

# Boeing BAC5408 Conforming Non-PFAS Aerosol Cleaner

#### Introduction

FluoSolv® 5408 Aerosol conforms to the Boeing BAC5408 specification for vapor degreasing. It has the same active ingredients of Fluosolv 5408 in convenient aerosol form. It is a proprietary blend of nonflammable fluorinated solvents (HFO's) and trans-1,2-dichloroethylene (t-DCE). FluoSolv® 5408 offers a **NON-PFAS** solution to precision degreasing of heavy duty grease and lubricants and also cold cleaning.

FluoSolv® 5408 Aerosol is a drop-in replacement for many 3M Novec Aerosols.

FluoSolv® 5408 Aerosol solvent leverages the chemical solvency of the fluid as well as its physical properties such as high density, low surface tension and low viscosity for optimal performance. Efficient cleaning requires the solvent to flow extremely close to the surface of the part to dissolve the contaminant or physically lift insoluble particulate contaminants away from the surface to be cleaned.

Fluosolv 5408 Aerosol does not contain any PFAS per the "EPA Reporting and Recordkeeping Requirements for Perfluoroalkyl and Polyfluoroalkyl Substances", final rule dated September 28, 2023.

#### **User Benefits**

NuGenTec's FluoSolv® 5408 Aerosol is ideally balanced to deliver performance, worker safety and desirable environmental properties while offering a solution that is better for the environment than traditional chemistries.

- Non-PFAS Formulation
- Conforms to Boeing BAC5408
- Drop-in replacement for 3M Novec aerosol products
- Low global warming potential (GWP)
- Low toxicity; high allowable exposure limit (AEL);
- Non-Flammable; Non-Hazardous
- Chemically stable; will not go acid

# **Material Compatibility**

FluoSolv® 5408 Aerosol conforms to everything on the Boeing BAC 5408 specification. Also it is compatible with all metals, ceramic and other non-conducting materials. Most elastomeric materials are compatible. It is recommended that all materials be tested prior to use. See Table 1.



**Table 1: Material Compatibility** 

Compatible **Additional Testing** 

**Metals** Aluminum, Copper, S/S

Required

Titanium, Brass, Tungsten

Neoprene, Butyl Rubber, **Elastomers** 

EPDM, Kynar (PVDF) Viton A & B, Kalrez\*\*

**Plastics** Acrylic\*, HDPE, PTFE,

Nylon, PVC, Epoxy, Phenolic,

**Table 2: Physical Properties** 

Property	NuGenTec FluoSolv <sup>®</sup> 5408 Aerosol	Novec 72DE	HCFC-141b	TCE	nPB
Density at 25°C (77°F) kg/liter [lb/gal]	1.27 [10.8]	1.28 [10.7]	1.23 [10.3]	1.46 [12.1]	1.35 [11.26]
Surface Tension at 25°C (77°F) dyne/cm	15.9	19	19.3	29.5	25.9
Viscosity at 25°C (77°F), cP	0.41	0.45	0.43	0.49	0.49
Vapor Pressure at 25°C (77°F) kPa	44.5	46.7	79.5	8.0	20.3
Heat of Vaporization @bp kJ/kg	282	218	147	236	58.8
Global Warming Potential(GWP/100year ITH)	<15	43	725	Low	n/a
Ozone Depleting Chemical	0	0	0.10	0	0.026
Volatile Organic Compounds (VOC) g/l	1207 g/L	Yes	No	Yes	1,350 g/L
Flash Point °C [°F]	None	None	None	None	<10
Worker Exposure Ceiling (ppm)	None	None	Not Determined	Not Determined	10
KB Value	103	52	56	129	125



<sup>\*\*</sup> Viton & Kalrez are fluoroelastomers that tend to swell when exposed to fluorinated fluids; dimensional changes are reversible

<sup>\*</sup> Acrylics & Polycarbonates in stressed conditions are more susceptible to solvent attack at elevated temperatures.

### **Worker Safety**

Data from acute toxicity studies of various ingredients has demonstrated that FluoSolv® 5408 Aerosol blend has low toxicity. It has a calculated AEL (Acceptable Exposure Limit) of 200 ppm based on its individual components. None of the ingredients in FluoSolv® 5408 Aerosol have any chronic or acute toxicity associated with them which makes it a worker friendly solvent.

Please refer to the SDS for information on detailed exposure limits and toxicity-related data.

NuGenTec's FluoSolv® 5408 Aerosol is not classified as a flammable liquid per established definitions by NFPA or DOT. Flash point data and vapor flammability limits in air are shown in Table 3 below .

### **Table 3: Flammability**

	Test Method	FluoSolv® 5408
Flash Point (CC) Flash Point (OC) Flammability in Air	ASTM D93 ASTM D1310 ASTM E681	None None

# Free Solvent Sample

NuGenTec offers free samples for testing. For more information about testing our Fluosolv 5408 Aerosol please call us at 800-409-3142 or <u>Contact Us</u>.

Email: fluosolv@nugentec.com

### **Product Specifications**

#### FluoSolv® 5408 Composition (Typical)

Qualified to the Boeing BAC 5408 Specification
Fluorinated Fluid Mixture <35 wt%
Trans-dichloroethylene >40 wt%
Water <100 ppm
Non-volatile residue <50 ppm (drums)
<200 ppm (pails)
Appearance Clear, colorless

### **Packaging & Availability**

Fluosolv 5408 Aerosol is packaged inan aerosol can

For orders, call 800-409-3142 Email: FluoSolv@nugentec.com

Lead times are 1-2 weeks after receipt of order.

