

*Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Directives*

## 1. PRODUCT IDENTIFICATION

<u>TRADE NAME (AS LABELED):</u>	<b>NuGenTec FluoSolv® KG</b>
<u>CHEMICAL NAME/CLASS/SYNONYMS:</u>	Cleaning solvent
<u>PRODUCT NUMBER:</u>	<b>NUGENTEC FLUOSOLV® KG</b>
<u>U.N. NUMBER:</u>	N/A
<u>U.N. DANGEROUS GOODS CLASS/SUBSIDIARY RISK:</u>	N/A
<u>MANUFACTURER'S NAME:</u>	<b>NuGeneration Technologies, LLC</b>
<u>ADDRESS:</u>	1155 Park Avenue, Emeryville, CA 94608 USA
<u>EMERGENCY PHONE:</u>	1-510-962-9551 (NuGenTec Safe-T-Chem: For emergencies)
<u>BUSINESS PHONE:</u>	(888) 996-8436 (Product Information)
<u>DATE OF PREPARATION:</u>	August 15, 2012
<u>DATE OF LAST REVISION:</u>	August 15, 2012

## 2. COMPOSITION and INFORMATION ON INGREDIENTS

Hazardous Ingredients:	CAS #	EC #	ICSC #	WT %	Hazard Symbol; Risk Phrases
Proprietary Blend of Fluorinated compounds	Blend	N/A	N/A	100%	HAZARD CLASSIFICATION: RISK PHRASES: None

NOTE: ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2004 format. This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard *JIS Z 7250: 2000*.

See Section 3 for full text of Risk Phrases and Safety Phrases

## 3. HAZARD IDENTIFICATION



**EU LABELING AND CLASSIFICATION:** This product meets the definition of the following hazard class as defined by the European Economic Community Guidelines.

**EU CLASSIFICATION:** None

**EU RISK PHRASES:** None

**EU SAFETY PHRASES:** None

**EMERGENCY OVERVIEW:**  
Not expected to be a skin or eye irritant.

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM			
<b>HEALTH HAZARD</b>	(BLUE)	1	
<b>FLAMMABILITY HAZARD</b>	(RED)	0	
<b>PHYSICAL HAZARD</b>	(YELLOW)	0	
PROTECTIVE EQUIPMENT			
EYES	RESPIRATORY	HANDS	BODY
	SEE SECTION 8		SEE SECTION 8
For Routine Industrial Use and Handling Applications			

Hazard Scale: **0** = Minimal; 1 = Slight; 2 = Moderate;  
**3** = Serious; 4 = Severe \* = Chronic hazard

**SYMPTOMS OF OVEREXPOSURE BY ROUTE OF EXPOSURE:** Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact.

**INHALATION:** Common inhalation effect due to overexposure may result in drowsiness, dizziness and shortness of breath.

**CONTACT WITH SKIN or EYES:** Prolonged or repeated contact may cause skin irritation, may irritate eyes causing temporary blurred vision.

**INGESTION:** No known issues with ingestion, large quantities may be harmful.

**HEALTH EFFECTS OR RISKS FROM EXPOSURE:**

**ACUTE:** Not expected to be a skin or eye irritant.

**CHRONIC:** Prolonged/repeated contact may produce mild skin irritation.

**TARGET ORGANS:** Acute: Eyes. Chronic: N/A

### 4. FIRST-AID MEASURES

Contaminated individuals of chemical exposure must be taken for medical attention if any adverse effect occurs. Rescuers should be taken for medical attention, if necessary. Take copy of label and MSDS to health professional with contaminated individual.

**SKIN EXPOSURE:** Wash affected areas thoroughly with water.

**EYE EXPOSURE:** In case of contact with the eyes, rinse with plenty of water.

**INHALATION:** Immediately remove to fresh air. If breathing is difficult, give oxygen.

**INGESTION:** Do not induce vomiting. Immediately give 2 glasses of water. If vomiting occurs naturally have victim lean forward

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Skin contact may temporarily defat skin.

### 5. FIRE-FIGHTING MEASURES

**FLASH POINT:** Not applicable

**AUTOIGNITION TEMPERATURE:** No Data

**FLAMMABLE LIMITS (in air by volume, %):** Not applicable

**FIRE EXTINGUISHING MATERIALS:** Use fire extinguishing materials appropriate for surrounding fire.

Water Spray: Yes

Foam: Yes

Halon: Yes

Carbon Dioxide: Yes

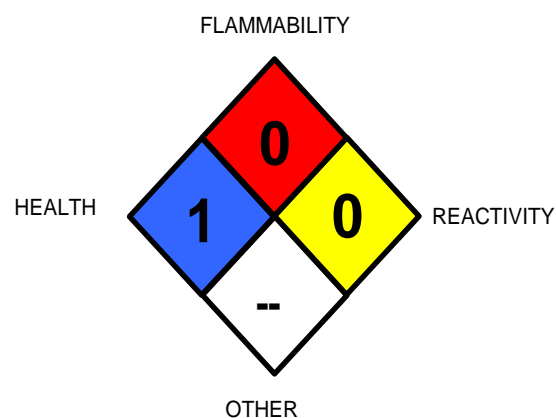
Dry Chemical: Yes

Other: Any "C" Class

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Product will not burn. Under fire conditions, carbon monoxide may be emitted.

**SPECIAL FIRE-FIGHTING PROCEDURES:** Firefighters should wear NIOSH/MSHA approved positive pressure breathing apparatus with full face-piece and full acid-resistant protective clothing.

**NFPA RATING**



### 6. ACCIDENTAL RELEASE MEASURES

**SPILL AND LEAK RESPONSE:** Wash to waste treatment system with water or absorb spill with inert material (dry sand). Proper protective equipment should be used.

**7. HANDLING and STORAGE**

**WORK PRACTICES AND HYGIENE PRACTICES:** As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product.

**STORAGE AND HANDLING PRACTICES:** Avoid contact with eyes, skin, and clothing. Empty drums should be returned to a drum reconditioner, or disposed of properly.

**8. EXPOSURE CONTROLS - PERSONAL PROTECTION**

**VENTILATION AND ENGINEERING CONTROLS:** Use with appropriate local exhaust ventilation. Provide appropriate local exhaust when product is heated. For those situations where the fluid might be exposed to extreme overheating due to misuse or equipment failure, use with appropriate local exhaust ventilation sufficient to maintain levels of thermal decomposition products below their exposure guidelines. Assure a constant supply of fresh when used in an enclosed area.

**EXPOSURE LIMITS/GUIDELINES:** Not Established.

*The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.*

**RESPIRATORY PROTECTION:** Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states. Oxygen levels below 19.5% are considered IDLH by OSHA. In such atmospheres, use of a full-facepiece pressure/demand SCBA or a full facepiece, supplied air respirator with auxiliary self-contained air supply is required under U.S. Federal OSHA's Respiratory Protection Standard (1910.134-1998) or the regulations of various U.S. States, Canada, EU Member States, or those of Japan. Air-purifying respirators with dust/mist/fume filters are recommended if operations may produce mists or sprays from this product.

**EYE PROTECTION:** Safety goggles. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards. Maintain eye wash fountain in the work area.

**HAND PROTECTION:** Not required when handling this product. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

**BODY PROTECTION:** Use body protection appropriate for task (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

**9. PHYSICAL and CHEMICAL PROPERTIES**

<b>Specific Physical Form:</b>	Liquid	<b>Boiling Point:</b>	75-85 °C
<b>Odor, Color:</b>	Colorless, Odorless	<b>Solubility in Water:</b>	Not soluble
<b>Density:</b>	1.3 – 1.5 g/ml	<b>Viscosity:</b>	<2.0 cSt [@ 25°C]
<b>Flash Point:</b>	None	<b>Evaporation rate:</b>	<1 [Ref Std: BUOAC=1]
<b>Percent volatile:</b>	100%	<b>Volatile Organics:</b>	Exempt

## 10. STABILITY and REACTIVITY

**STABILITY:** Stable under normal conditions.

**DECOMPOSITION PRODUCTS:** Hydrogen fluoride has an ACGIH Threshold Limit Value of 3 parts per million (as fluoride) as a Ceiling Limit and an OSHA PEL of 3 ppm of fluoride as an eight hour Time-Weighted Average and 6 ppm of fluoride as a Short Term Exposure Limit. The odor threshold for HF is 0.04 ppm, providing good warning properties for exposure.

**MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE:** Finely divided active metals; Alkali and alkaline earth metals; Heat greater than 300°C, or 200°C in the presence of Lewis Acids.

**HAZARDOUS POLYMERIZATION:** Not know to occur.

**CONDITIONS TO AVOID:** Spills can be slippery.

## 11. TOXICOLOGICAL INFORMATION

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

**Routes of Entry:** Eye, skin, nose, mouth

**Toxicity to Animals:** Non-toxic.

**Chronic Effects on Humans:** The substance is non-toxic.

## 12. ECOLOGICAL INFORMATION

**Eco toxicological Information:** No information available.

**Chemical Fate Information:** Degradable over time.

## 13. DISPOSAL CONSIDERATIONS

**Waste disposal of substance:** Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

**Container disposal:** Should be properly decontaminated and disposed in accordance with all Federal, State & Local considerations.

**RCRA:** N/A

## 14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

<u>PROPER SHIPPING NAME:</u>	NuGenTec FluoSolv <sup>®</sup>
<u>HAZARD CLASS NUMBER:</u>	N/A
<u>UN IDENTIFICATION NUMBER:</u>	N/A
<u>PACKING GROUP:</u>	III
<u>DOT LABEL(S) REQUIRED:</u>	Non-regulated material

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER, 2004: N/A

**MARINE POLLUTANT:** This product is **NOT** designated as a marine pollutant by the Department of Transportation (49 CFR 172.101, Appendix B).

**INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA):** This product is NOT considered as dangerous goods.

**INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO):** This product is NOT considered as dangerous goods.

**EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR):** This product is NOT considered by the United Nations Economic Commission for Europe to be dangerous goods.

## 15. REGULATORY INFORMATION

### **ADDITIONAL UNITED STATES REGULATIONS:**

**U.S. SARA REPORTING REQUIREMENTS:** The components of this product are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act, and are listed as follows:

CHEMICAL NAME	SARA 302 (40 CFR 355, Appendix A)	SARA 304 (40 CFR Table 302.4)	SARA 313 (40 CFR 372.65)
NUGENTEC FLUOSOLV®	NO	NO	NO

**U.S. SARA THRESHOLD PLANNING QUANTITY:** There are no specific Threshold Planning Quantities for the components of this product. The default Federal MSDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

**U.S. CERCLA REPORTABLE QUANTITY (RQ):** N/A

**U.S. TSCA INVENTORY STATUS:** The components of this product are listed on the TSCA Inventory.

**OTHER U.S. FEDERAL REGULATIONS:** Not applicable.

**CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65):** This product is NOT on the Proposition 65 Lists.

### **CANADIAN REGULATIONS:**

**CANADIAN DSL/NDSL INVENTORY STATUS:** The components of this product are on the DSL or NDSL Inventories

**CANADIAN WHMIS CLASSIFICATION and SYMBOLS:** N/A

### **EUROPEAN ECONOMIC COMMUNITY INFORMATION:**

**EU CLASSIFICATION:** None

**EU RISK PHRASES:** N/A

**EU SAFETY PHRASES:** N/A

**EUROPEAN ECONOMIC COMMUNITY INFORMATION FOR CONSTITUENTS:** The following information is available for the components of this product.

**NUGENTEC FLUOSOLV®:** EU EINECS/ELINCS NUMBER: N/A

### **AUSTRALIAN INFORMATION FOR PRODUCT:**

**AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES (AICS) STATUS:** The components of this product are listed on the AICS.

**HAZARDOUS SUBSTANCES INFORMATION SYSTEM:** NUGENTEC FLUOSOLV® is NOT listed by the Hazardous Substances Information System as a Hazardous Substance.

**STANDARD FOR THE UNIFORM SCHEDULING OF DRUGS AND POISONS:** Not applicable.

**LABELING AND CLASSIFICATION:** The product is NOT-regulated, based a review of the regulation [NOHSC: 10005 (1994-Current)]:

**Australian Hazchem Code:** N/A

### **JAPANESE INFORMATION FOR PRODUCT:**

**JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS:** The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

**JAPANESE ENCS INVENTORY:** The components of this product are on the ENCS Inventory as indicated in the section on International Chemical Inventories, below.

**POISONOUS AND DELETERIOUS SUBSTANCES CONTROL LAW:** No component of this product is a listed Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law.

**INTERNATIONAL CHEMICAL INVENTORIES:**

Listing of the components on individual country Chemical Inventories is as follows:

The components listed in NUGENTEC FLUOSOLV<sup>®</sup> are listed on the following inventories:

Asia-Pac: Listed

Australian Inventory of Chemical Substances (AICS): Listed

Korean Existing Chemicals List (ECL): Listed

Japanese Existing National Inventory of Chemical Substances (ENCS): Listed

Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed

Swiss Giftliste List of Toxic Substances: Listed

U.S. TSCA: Listed

## 16. OTHER INFORMATION

**PREPARED BY:** Donato Polignone

[MSDS Authoring Services](#)

**DATE:** August 15, 2012

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**End of MSDS**