Not compatible
Neoprene	Fair
Nylon™ 66	Excellent
Cross-Linked PE	Excellent
Polypropylene	Excellent
Polystyrene	Not compatible
PVC	Not compatible
Silicone Rubber	Poor
Teflon™	Excellent
Tygon [®]	Poor
Viton [™]	Good

Usage Instructions

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

Keep away from ignition sources. Use only in a well-ventilated area.

For ultrasonic or soak applications, be sure to cover tank when not in use to prevent evaporation.

For silicone deposition, 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 until the desired swelling is obtained. Remove and assemble.

Availability

12857 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.

