





Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev

Date of issue: 09/11/2025 Revised on 09/10/2025

1 Identification

- · Product Identifier
- · Trade Name: FluoSolv 5408 Aerosol
- Relevant identified uses of the substance or mixture and uses advised against:

Vapor degreasing. Cold cleaning. Spray cleaning. Aerosol applications. Carrier Fluids. Industrial use only.

· Product Description:

Azeotropic solvent blend.

Non-PFAS solution for vapor degreasing, cold cleaning, spray cleaning, aerosol applications, carrier fluids.

- · Application of the substance / the mixture: Precision Cleaning
- · Details of the Supplier of the Safety Data Sheet:
- Manufacturer/Supplier:

NuGeneration Technologies, LLC (dba NuGenTec)

1155 Park Ave, Emeryville, CA 94608

fluosolv@nugentec.com

For Product Info call 1-(800) 409-3142

www.fluosolv.com

www.nugentec.com/fluosolv

· Emergency telephone number:

PERS Emergency Response: US and Canada - 1-800-633-8253, International 1-801-629-0667

2 Hazard(s) Identification

· Classification of the substance or mixture:



Gas cylinder

Gases under pressure - Dissolved gas

H280

Contains gas under pressure; may explode if heated.



Specific target organ toxicity (single exposure) 3 H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

- · Label elements:
- · Hazard pictograms:





- · Signal word: Warning
- Hazard statements:

H280 Contains gas under pressure; may explode if heated.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

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Trade Name: FluoSolv 5408 Aerosol

· Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P411 Store at temperatures not exceeding 100°F.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Unknown acute toxicity:

This value refers to knowledge of known, established toxicological or ecotoxicological values. 0 % of the mixture consists of component(s) of unknown toxicity.

- Information pertaining to particular dangers for man and environment:
- · Classification system: NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
- NFPA ratings (scale 0 4)



Health = 2 Fire = 0 Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 2 Fire = 0

Physical Hazard = 1

- · Hazard(s) not otherwise classified (HNOC): None known
- · Classification according to (d)(1)(ii) of § 1910.1200

The SDS issuer does not object to the classifications provided by importers or manufacturers of precursor products.

Hazards not otherwise classified

There are no adverse physical or health effects known that are not covered by the hazard classes of the Hazard Communications Standard.

3 Composition/Information on Ingredients

· Non-hazardous components:

Proprietary Non-PFAS Solvents

2-12%

· Chemical characterization: Substance

· Description:

Mixture: consisting of the following components.

Mixture of substances listed with non-hazardous additions and/or components that are less than listing threshold. All non-hazardous, components listed under threshold, and listed component total 100%.

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Trade Name: FluoSolv 5408 Aerosol

· Dangerous Components:			
CAS: 156-60-5	trans-dichloroethylene	60-90%	
RTECS: KV 9400000	♦ Flammable liquids 2, H225; ♦ Acute toxicity - inhalation 4, H332		
CAS: 29118-24-9	(E)-1,3,3,3-tetrafluoroprop-1-ene	2-12%	
	Gases under pressure - Dissolved gas, H280		
CAS: 102687-65-0	(E)-1-Chloro-3,3,3-trifluoropropene	2-12%	

Additional information:

The exact percentages of the ingredients of this mixture are considered to be proprietary and are withheld in accordance with the provisions of paragraph (i) of §1910.1200 of 29 CFR 1910.1200 Trade Secrets.

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

4 First-Aid Measures

- · Description of first aid measures
- · General information: Take affected persons out into the fresh air.
- · After inhalation:

Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist. In case of unconsciousness place patient stably in the side position for transportation.

· After skin contact:

Wash with soap and water.

If skin irritation occurs, consult a doctor.

· After eve contact:

Rinse opened eye for several minutes under running water.

If easy to do so, remove contact lenses if worn.

If eye irritation occurs, consult a doctor.

· After swallowing:

Do not induce vomitting.

Never give anything by mouth to an unconscious person.

If swallowed and symptoms occur, consult a doctor.

- · Most important symptoms and effects, both acute and delayed: Dizziness.
- · Indication of any immediate medical attention and special treatment needed:

Do not administer preparations of the adrenalin-ephedrine-group.

5 Fire-Fighting Measures

- · Extinguishing media
- · Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- For safety reasons unsuitable extinguishing agents: No further relevant information is available.
- · Special hazards arising from the substance or mixture:

Fire or intense heat can cause violent rupture of packages.

The product is non-flammable. Vapors may form flammable mixture with air.

Hazardous decomposition products: hydrogen fluoride, fluorinated hydrocarbons, carbonyl fluoride, carbon oxides, and hydrogen chloride.

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Trade Name: FluoSolv 5408 Aerosol

- Advice for firefighters This product has no flash point but the product may release flammable vapor.
- Special protective equipment for firefighters:

Mouth respiratory protective device.

As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent) and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

· Personal precautions, protective equipment and emergency procedures:

Ventilate area, especially in low or enclosed places where heavy vapors might collect.

In case of insuffiencent ventilation, wear suitable respiratory equipment.

· Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

· Methods and material for containment and cleaning up:

Dispose of contaminated material as waste according to section 13.

Ensure adequate ventilation.

Dispose of the collected material according to regulations.

PAC-1:		
156-60-5	trans-dichloroethylene	280 ppm
29118-24-9	(E)-1,3,3,3-tetrafluoroprop-1-ene	1,400 ppm
PAC-2:		
156-60-5	trans-dichloroethylene	1000 ppm
29118-24-9	(E)-1,3,3,3-tetrafluoroprop-1-ene	15,000 ppm
PAC-3:		
156-60-5	trans-dichloroethylene	1700 ppm
29118-24-9	(E)-1,3,3,3-tetrafluoroprop-1-ene	69,000 ppm

· Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and Storage

· Precautions for safe handling:

Ensure good ventilation/exhaustion at the workplace.

Contents may be under pressure, open carefully and slowly.

Handle in accordance of good safe hygiene for industrial practices.

· Information about protection against explosions and fires:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

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Trade Name: FluoSolv 5408 Aerosol

- · Conditions for safe storage, including any incompatibilities
- · Storage
- Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurized containers.

Store in a well-ventilated area.

Keep container tightly closed.

Store away from heat.

Store at temperatures not exceeding 120F.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · Specific end use(s): No further relevant information available.

8 Exposure Controls/Personal Protection

· Control parameters:

· Components with occupational exposure limits:

156-60-5 trans-dichloroethylene

PEL Long-term value: 790 mg/m³, 200 ppm REL Long-term value: 790 mg/m³, 200 ppm TLV Long-term value: 793 mg/m³, 200 ppm

29118-24-9 (E)-1,3,3,3-tetrafluoroprop-1-ene

PEL Long-term value: 800 ppm

102687-65-0 (E)-1-Chloro-3,3,3-trifluoropropene

PEL Long-term value: 800 ppm

- Additional information: The lists that were valid during the creation of this SDS were used as basis.
- · Exposure controls:
- · Appropriate engineering controls No further data; see section 7.
- Personal protective equipment
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Wash hands before breaks and at the end of work.

Breathing equipment:

Engineering controls: Not required if appropriate ventilation is provided. If ventilation is not adequate, use appropriate respirtory protection equipment.

For rescue and maintenence work in stoage tanks use self-contained breathing apparatus. Vapors are heavier than air and can cause suffocation by reducing oxygen available for breathing.

- · Protection of hands: Not required.
- · Material of gloves: Solvent Resistant
- · Penetration time of glove material: Not applicable.

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Trade Name: FluoSolv 5408 Aerosol

· Eye protection:



Tightly sealed goggles

- · Body protection: Not required.
- · Limitation and supervision of exposure into the environment: None

9 Physical and Chemical Properties

· Information on basic physical and chemical properties

· General Information

Physical stateColor:AerosolColorless

Odor: Weak, characteristic
 Odor threshold: Not applicable
 Melting point/Melting range: Not determined.

· Boiling point/Boiling range: Not applicable, as aerosol.

· Flammability: Not applicable.

· Explosion limits:

· Lower: Not determined. · Upper: Not determined.

· Flash point: Not applicable, as aerosol.

Auto igniting: Not applicable

Decomposition temperature: N/A

· **pH-value:** Not determined.

· Viscosity:

Kinematic: Not determined.Dynamic: Not determined.

· Solubility in / Miscibility with:

· Water: Not miscible (100 ppm max)

· Partition coefficient (n-octanol/water): Not determined.

· **Vapor pressure @ 20 °C (68 °F):** ≤350 hPa (≤262.5 mm Hg)

· Vapor pressure:

Density: Not determined.
 Relative density: Not determined.
 Vapor density: Not determined.
 Particle characteristics Not applicable.

· Other information:

· Appearance:

· Form: Aerosol

Important information on protection of health and environment, and on safety.

Ignition temperature: Product is not self-igniting.

· Danger of explosion: Not determined.

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· Change in condition

· Evaporation rate: Not applicable.

10 Stability and Reactivity

- · Reactivity: Stable under normal conditions.
- · Chemical stability: Stable under normal conditions.
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · **Possibility of hazardous reactions:** Hazardous polymerization will not occur.
- · Conditions to avoid: Heat and flame
- · Incompatible materials:

Avoid contact with Alkali metals and Alkaline earth metals, powdered metal salts, strong bases

· Hazardous decomposition products:

Hazardous decomposition products formed under fire conditions: fluorinated hydrocarbons, hydrogen fluoride, carbon dioxide (CO2), carbon monoxide, hydrogen chloride gas, carbonyl fluoride.

11 Toxicological Information

· Information on toxicological effects:

			ant for classification:	
156-60-5 t	trans-dichloroe	ethyle	ne	
Oral	LD50	7,90	2 mg/kg (Rat)	
Dermal	LD50	>5,0	00 mg/kg (rabbit)	
Inhalative	LC50/4 h	95.4	mg/l (Rat)	
	LC50/96 hours	27.2	mg/l (Cyprinodon variegatus (minnow))	
	LC50/48 hrs	79 n	ng/l (Daphnia)	
102687-6	5-0 (E)-1-Chlord	o-3,3,	3-trifluoropropene	
Inhalative	LC50/4 h	120,	000 mg/l (Rat)	
29118-24-	-9 (E)-1,3,3,3-ter	traflu	oroprop-1-ene	
Inhalative LC50/4 h >20		>207	7,000 mg/l (Rat)	
Primary in	rritant effect:			
On the sk	in:			
102687-6	5-0 (E)-1-Chlord	o-3,3,	3-trifluoropropene	
Irritation o	f skin Skin Irrita		(rabbit)	
			No skin irritation	
29118-24-	-9 <i>(E)-1,3,3,3-t</i> et	traflu	oroprop-1-ene	
Irritation o	f skin Skin Irrita		(rabbit) No skin irritation	







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· On the eye: No irritating effect.

· Sensitization:

29118-24-9 (E)-1,3,3,3-tetrafluoroprop-1-ene

Sensitization | Skin Sensitization | (Dog)

No sensitization

· Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations:

- · Interactive effects No interactive effects between components are known.
- · Carcinogenic categories:
- · IARC (International Agency for Research on Cancer):

None of the ingredients are listed.

NTP (National Toxicology Program):

None of the ingredients are listed.

· OSHA-Ca (Occupational Safety & Health Administration):

None of the ingredients are listed.

· Alternative sources for toxicological information

No non-standard sources for toxicological information where used.

12 Ecological Information

- · **Toxicity:** The hazards for the aquatic environment are unknown.
- · Aquatic toxicity: No further relevant information available.
- Persistence and degradability: No further relevant information available.
- · Bioaccumulative potential: No further relevant information available.
- · Mobility in soil: No further relevant information available.
- · Results of PBT and vPvB assessment:
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects:
- · Remark: Harmful to fish
- · Additional ecological information:
- · General notes:

Do not allow undiluted product or product that has not been neutralized to reach ground water, water course or sewage system.

Harmful to aquatic organisms

13 Disposal Considerations

- · Waste treatment methods
- · Recommendation:

Contact manufacturer for recycling information.

Must not be disposed of together with household waste. Do not allow product to reach sewage system.

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07

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Trade Name: FluoSolv 5408 Aerosol

Observe all federal, state and local environmental regulations when disposing of this material.

- · Uncleaned packaging
- · Recommendation: Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

Transport Information	
UN-Number: DOT, ADR/ADN, IMDG, IATA	UN1950
UN proper shipping name: DOT ADR/ADN IMDG IATA	Aerosols, non-flammable UN1950 AEROSOLS AEROSOLS AEROSOLS, non-flammable
Transport hazard class(es): DOT	
Class: Label:	2 Gases 2.2
ADR/ADN	
Class: Label:	2 5A Gases 2.2
IMDG, IATA	2.2
Class: Label:	2 Gases 2.2
Packing group: DOT, ADR/ADN, IMDG, IATA	Non-Regulated Material
Environmental hazards:	Not applicable.

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Trade Name: FluoSolv 5408 Aerosol

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable. · Transport/Additional information: · DOT Quantity limitations: On passenger aircraft/rail: 75 kg On cargo aircraft only: 150 kg · ADR/ADN · Excepted quantities (EQ): Code: E0 Not permitted as Excepted Quantity · IMDG · Limited quantities (LQ): 1L Excepted quantities (EQ): Code: E0 Not permitted as Excepted Quantity · Special precautions for user: Warning: Gases · Hazard identification number (Kemler code): -· EMS Number: F-D,S-U Stowage Code SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters. SG69 For AEROSOLS with a maximum capacity of 1 · Segregation Code litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class · UN "Model Regulation": UN 1950 AEROSOLS, 2.2

15 Regulatory Information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture: No further relevant information available.
- · SARA (Superfund Amendments and Reauthorization):
- · Section 355 (extremely hazardous substances):

None of the ingredients are listed.

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Trade Name: FluoSolv 5408 Aerosol

	Specific toxic chemical listings):	
	gredients are listed.	
•	Substances Control Act):	
	trans-dichloroethylene	ACTIV
	(E)-1,3,3,3-tetrafluoroprop-1-ene	ACTIV
102687-65-0	(E)-1-Chloro-3,3,3-trifluoropropene	ACTIV
· Hazardous A		
	gredients are listed.	
· California Pro		
	nown to cause cancer:	
None of the in	gredients are listed.	
· Chemicals kı	nown to cause reproductive toxicity for females:	
None of the in	gredients are listed.	
· Chemicals kı	nown to cause reproductive toxicity for males:	
None of the in	gredients are listed.	
Chemicals ki	nown to cause developmental toxicity:	
None of the in	gredients are listed.	
New Jersey F	Right-to-Know List:	
None of the in	gredients are listed.	
New Jersey S	Special Hazardous Substance List:	
None of the in	gredients are listed.	
Pennsylvania	Right-to-Know List:	
156-60-5 tran	ns-dichloroethylene	
Pennsylvania	Special Hazardous Substance List:	
156-60-5 tran	ns-dichloroethylene	
Carcinogenio	categories:	'
_	nmental Protection Agency):	
•	ns-dichloroethylene	
TLV (Thresho	old Limit Value established by ACGIH):	
•	gredients are listed.	
NIOSH-Ca (N	ational Institute for Occupational Safety and Health):	
•	gredients are listed.	
GHS Jahol old		

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms:









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Trade Name: FluoSolv 5408 Aerosol

· Signal word: Warning · Hazard statements:

H280 Contains gas under pressure; may explode if heated.

H335-H336 May cause respiratory irritation. May cause drowsiness or dizziness.

· Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.

P301+P312 If swallowed: Call a poison center/doctor if you feel unwell.

P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P411 Store at temperatures not exceeding 100°F.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· National regulations:

The product is not subject to be labelled according with the prevailing version of the regulations on hazardous substances.

· Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other Information

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose.

- · Date of previous version 09/03/2025
- · Date of preparation 09/11/2025
- · Abbreviations and acronyms:

ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road

ADN: The European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety & Health Administration

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

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REL: Recommended Exposure Limit

Gases under pressure - Compressed gas: Gases under pressure - Compressed gas Gases under pressure - Dissolved gas: Gases under pressure - Dissolved gas

Flammable liquids 2: Flammable liquids – Category 2 Acute toxicity - inhalation 4: Acute toxicity – Category 4

Specific target organ toxicity (single exposure) 3: Specific target organ toxicity (single exposure) - Category 3

* Data compared to the previous version altered.

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