

Safety Data Sheet

OSHA HazCom Standard 29 CFR 1910.1200(g) revised in 2024 and GHS Rev 07

Date of issue: 09/12/2025

Revised on 09/12/2025

1 Identification

· **Product Identifier**

· **Trade Name:** FluoSolv 7100DL

· **Relevant identified uses of the substance or mixture and uses advised against:**

For professional use only

· **Product Description:**

Including but not limited to precision cleaning of medical devices and as lubricant deposition solvents for medical devices.

· **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:**

The product does not need classification according to OSHA HazCom Standard 29 CFR paragraph (d) of §1910.1200(g) and GHS Rev 03.

· **Label elements:**

· **Hazard pictograms:** Non-Regulated Material

· **Signal word:** Non-Regulated Material

· **Hazard statements:** Non-Regulated Material

· **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 = 3

Fire = 1

Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 0

Fire = 1

Physical Hazard = 0

· **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.

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· **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:**

163702-08-7	Methyl nonafluoroisobutyl ether	55-90%
163702-07-6	Methyl nonafluorobutyl ether	10-45%

· **Chemical characterization: Substance**

· **Description:**

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%.

· **Dangerous Components: Non-Regulated Material**

· **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.

4 First-Aid Measures

· **Description of first aid measures**

· **General information:**

Symptoms of poisoning may occur after exposure to dust, fumes or particulates; seek medical attention if feeling unwell.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:**

Wash with soap and water.

If skin irritation occurs, consult a doctor.

· **After eye contact:**

Rinse opened eye for several minutes under running water.

If eye irritation occurs, consult a doctor.

Remove contact lenses.

· **After swallowing:**

Rinse mouth with water.

If swallowed and symptoms occur, consult a doctor.

· **Most important symptoms and effects, both acute and delayed:**

No further relevant information available.

· **Indication of any immediate medical attention and special treatment needed:**

No further relevant information available.

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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.
- **Special hazards arising from the substance or mixture:**
Exposure to extreme heat can give rise to thermal decomposition.
- **Advice for firefighters**
- **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 the area with fresh air. Observe precautions from other sections.
- **Environmental precautions:**
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust).
Dispose of the collected material according to regulations.

· **PAC-1:**

All components have the value 2500 ppm.

· **PAC-2:**

All components have the value 8200 ppm.

· **PAC-3:**

All components have the value 15000 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:**
Do not breathe thermal decomposition products. Avoid skin contact with hot material. Store work clothes separately from other clothing, food and tobacco products. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) No smoking: Smoking while using this product can result in contamination of the tobacco and/or smoke and lead to the formation of hazardous decomposition products.
- **Information about protection against explosions and fires:** No special measures required.

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- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
Store away from acids. Store away from strong bases. Store away from oxidizing agents.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **Specific end use(s):** No further relevant information available.

8 Exposure Controls/Personal Protection

- **Control parameters:**
- **Components with occupational exposure limits:**

163702-08-7 Methyl nonafluoroisobutyl ether	
TWA	750 ppm (AIHA)
163702-07-6 Methyl nonafluorobutyl ether	
TWA	750 ppm (AIHA)
- **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:**
The usual precautionary measures for handling chemicals should be followed.
Wash hands before breaks and at the end of work.
- **Breathing equipment:** Use suitable respiratory protective device in case of insufficient ventilation.
- **Protection of hands:**



Protective gloves

- **Material of gloves:**
Rubber gloves
Chemical protective gloves are not required under normal use conditions. However, when the product is subjected to extreme heat, HF may be formed. For those cases, neoprene gloves and apron are recommended.
- **Penetration time of glove material:** Not applicable.
- **Eye protection:** Not required.
- **Limitation and supervision of exposure into the environment:** None

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9 Physical and Chemical Properties

· Information on basic physical and chemical properties

· General Information

· Physical state

Liquid

· Color:

Clear, Colorless

· Odor:

Ether-like

· Odor threshold:

Not determined.

· Melting point/Melting range:

-135 °C (-211 °F)

· Boiling point/Boiling range:

61 °C (141.8 °F)

· Flammability:

Not applicable.

· Explosion limits:

· Lower:

Not determined.

· Upper:

Not determined.

· Flash point:

None

· Auto igniting:

405 °C (761 °F)

· Decomposition temperature:

Not determined.

· pH-value:

Not applicable.

· Viscosity:

· Kinematic:

Not determined.

· Dynamic:

Not determined.

· Solubility in / Miscibility with:

· Water @ 20 °C (68 °F):

<12 ppm

· Partition coefficient (n-octanol/water):

3.9 log POW

· Vapor pressure @ 20 °C (68 °F):

269 hPa (201.8 mm Hg)

· Vapor pressure:

· Density @ 20 °C (68 °F):

1.5 g/cm³ (12.5175 lbs/gal)

· Relative density @ 20 °C (68 °F):

1.5

· Vapor density @ 20 °C (68 °F):

8.6

· Particle characteristics

Not applicable.

· Other information:

· Appearance:

· Form:

Liquid

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

· Ignition temperature:

Product is not self-igniting.

· Danger of explosion:

Product does not present an explosion hazard.

· Solvent content:

· VOC content:

0 %

· Solids content:

0.0 %

· Change in condition

· Evaporation rate:

Not determined.

10 Stability and Reactivity

- **Reactivity:** No further relevant information available.

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- **Chemical stability:** Stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:**
Strong acids
Strong bases
Strong oxidizing agents
- **Hazardous decomposition products:**
Carbon monoxide, Carbon dioxide, Hydrogen Fluoride, Perfluoroisobutylene (PFIB), Toxic Vapor, Gas, Particulate At Elevated Temperatures - extreme conditions of heat.

11 Toxicological Information

- **Information on toxicological effects:**
- **Acute toxicity:**
- **LD/LC50 values that are relevant for classification:**

163702-08-7 Methyl nonafluoroisobutyl ether

Oral	LD50 Oral	>5,000 ml/kg (Rat)
Dermal	LD50	>5,000 mg/kg (not defined)
Inhalative	LC50/4 h	>1,000 mg/l (Rat)

163702-07-6 Methyl nonafluorobutyl ether

Oral	LD50 Oral	>5,000 ml/kg (Rat)
Dermal	LD50	>5,000 mg/kg (not defined)
Inhalative	LC50/4 h	>1,000 mg/l (Rat)

- **Primary irritant effect:**

- **On the skin:**

163702-08-7 Methyl nonafluoroisobutyl ether

Irritation of skin	Skin Irritation	(rabbit) No significant irritation
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- **On the eye:**

163702-08-7 Methyl nonafluoroisobutyl ether

Irritation of eyes	Eye Irritation	(rabbit) No significant irritation
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- **Sensitization:**

163702-08-7 Methyl nonafluoroisobutyl ether

Sensitization	Skin Sensitization	(guinea pig) Not classified
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- **Additional toxicological information:**
- **Interactive effects** No interactive effects between components are known.

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· **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:**

· **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:**

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.

14 Transport Information

· **UN-Number:**

· **DOT, ADR/ADN, IMDG, IATA**

Non-Regulated Material

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Trade Name: FluoSolv 7100DL

· UN proper shipping name:	
· DOT, ADR/ADN, IMDG, IATA	Non-Regulated Material
· Transport hazard class(es):	
· DOT, ADR/ADN, ADN, IMDG, IATA	
· Class:	Non-Regulated Material
· Packing group:	
· DOT, ADR/ADN, IMDG, IATA	Non-Regulated Material
· Environmental hazards:	Not applicable.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable.
· Special precautions for user:	Not applicable.
· UN "Model Regulation":	Non-Regulated Material

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.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients are listed.

- **TSCA (Toxic Substances Control Act):**

All components have the value ACTIVE.

- **Hazardous Air Pollutants**

None of the ingredients are listed.

- **California Proposition 65:**

- **Chemicals known to cause cancer:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients are listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients are listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients are listed.

- **New Jersey Right-to-Know List:**

None of the ingredients are listed.

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· **New Jersey Special Hazardous Substance List:**

None of the ingredients are listed.

· **Pennsylvania Right-to-Know List:**

None of the ingredients are listed.

· **Pennsylvania Special Hazardous Substance List:**

None of the ingredients are listed.

· **Carcinogenic categories:**

· **EPA (Environmental Protection Agency):**

None of the ingredients are listed.

· **TLV (Threshold Limit Value established by ACGIH):**

None of the ingredients are listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health):**

None of the ingredients are listed.

· **GHS label elements** Non-Regulated Material

· **Hazard pictograms:** Non-Regulated Material

· **Signal word:** Non-Regulated Material

· **Hazard statements:** Non-Regulated Material

· **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** 07/08/2025

· **Date of preparation** 09/12/2025

· **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)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

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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

REL: Recommended Exposure Limit

*** Data compared to the previous version altered.**

SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106

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