

Technical Data Sheet

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Arctic Blast™ Freeze Spray

Product# ES1054

Product Description

Arctic Blast Freeze Spray is specifically designed for locating thermal intermittent electrical components and cooling printed circuit boards. Utilizing an ultra-low global warming potential coolant, this product offers the best cooling possible with the lowest global warming impact. Arctic Blast™ Freeze Spray is nonflammable*, residue-free and provides fast cooling action.

- Cools surfaces to below -49°F / -45 °C
- Ultra-low global warming impact of <1
- Nonflammable*
- High heat transfer
- Pinpoint spray for individual component isolation
- Noncorrosive
- Ultra-pure, filtered to <0.2 microns
- Leaves no residue
- Nonabrasive on most surfaces
- CFC, HCFC and HFC free
- VOC free

Typical Applications

Arctic Blast Freeze Spray can be used to:

- Cool Equipment for testing
- Dissipate heat while soldering or desoldering
- Isolate thermal intermittent components
- Test circuit traces for continuity
- Test printed circuit boards for stress fractures
- Track intermittent failures and shorts





Typical Product Data and Physical Properties

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Boiling Point:	-2 °F / -19 °C	
Cools To:	-49 °F / -45 °C	
Vapor Density (air=1):	4.0	
<u>@</u> 77°F		
Solubility in Water:	>0.10% by weight	
@77°F/1 atm		
Internal Pressure:	47 psia @ 70 °F	
(water = 1@77°F)		
Surface Tension:	7.8	
(dynes/cm @ 21.6°F)		
Flash Point (TCC):	None	
Evaporation Rate:	>1	
(butyl acetate =1)		
Appearance:	Clear, colorless	
	liquified gas	
Odor	Slight ethereal	
Shelflife	10 years	
RoHS Compliant	Yes	

^{*} under ambient conditions

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Compatibility

Arctic Blast Freeze Spray is generally compatible with most materials used in printed circuit board fabrication, including sensitive plastics and compounds. With any circuit refrigerant, compatibility must be determined on a non-critical area prior to use.

Material	Compatibility
Buna-N	Good
Graphite	Excellent
HDPE	Fair
LDPE	Fair
Lexan	Good
Neoprene	Good
Cross-Linked PE	Good
Polyacrylate	Good
Polystyrene	Good
PVC	Good
Silicone Rubber	Fair
Teflon	Fair
Viton	Poor

Usage Instructions

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

No special surface preparation is required prior to using Arctic Blast Freeze Spray. Direct spray onto the area to instantly cool components, circuit boards or adhesives. For optimum performance and pin point control, use Arctic Blast Freeze Spray with the attached extension tube.

Availability

ES1054 10 oz. / 283 g Aerosol

Environmental Impact Data

CFC	0.0%
HCFC	0.0%
CL Solv.	0.0%
VOC	0.0%
HFC	0.0%
ODP	0.0

CFC, HCFC, CL. SOLV., VOC, and HFC numbers shown are the content by weight. Ozone depletion potential (ODP) is determined in accordance with the Montreal Protocol and U.S. Clean Air Act of 1990. The ODP of this product is 0.0. It is the sum of the ODP of the substances that may contribute to the depletion of stratospheric ozone, based upon the weight of each substance in the product's formulation. VOC consideration is based on the materials being not photochemically reactive by Commonly Used Standards (material supplier).

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.

