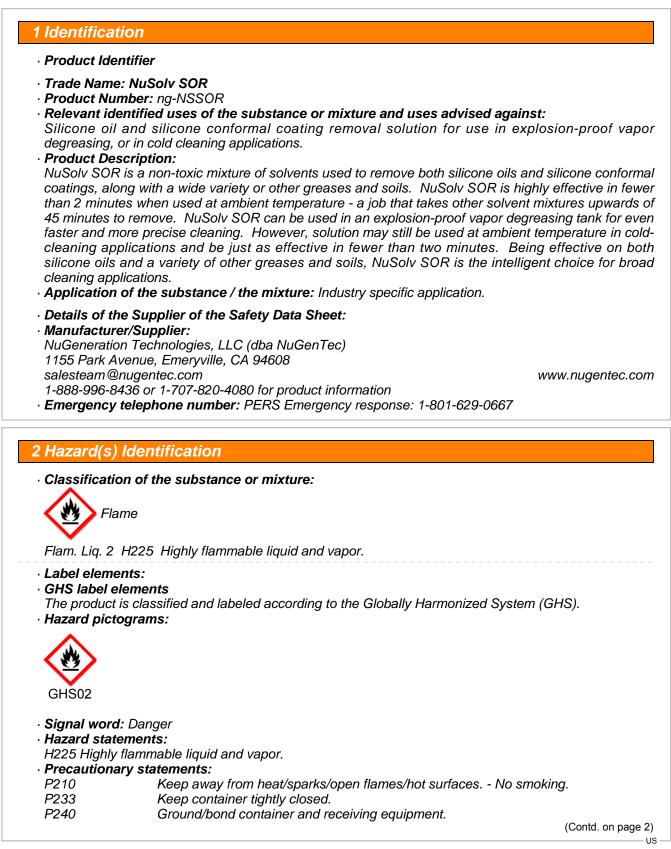


OSHA HazCom Standard 29 CFR 1910.1200(g) and GHS Rev 03.

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| P241 P242 | Use explosion-proof electrical/ventilating/lighting/equipment. |
|--|---|
| | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P303+P361+P35 | 3 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P370+P378 | In case of fire: Use for extinction: CO2, powder or water spray. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/container in accordance with local/regional/national/ international regulations. |
| · Unknown acute | toxicity: |
| | 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 (se | |
| A Taungs (3 | |
| Fire | lth = 1 = 3 ctivity = 0 |
| · HMIS-ratings (so | cale 0 - 4) |
| HEALTH 1 Ho | alth = 1 |
| | e = 3 |
| | |
| | ysical Hazard = 0 |
| · Hazard(s) not ot | herwise classified (HNOC): None known |

3 Composition/Information on Ingredients

· Chemical characterization: Mixtures

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

| Dangerous Componen | its: | |
|--|--|--------------|
| Proprietary Solvent 2 | 🚸 Skin Irrit. 2, H315; Eye Irrit. 2A, H319; Flam. Liq. 4, H227 | Proprietary% |
| Proprietary Solvent 1 | 🚸 Flam. Liq. 2, H225 | Proprietary% |

· 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.

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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.
- 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:

Absorb with liquid-binding material (i.e. sand, diatomite, acid binders, universal binders, sawdust). 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

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· PAC-2:

Proprietary Solvent 1

· PAC-3:

Proprietary Solvent 1

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: Keep ignition sources away - Do not smoke. Protect from heat.

Protect against electrostatic charges.

- 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.
- Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles. 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 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 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.

(Contd. on page 5) US

140 ppm

150 ppm



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- · 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.

· 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: | Liquid |
|---|--|
| Color: | Clear, colorless |
| · Odor: | Mild |
| Odor threshold: | Not determined. |
| · pH-value: | Not applicable. |
| Change in condition Melting point/Melting range: Boiling point/Boiling range: | Not determined. ≥101 °C (≥213.8 °F) |
| · Flash point: | -4 °C (24.8 °F) |
| · Flammability (solid, gaseous): | Not applicable. |
| · Ignition temperature: | Not applicable |
| · Decomposition temperature: | Not determined. |

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| Auto igniting: | Product is not self-igniting. |
|---------------------------------------|--|
| Danger of explosion: | Product is not explosive. However, formation of explosive a vapor mixtures are possible. |
| Explosion limits: | |
| Lower: | Not determined. |
| Upper: | Not determined. |
| Vapor pressure @ 20 °C (68 °F): | <i>≤</i> 1.4 hPa (<i>≤</i> 1.1 mm Hg) |
| Density @ 20 °C (68 °F): | 0.818 g/cm³ (6.8262 lbs/gal) |
| Relative density: | Not determined. |
| Vapor density: | Not determined. |
| Evaporation rate: | Not determined. |
| Solubility in / Miscibility with: | |
| Water: | Not miscible or difficult to mix. |
| Partition coefficient (n-octanol/wate | er): Not determined. |
| Viscosity: | |
| Dynamic: | Not determined. |
| 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: No data available.
- · 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

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· 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.
- · 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:
- · DOT, ADR/ADN, IMDG, IATA
- · UN proper shipping name:
- ·DOT
- · ADR/ADN

· IMDG, IATA

UN1993

Flammable liquids, n.o.s. (Proprietary Solvent 1) UN1993 FLAMMABLE LIQUID, N.O.S. (Proprietary Solvent 1) FLAMMABLE LIQUID, N.O.S. (Proprietary Solvent 1) (Contd. on page 8)



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|--|---|
| rade Name: NuSolv SOR | |
| · Transport hazard class(es): | |
| ·DOT | |
| | |
| · Class: | 3 Flammable liquids |
| · Label: | 3 |
| · ADR/ADN | |
| | |
| · Class: | 3 (F1) Flammable liquids |
| · Label: | 3 |
| · IMDG, IATA | |
| | |
| · Class: | 3 Flammable liquids |
| · Label: | 3 |
| · Packing group: · DOT, ADR/ADN, IMDG, IATA | 11 |
| Environmental hazards: | Not applicable. |
| • Special precautions for user: | Warning: Flammable liquids |
| Danger code (Kemler): EMS Number: | 33 F-E, <u>S-E</u> |
| · Stowage Category | В |
| · Transport in bulk according to Annex | |
| MARPOL73/78 and the IBC Code: | Not applicable. |
| · Transport/Additional information: | |
| ·DOT | |
| · Quantity limitations: | On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L |
| · ADR/ADN | |
| · ADR/ADN · Excepted quantities (EQ): | Code: E2 |
| | Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml |
| ·IMDG | |
| Limited quantities (LQ): | 1L |
| | Contd. on page 9) رومین |





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· Excepted quantities (EQ):

Code: E2

· UN "Model Regulation":

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml UN 1993 FLAMMABLE LIQUID, N.O.S. (PROPRIETARY SOLVENT 1), 3, II

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):

Proprietary Solvent 1

Proprietary Solvent 2

· 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.

 \cdot 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.

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| NIOSH-Ca (Na | tional Institute for Occupational Safety and Health): |
|------------------------------------|---|
| None of the ing | redients are listed. |
| · GHS label elen | nents |
| | classified and labeled according to the Globally Harmonized System (GHS). |
| Hazard pictogi | rams: |
| | |
| GHS02 | |
| · Signal word: D |)anger |
| · Hazard statem | |
| | mmable liquid and vapor. |
| · Precautionary | |
| P210 | Keep away from heat/sparks/open flames/hot surfaces No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ventilating/lighting/equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P303+P361+P3 | 353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P370+P378 | In case of fire: Use for extinction: CO2, powder or water spray. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P501 | Dispose of contents/container in accordance with local/regional/national, international regulations. |
| · National regula | ations: |
| None of the ing | redients are listed. |
| Chaminal anta | ty 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: 03/20/2019 / -

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 List of Notified Chemical Substances

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