

Safety Data Sheet (SDS)

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

Issue date 04/27/2017

Reviewed on 04/27/2017

1 Identification

- **Product Identifier**
- **Trade name: NuSolv 5037T**
- **Product Number: ng-NS5037T**
- **Relevant identified uses of the substance or mixture and uses advised against:**
Use according to manufacturer's specifications. Not for use on Copper or Copper alloys (Brass & Bronze).
- **Product Description** Washing and cleaning product. Specialty solvent.
- **Application of the substance / the mixture:** Industry-specific application.
- **Details of the Supplier of the Safety Data Sheet:**
- **Manufacturer/Supplier:**
NuGeneration Technologies, LLC (dba NuGenTec)
1155 Park Avenue, Emeryville, CA 94608
salesteam@nugentec.com www.nugentec.com
1-888-996-8436 or 1-707-820-4080 for product information
- **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:**



GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H312 Harmful in contact with skin.

Flam. Liq. 4 H227 Combustible liquid.

- **Label elements:**

- **GHS label elements**

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

- **Hazard pictograms:**



GHS05 GHS07

- **Signal word:** Danger

- **Hazard-determining components of labeling:**

Ethylene Glycol Monobutyl Ether

Monoethanolamine

- **Hazard statements:**

H227 Combustible liquid.

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H312 Harmful in contact with skin.

H314 Causes severe skin burns and eye damage.

• **Precautionary statements:**

P210 Keep away from flames and hot surfaces. – No smoking.

P260 Do not breathe dusts or mists.

P264 Wash thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.

P302+P352 IF ON SKIN: Wash with plenty of water.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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.

P310 Immediately call a POISON CENTER/doctor.

P312 Call a POISON CENTER/doctor if you feel unwell.

P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).

P362+P364 Take off contaminated clothing and wash it before reuse.

P363 Wash contaminated clothing before reuse.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

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.

• **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme

• **NFPA ratings (scale 0 - 4)**



Health = 1

Fire = 2

Reactivity = 0

• **HMIS-ratings (scale 0 - 4)**



Health = 1

Fire = 2

Reactivity = 0

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

3 Composition/Information on Ingredients

• **Non-hazardous components:**

7732-18-5	Water, distilled water, deionized water	60-90%
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• **Chemical characterization: Mixtures**

• **Description:** Mixture of substances listed below with non-hazardous additions.

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Trade name: NuSolv 5037T
· Dangerous Components:

CAS: 111-76-2 RTECS: KJ 8575000	Ethylene Glycol Monobutyl Ether ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Flam. Liq. 4, H227	15-35%
CAS: 141-43-5 RTECS: KJ 5775000	Monoethanolamine ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Flam. Liq. 4, H227	15-35%
	Proprietary Solvent ⚠ Acute Tox. 4, H302	5-10%

· 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:
· 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:

Wash with water and soap and rinse thoroughly. If skin irritation occurs, consult a doctor.

· After eye contact:

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention. 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. If swallowed and symptoms occur, consult a doctor.

· Information for 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.

· For safety reasons unsuitable extinguishing agents: Water with full jet

· Special hazards arising from the substance or mixture:

Combustible liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above flashpoint.

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- **Advice for firefighters:**
- **Protective equipment:**

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:**

Ensure adequate ventilation.
 Avoid contact with skin, eyes and clothing.
 Keep away from ignition sources

- **Environmental precautions:**

Dilute with plenty of water.
 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:**

111-76-2	Ethylene Glycol Monobutyl Ether	60 ppm
141-43-5	Monoethanolamine	6 ppm
	Proprietary Solvent	4.1 mg/m3

- **PAC-2:**

111-76-2	Ethylene Glycol Monobutyl Ether	120 ppm
141-43-5	Monoethanolamine	170 ppm
	Proprietary Solvent	45 mg/m3

- **PAC-3:**

111-76-2	Ethylene Glycol Monobutyl Ether	700 ppm
141-43-5	Monoethanolamine	1,000 ppm
	Proprietary Solvent	400 mg/m3

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:** No special measures required.

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- **Conditions for safe storage, including any incompatibilities:**
Store away from strong acids, strong bases, strong oxidizing agents, strong reducing agents, Copper, and it's alloys (Brass & Bronze).
- **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:**
- **Components with occupational exposure limits:**
The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.
At this time, the remaining constituent has no known exposure limits.

111-76-2 Ethylene Glycol Monobutyl Ether

PEL	Long-term value: 240 mg/m ³ , 50 ppm Skin
REL	Long-term value: 24 mg/m ³ , 5 ppm Skin
TLV	Long-term value: 97 mg/m ³ , 20 ppm BEI

141-43-5 Monoethanolamine

PEL	Long-term value: 6 mg/m ³ , 3 ppm
REL	Short-term value: 15 mg/m ³ , 6 ppm Long-term value: 8 mg/m ³ , 3 ppm
TLV	Short-term value: 15 mg/m ³ , 6 ppm Long-term value: 7.5 mg/m ³ , 3 ppm

- **Ingredients with biological limit values:**

111-76-2 Ethylene Glycol Monobutyl Ether

BEI	200 mg/g creatinine urine end of shift Butoxyacetic acid with hydrolysis
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- **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.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Not required.

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· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Select glove material based on penetration times, rates of diffusion and degradation.

· **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:**



Safety glasses

· **Body protection:**



Protective work clothing

9 Physical and Chemical Properties

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

· **General Information**

· **Appearance:**

· Form:	Liquid
· Color:	Colorless
· Odor:	Pungent
· Odor threshold:	Not determined.

· **pH-value @ 20 °C (68 °F):** 10.5

· **Change in condition**

· Melting point/Melting range:	Not determined.
· Boiling point/Boiling range:	>100 °C (>212 °F)

· **Flash point:** 68 °C (154 °F)

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

· **Ignition temperature:** 240 °C (464 °F)

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· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not self-igniting.
· Danger of explosion:	Not determined.
· Explosion limits:	
Lower:	1.1 Vol %
Upper:	10.6 Vol %
· Vapor pressure @ 20 °C (68 °F):	23 hPa (17 mm Hg)
· Density @ 20 °C (68 °F):	1.02 g/cm ³ (8.512 lbs/gal)
· Relative density:	Not determined.
· Vapor density:	Not determined.
· Evaporation rate:	Not determined.
· Solubility in / Miscibility with:	
Water:	Fully miscible.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	28.5 %
Water:	62.9 %
VOC content:	28.5 %
Solids content:	8.6 %
· Other information:	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:** Heat, flame and ignition sources.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

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11 Toxicological Information

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

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

111-76-2 Ethylene Glycol Monobutyl Ether

Oral	LD50	470 mg/kg (Rat)
Dermal	LD50	220 mg/kg (rab)
Inhalative	LC50/4 h	2174.91 mg/l (Rat)

141-43-5 Monoethanolamine

Oral	LD50	2050 mg/kg (Rat)
Dermal	LD50	1000 mg/kg (Rabbit)

Proprietary Solvent

Oral	LD50	1941 mg/kg (Rat)
Dermal	LD50	4009 mg/kg (Rabbit)

- **Primary irritant effect:**
- **On the skin:** No irritating effect.
- **On the eye:** Causes serious eye irritation.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Harmful
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

111-76-2	Ethylene Glycol Monobutyl Ether	3
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- **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:**

111-76-2 Ethylene Glycol Monobutyl Ether

EC50	1815 mg/l (Water flea)
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- **Persistence and degradability:** No further relevant information available.

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- **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:** 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, 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 |

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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):**

111-76-2 Ethylene Glycol Monobutyl Ether

- **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:**

111-76-2 Ethylene Glycol Monobutyl Ether

141-43-5 Monoethanolamine

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

111-76-2 Ethylene Glycol Monobutyl Ether

CA, F2

141-43-5 Monoethanolamine

CO, F2

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

111-76-2 Ethylene Glycol Monobutyl Ether

141-43-5 Monoethanolamine

Proprietary Solvent

- **Pennsylvania Special Hazardous Substance List:**

None of the ingredients are listed.

- **Carcinogenic categories:**

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

111-76-2 Ethylene Glycol Monobutyl Ether

NL

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

111-76-2 Ethylene Glycol Monobutyl Ether

A3

- **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).

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· **Hazard pictograms:**



GHS05 GHS07

· **Signal word:** Danger

· **Hazard-determining components of labeling:**

Ethylene Glycol Monobutyl Ether
Monoethanolamine

· **Hazard statements:**

H227 Combustible liquid.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.

· **Precautionary statements:**

P210 Keep away from flames and hot surfaces. – No smoking.
P260 Do not breathe dusts or mists.
P264 Wash thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of water.
P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
P310 Immediately call a POISON CENTER/doctor.
P312 Call a POISON CENTER/doctor if you feel unwell.
P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
P362+P364 Take off contaminated clothing and wash it before reuse.
P363 Wash contaminated clothing before reuse.
P370+P378 In case of fire: Use for extinction: CO₂, powder or water spray.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

· **National regulations:**

The product is subject to be classified according with the latest version of the regulations on hazardous substances.

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

16 Other Information

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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:** 04/27/2017 / -

• **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

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

BEI: Biological Exposure Limit

Flam. Liq. 4: Flammable liquids – Category 4

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2A: Serious eye damage/eye irritation – Category 2A

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

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