

Safety Data Sheet (SDS)

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

Issue date 02/27/2019

Reviewed on 02/27/2019

1 Identification

· **Product Identifier**

· **Trade Name: NuSolv SOR (Aerosol)**

· **Product Number:** ng-NASOR(A)

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

Silicone oil and silicone conformal coating removal solution for use in explosion-proof vapor degreasing, or in cold cleaning applications. Aerosol.

· **Product Description:**

NuSolv SOR (Aerosol) is a non-toxic mixture of solvents used to remove both silicone oils and silicone conformal coatings, along with a wide variety of other greases and soils. NuSolv SOR (Aerosol) is highly effective in fewer than 2 minutes when used at ambient temperature - a job that takes other solvent mixtures upwards of 45 minutes to remove. NuSolv SOR (Aerosol) can be used in an explosion-proof vapor degreasing tank for even faster and more precise cleaning. However, solution may still be used at ambient temperature in cold-cleaning applications and be just as effective in fewer than two minutes. Being effective on both silicone oils and a variety of other greases and soils, NuSolv SOR (Aerosol) is the intelligent choice for broad cleaning applications.

· **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

1-888-996-8436 or 1-707-820-4080 for product information

www.nugentec.com

· **Emergency telephone number:** PERS Emergency response: 1-801-629-0667

2 Hazard(s) Identification

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



Flame

Flam. Aerosol 1 H222 Extremely flammable aerosol.



Skin Irrit. 2 H315 Causes skin irritation.

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:**



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- **Signal word:** *Danger*
- **Hazard statements:**
 - H222 Extremely flammable aerosol.
 - H315 Causes skin irritation.
 - H319 Causes serious eye irritation.
- **Precautionary statements:**
 - P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 - P211 Do not spray on an open flame or other ignition source.
 - P251 Pressurized container: Do not pierce or burn, even after use.
 - P264 Wash thoroughly after handling.
 - P280 Wear protective gloves / eye protection / face protection.
 - P302+P352 If on skin: Wash with plenty of water.
 - P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
 - P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P332+P313 If skin irritation occurs: Get medical advice/attention.
 - P362+P364 Take off contaminated clothing and wash it before reuse.
 - P337+P313 If eye irritation persists: Get medical advice/attention.
 - P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
- **Unknown acute toxicity:**
 - This value refers to knowledge of known, established toxicological or ecotoxicological values.
 - 90 % of the mixture consists of component(s) of unknown toxicity.
- **Classification system:** NFPA/HMIS Definitions: 0-Least, 1-Slight, 2-Moderate, 3-High, 4-Extreme
- **NFPA ratings (scale 0 - 4)**



Health = 1
Fire = 3
Reactivity = 3
- **HMIS-ratings (scale 0 - 4)**

HEALTH	1
FIRE	3
REACTIVITY	3

Health = 1
Fire = 3
Physical Hazard = 3
- **Hazard(s) not otherwise classified (HNOC):** None known

3 Composition/Information on Ingredients

- **Chemical characterization:** *Mixtures*
- **Description:** *Mixture of substances listed below with non-hazardous additions.*

- **Dangerous Components:**

Proprietary Solvent 1	☠ Flam. Liq. 2, H225	Proprietary%
Proprietary Solvent 2	☠ Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Flam. Liq. 4, H227	Proprietary%
Proprietary Propellant	☠ Press. Gas, H281	Proprietary%

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Trade Name: NuSolv SOR (Aerosol)**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:**

Generally the product does not irritate with inhalation.
Supply fresh air. If required, provide artificial respiration. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in the side position for transportation.

After skin contact:

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

After eye contact:

Rinse opened eye for several minutes under running water.
If easy to do so, remove contact lenses if worn.
If eye irritation occurs, consult a doctor.

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, sand, extinguishing powder. Do not use water.

For safety reasons unsuitable extinguishing agents: Water with full jet

Special hazards arising from the substance or mixture: No further relevant information available.

Advice for firefighters**Special protective equipment for firefighters:**

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.

Keep away from ignition sources

Keep people at a distance and stay upwind.

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- Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up:**
 Dispose contaminated material as waste according to section 13.
 Ensure adequate ventilation.
 Do not flush with water or aqueous cleansing agents
 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:	
Proprietary Solvent 1	13 ppm
Proprietary Propellant	8,000 ppm
• PAC-2:	
Proprietary Solvent 1	140 ppm
Proprietary Propellant	13,000 ppm
• PAC-3:	
Proprietary Solvent 1	150 ppm
Proprietary Propellant	27,000 ppm

7 Handling and Storage

- **Handling**
- **Precautions for safe handling:**
 Ensure good ventilation/exhaustion at the workplace.
 Open and handle receptacle with care.
- **Information about protection against explosions and fires:**
 Keep ignition sources away - Do not smoke.
 Protect from heat.
 Protect against electrostatic charges.
 Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C, i.e. electric lights. Do not pierce or burn, even after use.
 Do not spray on a naked flame or any incandescent material.
- **Conditions for safe storage, including any incompatibilities**
 Store away from strong acids, strong bases, strong oxidizing agents and strong reducing agents.
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
 Store in a cool location.
 Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
 Keep receptacle tightly sealed.
 Do not gas tight seal receptacle.
 Store in cool, dry conditions in well sealed receptacles.

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Protect from heat and direct sunlight.

- **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 other constituents have no known exposure limits.

Proprietary Propellant

WEEL Long-term value: 1000 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:**

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:** Not required.

- **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.

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· **Eye protection:**



Safety glasses

· **Body protection:** Not required.

· **Limitation and supervision of exposure into the environment:** None

9 Physical and Chemical Properties

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

· **General Information**

· **Appearance:**

Form: Aerosol
Color: Clear, colorless

· **Odour:** Mild

· **Odor threshold:** Not determined.

· **pH-value:** Not applicable.

· **Change in condition**

Melting point/Melting range: Not determined.
Boiling point/Boiling range: Not applicable, as aerosol.

· **Flash point:** -4 °C (24.8 °F)

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

· **Ignition temperature:** Not applicable

· **Decomposition temperature:** Not determined.

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

· **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.

· **Explosion limits:**

Lower: Not determined.
Upper: Not determined.

· **Vapor pressure:** Not determined.

· **Density @ 20 °C (68 °F):** 0.7769 g/cm³ (6.4832 lbs/gal)

· **Relative density:** Not determined.

· **Vapor density:** Not determined.

· **Evaporation rate:** Not applicable.

· **Solubility in / Miscibility with:**

Water: Not miscible or difficult to mix.

· **Partition coefficient (n-octanol/water):** Not determined.

· **Viscosity:**

Dynamic: Not determined.

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- Kinematic:** Not determined.
- 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:**
Strong acids, strong bases, strong oxidizing agents and strong reducing agents.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological Information

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

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

Proprietary Propellant

Inhalative	LC50/4 h	1,500 mg/l (Rat)
	LC50/96 hours	450 mg/l (Trout)

- **Primary irritant effect:**
- **On the skin:** Irritant to skin and mucous membranes.
- **On the eye:** Irritating effect.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

- **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:** The hazards for the aquatic environment are unknown.
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability:** No further relevant information available.

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Trade Name: NuSolv SOR (Aerosol)

- **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:**
Observe all federal, state and local environmental regulations when disposing of this material.
- **Uncleaned packaging**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport Information

- **UN-Number:** UN1950
- **DOT, ADR/ADN, IMDG, IATA**
- **UN proper shipping name:** Aerosols
- **DOT** UN1950 AEROSOLS
- **ADR/ADN** AEROSOLS
- **IMDG, IATA**
- **Transport hazard class(es):**
- **DOT, IMDG, IATA**



- **Class:** 2 Gases
- **Label:** 2.1

- **ADR/ADN**



- **Class:** 2 5F Gases
- **Label:** 2.1
- **Packing group:**
- **ADR/ADN** Non-Regulated Material

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<ul style="list-style-type: none"> · Environmental hazards: · Special precautions for user: · Danger code (Kemler): · Stowage Code 	<p>Not applicable. Warning: Gases - SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.</p>
<ul style="list-style-type: none"> · Segregation Code 	<p>SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.</p>
<ul style="list-style-type: none"> · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: · Transport/Additional information: · DOT · Quantity limitations: 	<p>Not applicable. On passenger aircraft/rail: 75 kg On cargo aircraft only: 150 kg</p>
<ul style="list-style-type: none"> · ADR/ADN · Excepted quantities (EQ): 	<p>Code: E0 Not permitted as Excepted Quantity</p>
<ul style="list-style-type: none"> · IMDG · Limited quantities (LQ): · Excepted quantities (EQ): 	<p>1L Code: E0 Not permitted as Excepted Quantity</p>
<ul style="list-style-type: none"> · UN "Model Regulation": 	<p>UN 1950 AEROSOLS, 2.1</p>

15 Regulatory Information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture:**
 - **SARA (Superfund Amendments and Reauthorization):**
- | |
|--|
| <ul style="list-style-type: none"> · Section 355 (extremely hazardous substances): <p style="margin: 0;">None of the ingredients are listed.</p> |
| <ul style="list-style-type: none"> · Section 313 (Specific toxic chemical listings): <p style="margin: 0;">None of the ingredients are listed.</p> |
| <ul style="list-style-type: none"> · TSCA (Toxic Substances Control Act): <p style="margin: 0;">All ingredients are listed or exempt from listing.</p> |
| <ul style="list-style-type: none"> · TSCA new (21st Century Act): (Substances not listed) <p style="margin: 0;">Proprietary Solvent 1</p> |

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Trade Name: NuSolv SOR (Aerosol)

• **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.

• **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**

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

• **Hazard pictograms:**



GHS02 GHS07

• **Signal word: Danger**

• **Hazard statements:**

H222 Extremely flammable aerosol.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

• **Precautionary statements:**

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P211 Do not spray on an open flame or other ignition source.

P251 Pressurized container: Do not pierce or burn, even after use.

P264 Wash thoroughly after handling.

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Trade Name: NuSolv SOR (Aerosol)

P280 Wear protective gloves / eye protection / face protection.
P302+P352 If on skin: Wash with plenty of water.
P321 Specific treatment (see supplementary first aid instructions on this Safety Data Sheet).
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P337+P313 If eye irritation persists: Get medical advice/attention.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

• 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: 02/27/2019 / -**• 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)

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

Flam. Aerosol 1: Aerosols – Category 1

Press. Gas: Gases under pressure – Refrigerated liquefied gas

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 4: Flammable liquids – Category 4

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

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

• * Data compared to the previous version altered.SDS created by MSDS Authoring Services www.msdsauthoring.com +1-877-204-9106