

Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03.

Printing date 08/14/2014

Reviewed on 08/03/2014

1 Identification

- **Product identifier**
- **Trade name:** FLUOSOLV CM
- **Product description** Fast Evaporating Machining Fluid
- **Application of the substance / the mixture** Coolant/ Cutting solution
- **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:**
 INFOTRAC day or night - 1-800-535-5053
 Outside of continental U.S. call collect 1-352-323-3500

2 Hazard(s) identification

- **Classification of the substance or mixture**
 The product is not classified according to the Globally Harmonized System (GHS).
- **Label elements**
- **GHS label elements** Non-Regulated Material
- **Hazard pictograms** Non-Regulated Material
- **Signal word** Non-Regulated Material
- **Hazard statements** Non-Regulated Material
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**

HEALTH	1	Health = 1
FIRE	0	Fire = 0
REACTIVITY	0	Reactivity = 0

3 Composition/information on ingredients

Proprietary Fluorinated Fluid Mixture #3	25-50%
Proprietary fluorinated fluid mixture	25-50%

- **Chemical characterization: Mixtures**
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- **Dangerous Components:** Non-Regulated Material

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4 First-aid measures

- **Description of first aid measures**
- **General information:** No special measures required.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water.
- **After swallowing:** Give large amounts of water. If symptoms persist consult 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.

5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture** No further relevant information available.
- **Advice for firefighters**
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures** Not required.
- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (ie. sand, diatomite, acid binders, universal binders, sawdust).
- **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** No special measures required.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **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.

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8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters**
- **Components with occupational exposure limits:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** *The lists that were valid during the creation were used as basis.*
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:**
*Not necessary under normal conditions.
 In special circumstances such as during an emergency reponse due to a spill or storage vessel maintainance use suitable respiratory protective device when high concentrations are present.
 Use suitable respiratory protective device in case of insufficient ventilation.*
- **Protection of hands:** Not required.
- **Material of gloves:** Not required.
- **Penetration time of glove material:** Not applicable.
- **Eye protection:** Not required.

9 Physical and chemical properties

- **Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**

Form:	Liquid
Color:	Colorless
Odor:	Odorless
Odor threshold:	Not determined.
- **pH-value:** not applicable
- **Change in condition**

Melting point/Melting range:	not applicable °C
Boiling point/Boiling range:	130-150 °C (266-302 °F)
- **Flash point:** Does Not Flash. *The product is not flammable. Method DIN 51755 Part 1*
- **Flammability (solid, gaseous):** Not applicable.
- **Ignition temperature:**

Decomposition temperature:	≥ 200 deg C (392 deg F) <i>Rapidly at 325 °C, noticeably at 300 °C, safe operating temperature is 200 °C and maximum short term temperature is 260 °C in scrupulously clean systems.</i>
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· Auto igniting:	Auto-flammability 580 deg C (1,076 deg F)
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	None
Upper:	None
· Vapor pressure @ 20 °C (68 °F):	700 hPa (525 mm Hg)
· Density @ 20 °C (68 °F):	1.6 g/cm ³ (13.352 lbs/gal)
· Vapour density	6.5
· Evaporation rate	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	1.6 (log Pow)
· Viscosity:	
Kinematic @ 20 °C (68 °F):	0.4 mPa.s (DIN 53211/4)
· Solvent content:	
Organic solvents:	100 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability** Product is stable under normal conditions.
- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Possibility of hazardous reactions**
Danger of polymerization.
Forms explosive gas mixture with air.
- **Conditions to avoid**
Heat, flame and ignition sources.
Keep at temperature not exceeding 150 deg C
- **Incompatible materials:** Alkali metals and alkaline earth metals may cause fires or explosions
- **Hazardous decomposition products:**
Thermal decomposition can lead to release of toxic/corrosive gases and hydrogen fluoride.
Fluorophosgene on contact with naked flame or red hot objects.

11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.

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· **Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· **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.

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.*

· **Additional ecological information:**

· **General notes:**

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

· **Results of PBT and vPvB assessment**

· **PBT:** *Not applicable.*

· **vPvB:** *Not applicable.*

· **Other adverse effects** *No further relevant information available.*

13 Disposal considerations

· **Waste treatment methods**

· **Recommendation:** *Smaller quantities can be disposed of with household waste.*

· **Uncleaned packagings:**

· **Recommendation:** *Disposal must be made according to official regulations.*

14 Transport information

· **UN-Number**

· **DOT, ADN, IMDG, IATA**

· **ADR**

Non-Regulated Material

Non-Regulated Material

Not Regulated

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<ul style="list-style-type: none"> · UN proper shipping name · DOT, ADR, ADN, IMDG, IATA 	<p><i>Non-Regulated Material</i></p>
<ul style="list-style-type: none"> · Transport hazard class(es) · DOT, ADR, ADN, IMDG, IATA · Class 	<p><i>Non-Regulated Material</i></p>
<ul style="list-style-type: none"> · Packing group · DOT, ADR, IMDG, IATA 	<p><i>Non-Regulated Material</i></p>
<ul style="list-style-type: none"> · Environmental hazards: · Marine pollutant: 	<p><i>No</i></p>
<ul style="list-style-type: none"> · Special precautions for user 	<p><i>Not applicable.</i></p>
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code 	<p><i>Not applicable.</i></p>
<ul style="list-style-type: none"> · UN "Model Regulation": 	<p><i>-</i></p>

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **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 ingredients are listed.

- **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.

- **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.

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· **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 subject to be labeled according with the prevailing version of the regulations on hazardous substances.

· **State Right to Know**

All ingredients are listed.

· **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 preparation / last revision** 08/14/2014 / 4

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

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

SDS created by MSDS Authoring Services www.msdsauthoring.com (877) 204-9106