

FluoSolv™

CX

Technical Data Sheet

Introduction:

NuGenTec FluoSolv™ CX is a proprietary blend of non-flammable fluorocarbons (HFC, HFE etc.) and trans-1,2-dichloro-ethylene (t-DCE) formulated as a mixture of azeotropes such that during evaporation and use in a vapor-degreaser will maintain a composition that will be effective for heavy-duty degreasing.

NuGenTec FluoSolv™ CX is an ideal drop-in replacement for trichloroethylene (TCE) and n-propyl bromide (nPB). Moreover the high-chemical stability of FluoSolv™ CX makes it a very cost-effective replacement for TCE & nPB because it does not have to be periodically replaced and sent for waste-treatment as current users have to do with TCE & nPB. FluoSolv™ CX solvent is a very good substitute for HCFC-225 and its blends. It will perform very well in applications where maximum cleaning power is needed and where safety, toxicity and environmental concerns and/or floor space and cleanliness are at a premium.

Typical soils that can be cleaned using NuGenTec FluoSolv™ CX include mineral oils, hydrocarbon and silicone greases, waxes and hydraulic fluids.

Key Properties and Benefits:

NuGenTec FluoSolv™ CX is a versatile solvent for precision cleaning and myriad degreasing applications. Table 1 below shows how some of its characteristic properties can be used advantageously:

Typical Applications:

NuGenTec FluoSolv CX is ideal for a wide range of precision cleaning applications in industries such as:

- Aerospace and Avionic assemblies
- Disk-drive and computers
- Optics and Opto-electronics
- Automotive parts & assemblies
- Semiconductors and tooling parts
- Electronic circuit assemblies
- Medical devices and instruments

Material Compatibility

NuGenTec FluoSolv™ CX can be safely used for cleaning metal parts since it is completely compatible with metals. Non-metals must be tested prior to use. Known plastics that are affected by FluoSolv™ CX are acrylics, polycarbonates and ABS. These plastics will swell, soften or deform under various conditions of use. Elastomers show varying degrees of compatibility, however if affected they will revert to their original dimensions after air-drying.

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Table 1

FluoSolv™ CX Property	User Benefit
High Kb Value (>90)	Removes heavy-duty greases, waxes & silicone fluids
Low Boiling Point (41°C)	Fast drying; high through-put
Low Surface Tension	Maximize surface penetration without using surfactants
Low Viscosity	Effectively clean complex geometry parts
High Density (Sp. Gr=1.3)	Enhances ultrasonic mechanical cleaning
No Surfactants	No-rinse, residue-free cleaning
High Chemical Stability	No solvent breakdown; no waste disposal
No Chronic toxicity	Greater worker safety; low insurance cost
Non-Flammable	Greater worker safety; low insurance cost
Non-ODP, Low GWP	Environmentally friendly
Azeotropic blends	Ideal for vapor-degreasing

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Physical Properties:

Table 2

Property	FluoSolv™ CX	nPB	TCE
Boiling Point	41°C	71°C	87°C
Freezing Point	< -45°C	< -76°C	-86°C
Liquid Density	1.3 g/l	1.35 g/l	1.46 g/l
Surface Tension at 25°C	22.4 dyne/cm	25.9dyne/cm	32.3 dyne/cm
Viscosity at 25°C	0.59 cPs	0.49 cPs	0.54 cPs
Vapor Pressure	390 mm Hg	152 mm Hg	75 mm Hg
Kauri-Butanol Value	93	125	129
Heat of Vaporization	65 cal/g	59 cal/g	56 cal/g



Safety:

Please make sure you have read and understand the product label and MSDS before using this product. Avoid breathing vapors, spray or mists. Use only with adequate ventilation. Wash thoroughly after handling. Observe label precautions.

Environmentally Responsible

Environmental Information

FluoSolv™ CX is a non-ODP (ozone depleting potential) solvent and has a very low GWP (global warming potential).

Table 3 below is a summary of key environmental properties of NuGenTec FluoSolv™ CX.

Table 3

Property	NuGenTec FluoSolv™ CX
Ozone Depleting	NO
Global Warming	Low (160 GWP/100yr ITH)
VOC	Yes*
TLV	200 ppm (calculated)
HAP	No
Prop 65 Chemical	No
Carcinogen (or suspected)	No

Handling & Storage

NuGenTec FluoSolv™ CX does not have a flash point. It is classified as a non-flammable liquid per DOT shipping regulations. FluoSolv™ CX is a thermally stable liquid and will not degrade or oxidize during storage, however recommended storage temperatures are between -10°C and 52°C. Due to its chemical and thermal stability there is no shelf-life as such for the product. However, product stored for extended period of time should be re-tested non-volatile (NVR) residues from the drum liner.

Packaging and Availability

NuGenTec FluoSolv™ CX is available directly from NuGenTec. It is available in 55 gal carbon-steel lined drums, 5 gal carbon steel lined pails and 1 gal amber glass bottles. Each standard packaging has a package net wt. as follows:

- 55 gal – net wt. = 550 lbs..
- 5 gal pail – net wt. = 55 lbs..
- 1 gal glass bottle – net wt. = 11 lbs.

We also offer custom packaging in stainless steel drums for critical applications that require low NVR. For orders call Geri at 1-888-996-8436 ext. 100 or email fluosolv@nugentec.com.

NuGenTec is located at **1155 Park Ave, Emeryville, CA 94608**. We manufacture and stock at this location. Additionally we stock certain products at our warehouse in Atlanta, GA.

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