

## Safety Data Sheet (SDS)

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

Issue date 08/03/2017

Reviewed on 08/03/2017

### 1 Identification

- **Product Identifier**
- **Trade name: NuSolv RR**
- **Product Number: ngt-NSRR**
- **Relevant identified uses of the substance or mixture and uses advised against:**  
For professional use only
- **Product Description** Injection Molding Cleaning Solvent.
- **Application of the substance / the mixture:**  
Injection Molding Cleaning - For use on hot molds during inline cleaning, and on cold molds during offline 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: Domestic and Canada - 1-800-633-8253, International 1-801-629-0667

### 2 Hazard(s) Identification

- **Classification of the substance or mixture:**



Eye Irrit. 2A H319 Causes serious eye irritation.

- **Label elements:**
- **GHS label elements**  
The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms:**



- **Signal word:** Warning
- **Hazard statements:**  
H319 Causes serious eye irritation.
- **Precautionary statements:**  
P264 Wash thoroughly after handling.  
P280 Wear eye protection / face protection.  
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.
- **Unknown acute toxicity:**  
This value refers to knowledge of known, established toxicological or ecotoxicological values.
- **Classification system: NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme**

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· **NFPA ratings (scale 0 - 4)**



Health = 1  
Fire = 1  
Reactivity = 0

· **HMIS-ratings (scale 0 - 4)**



Health = 1  
Fire = 1  
Physical Hazard = 0

· **Hazard(s) not otherwise classified (HNOC):** None known

## 3 Composition/Information on Ingredients

- **Chemical characterization:** Mixtures
- **Description:** Mixture: consisting of the following components.

· **Dangerous Components:**

CAS: 100-51-6	Benzyl alcohol	Proprietary%
RTECS: DN 3150000	⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332	
	Proprietary Solvent	Proprietary%
	⚠ Eye Irrit. 2A, H319	

· **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:** 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 side position for transportation.
- **After skin contact:**  
Generally the product does not irritate the skin.  
Wash with soap and water.  
If skin irritation occurs, consult a doctor.
- **After eye contact:**  
Rinse opened eye for at least 15 minutes under running water. If symptoms persist, consult a doctor.  
If easy to do so, remove contact lenses if worn.
- **After swallowing:**  
Rinse out mouth and then drink plenty of water.  
Do not induce vomiting without medical advice.  
If vomiting does occur, repeat fluid administration
- **Information for doctor:**
- **Most important symptoms and effects, both acute and delayed:**  
No further relevant information available.

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- **Indication of any immediate medical attention and special treatment needed:**  
No further relevant information available.

### 5 Fire-Fighting Measures

- **Extinguishing media:**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture:**  
Thermal decomposition can lead to the release of irritating gases and vapor.  
If incinerated, product will release the following toxic fumes: Oxides of Carbon.
- **Advice for firefighters:** Use water spray to cool unopened containers.
- **Protective equipment:**  
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:**  
Mount respiratory protective device.  
Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation.  
Keep people at a distance and stay upwind.  
Keep away from ignition sources  
Do not breathe vapor.  
Avoid contact with skin, eyes and clothing.
- **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 (i.e. sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to section 13.  
Ensure adequate ventilation.  
Dispose of the collected material according to regulations.
- **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.
- **Protective Action Criteria for Chemicals**

· **PAC-1:**  
None of the ingredients are listed.

· **PAC-2:**  
None of the ingredients are listed.

· **PAC-3:**  
None of the ingredients are listed.

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### 7 Handling and Storage

- **Handling**
- **Precautions for safe handling:**  
Ensure good ventilation/exhaustion at the workplace.  
Prevent formation of aerosols.
- **Information about protection against explosions and fires:**  
Fumes can combine with air to form an explosive mixture.
- **Conditions for safe storage, including any incompatibilities:**  
Store away from strong oxidizing agents and strong bases.
- **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:** Keep receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

### 8 Exposure Controls/Personal Protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **Control parameters:**  
All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.
- **Components with occupational exposure limits:**  
The following constituent is the only constituent of the product which has a PEL, TLV or other recommended exposure limit.  
At this time, the remaining constituent has no known exposure limits.

#### 100-51-6 Benzyl alcohol

WEEL Long-term value: 10 ppm

- **Additional information:** The lists that were valid during the creation of this SDS were used as basis.
- **Exposure controls:**
- **Personal protective equipment:**
- **General protective and hygienic measures:**  
The usual precautionary measures for handling chemicals should be followed.  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing and wash before reuse.  
Wash hands before breaks and at the end of work.  
Avoid contact with the eyes and skin.
- **Breathing equipment:**



Suitable respiratory protective device recommended.

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· **Protection of hands:**



Protective gloves

· **Material of gloves:**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material:**

The exact break-through time has to be determined and observed by the manufacturer of the protective gloves.

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Not required.

### 9 Physical and Chemical Properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· <b>Form:</b>	Liquid
· <b>Color:</b>	Colorless
· <b>Odor:</b>	Weak, characteristic
· <b>Odor threshold:</b>	Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

· <b>Melting point/Melting range:</b>	Not determined.
· <b>Boiling point/Boiling range:</b>	≥200 °C (≥392 °F)

· **Flash point:** >96°C (°F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:** Not applicable

· **Decomposition temperature:** ≥ 200 deg C (392 deg F)

· **Auto igniting:** Product is not self-igniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

· <b>Lower:</b>	≥2 Vol %
· <b>Upper:</b>	≤14 Vol %

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· <b>Vapor pressure @ 20°C (68 °F):</b>	≤0.1 hPa (≤0 mm Hg)
· <b>Density @ 20°C (68 °F):</b>	1.119 g/cm <sup>3</sup> (lbs/gal)
· <b>Relative density:</b>	Not determined.
· <b>Vapor density:</b>	3.1 (Air=1)
· <b>Evaporation rate:</b>	<1 (n-Butyl Acetate =1)
· <b>Solubility in / Miscibility with:</b>	
<b>Water:</b>	Not miscible or difficult to mix.
· <b>Partition coefficient (n-octanol/water):</b>	Not determined.
· <b>Viscosity:</b>	
<b>Dynamic:</b>	Not determined.
<b>Kinematic:</b>	Not determined.
· <b>Solvent content:</b>	
<b>Organic solvents:</b>	100.0 %
<b>VOC content:</b>	560 g/l
· <b>Other information:</b>	No further relevant information available.

### 10 Stability and Reactivity

- **Reactivity:** No further relevant information available.
- **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 oxidizing agents and strong bases.
- **Hazardous decomposition products:** Carbon Oxides.

### 11 Toxicological Information

- **Information on toxicological effects:**
- **Acute toxicity:**

· **LD/LC50 values that are relevant for classification:**

**100-51-6 Benzyl alcohol**

Oral	LD50	1,230 mg/kg (Rat)
Dermal	LD50	2,000 mg/kg (Rabbit)

**Proprietary Solvent**

Oral	LD50	29,000 mg/kg (Rat)
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- **Primary irritant effect:**
- **On the skin:** No irritating effect.
- **On the eye:** Irritating effect.
- **Additional toxicological information:**

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

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*Irritant*

- **Carcinogenic categories:**
- **IARC (International Agency for Research on Cancer):**
  - Group 1 - Carcinogenic to humans
  - Group 2A - Probably carcinogenic to humans
  - Group 2B - Possibly carcinogenic to humans
  - Group 3 - Not classifiable as to its carcinogenicity to humans
  - Group 4 - Probably not carcinogenic to humans

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:** The hazards for the aquatic environment are unknown.
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential:** No further relevant information available.
- **Mobility in soil:** No further relevant information available.
- **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.*
- **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:**  
*Must not be disposed of together with household garbage. Do not allow product to reach sewage system.  
Observe all federal, state and local environmental regulations when disposing of this material.*
- **Uncleaned packagings**
- **Recommendation:** *Dispose of as unused product.*



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### 14 Transport Information

- **UN-Number:**  
· **DOT, ADR/ADN, ADN, IMDG, IATA**                      *Non-Regulated Material*
- **UN proper shipping name:**  
· **DOT, 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.*
- **Special precautions for user:**                              *Not applicable.*
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:**                      *Not applicable.*
- **UN "Model Regulation":**                                      *Non-Regulated Material*

### 15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
- **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 ingredients are listed or exempt from listing.*
  - **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.*
  - **New Jersey Special Hazardous Substance List:**  
*None of the ingredients are listed.*

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

100-51-6 Benzyl alcohol

· **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**

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

· **Hazard pictograms:**



GHS07

· **Signal word:** Warning

· **Hazard statements:**

H319 Causes serious eye irritation.

· **Precautionary statements:**

P264 Wash thoroughly after handling.

P280 Wear eye protection / face protection.

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.

· **National regulations:**

None of the 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:** 08/03/2017 / -

· **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

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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)  
VOC: Volatile Organic Compounds (USA, EU)  
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  
REL: Recommended Exposure Limit  
Acute Tox. 4: Acute toxicity – Category 4  
Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

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

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