1 Identification of the substance/mixture and of the company/undertaking

- **Product identifier**
- **Trade name:** Nou-Clean-Spray
- **Relevant identified uses of the substance or mixture and uses advised against**
  No further relevant information available.
- **Application of the substance / the preparation:**
  Lubricant
  Spray (propane/butane)
- **Manufacturer/Supplier:**
  Nouvag AG
  St. Gallenstrasse 23-25
  CH - 9403 Goldach
  Tel: +41 (0)71 846 66 00
  Fax: +41 (0)71 845 35 36
  E-Mail: info@nouvag.com
  Website: www.nouvag.com
- **Further information obtainable from:** Product safety department
- **Emergency telephone number:**
  Toxikologisches Informationsszentrum
  CH-8030 Zürich, Freiestrasse 16
  Tel. +41 44 2 51 51 51
  CH-Notfallnummer: 145

2 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
  GHS02 flame

- **Label elements**
- **Labelling according to Regulation (EC) No 1272/2008:**
  The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms:**
  GHS02

- **Signal word:** Danger
- **Hazard statements**
  H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.
- **Precautionary statements**
  P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
  P251 Pressurized container: Do not pierce or burn, even after use.
  P211 Do not spray on an open flame or other ignition source.
  P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
- **Additional information:**
  Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C.
  Do not pierce or burn, even after use.
  72.9 % by mass of the contents are flammable.
  Keep out of the reach of children.
- **Other hazards:** -

(Contd. on page 2)
3 Composition/information on ingredients

- Chemical characterization: Mixtures

<table>
<thead>
<tr>
<th>Dangerous components:</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS: 106-97-8 butane, pure</td>
</tr>
<tr>
<td>EINECS: 203-448-7 Flam. Gas 1, H220; Press. Gas, H280</td>
</tr>
</tbody>
</table>

4 First aid measures

- Description of first aid measures
  - General information: Immediately remove any clothing soiled by the product.
  - After inhalation: Supply fresh air; consult doctor in case of complaints.
  - After skin contact: Immediately wash with water and soap and rinse thoroughly.
  - After eye contact: Remove contact lenses. Rinse opened eye for several minutes under running water. Then consult a doctor.
  - After swallowing: Do not induce vomiting; call for medical help immediately.

- Information for doctor:
  - Most important symptoms and effects, both acute and delayed: -
  - Indication of any immediate medical attention and special treatment needed: -

5 Firefighting measures

- Suitable extinguishing agents: CO₂, sand, extinguishing powder. Do not use water.
- For safety reasons unsuitable extinguishing agents: Water
- Special hazards arising from the substance or mixture
  - Formation of toxic gases is possible during heating or in case of fire.
- Protective equipment:
  - Wear self-contained respiratory protective device.
  - Do not inhale explosion gases or combustion gases.
- Additional information:
  - Cool endangered receptacles with water spray.
  - Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  - Wear protective equipment. Keep unprotected persons away.
  - Ensure adequate ventilation.
  - Keep away from ignition sources.
- Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up: Ensure adequate ventilation.
- 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.

7 Handling and storage

- Handling:
- Precautions for safe handling
  - Ensure good ventilation/exhaustion at the workplace.
  - Ensure good interior ventilation, especially at floor level. (Fumes are heavier than air).
Trade name: Nou-Clean-Spray

- Information about fire - and explosion protection:
  Do not spray onto a naked flame or any incandescent material.
  Keep ignition sources away - Do not smoke.
  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.

- Conditions for safe storage, including any incompatibilities
  Storage:
  - Requirements to be met by storerooms and receptacles:
    Store in a cool location.
    Store only in the original receptacle.
    Observe official regulations on storing packagings with pressurized containers.
  - Further information about storage conditions:
    Keep container tightly sealed.
    Do not seal receptacle gas tight.
    Store in cool, dry conditions in well sealed receptacles.
    Protect from heat and direct sunlight.
    Store receptacle in a well ventilated area.
    Store in accordance with the particular national regulations concerning storage of combustible liquids.
  - Specific end use(s):

---

### 8 Exposure controls/personal protection

- Control parameters

<table>
<thead>
<tr>
<th>Ingredients with limit values that require monitoring at the workplace:</th>
</tr>
</thead>
<tbody>
<tr>
<td>106-97-8 butane, pure</td>
</tr>
<tr>
<td>WEL (Great Britain)</td>
</tr>
<tr>
<td>Short-term value: 1810 mg/m³, 750 ppm</td>
</tr>
<tr>
<td>Long-term value: 1450 mg/m³, 600 ppm</td>
</tr>
<tr>
<td>Carc (if more than 0.1% of buta-1,3-diene)</td>
</tr>
</tbody>
</table>

- Additional information: The lists valid during the making were used as basis.

- Exposure controls
  - Personal protective equipment:
  - General protective and hygienic measures:
    The usual precautionary measures are to be adhered to when handling chemicals.
    Do not eat, drink, smoke or sniff while working.
    Wash hands before breaks and at the end of work.
  - Protection of hands:
    Protective gloves and protective skin cream.
    Preventive skin protection by use of skin-protecting agents is recommended.
    After use of gloves apply skin-cleaning agents and skin cosmetics.
  - 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 can not be calculated in advance and has therefore to be checked prior to the application.
  - Penetration time of glove material:
    The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - Eye protection: Tightly sealed goggles
  - Body protection: Wear shoes with conductive soles.
Safety data sheet  
according to 1907/2006/EC, Article 31

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Trade name: Nou-Clean-Spray

(Contd. of page 3)

<table>
<thead>
<tr>
<th>9 Physical and chemical properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Information on basic physical and chemical properties</td>
</tr>
<tr>
<td>- General Information</td>
</tr>
</tbody>
</table>
| - Appearance:  
  Form: Aerosol  
  Colour: Light yellow  
  Odour: Mild |
| - Change in condition  
  Boiling point/Boiling range: -44 °C  
  Flash point: -97 °C  
  Ignition temperature: 365 °C |
| - Explosion limits:  
  Lower: 1.5 Vol %  
  Upper: 10.9 Vol % |
| - Vapour pressure at 20 °C: 8300 hPa |
| - Density: Not determined. |
| - Solubility in / Miscibility with water: Not miscible or difficult to mix. |
| - Solvent content:  
  Organic solvents: 72.9 % |

(Contd. on page 5)

<table>
<thead>
<tr>
<th>10 Stability and reactivity</th>
</tr>
</thead>
</table>
| - Reactivity  
  Chemical stability  
  Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications. |
| - Conditions to avoid: No further relevant information available. |
| - Incompatible materials: Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. |
| - Hazardous decomposition products: Exposition to high temperatures may produce hazardous decomposition products such as: carbon dioxide, carbon monoxide, smoke, oxides of nitrogen (NOx). |

<table>
<thead>
<tr>
<th>11 Toxicological information</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Information on toxicological effects</td>
</tr>
</tbody>
</table>
| - Acute toxicity:  
  - LD/LC50 values relevant for classification:  
    106-97-8 butane, pure  
    LC50/4 h 658 mg/l (rat) |

<table>
<thead>
<tr>
<th>12 Ecological information</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Do not allow to enter sewers/ surface or ground water.</td>
</tr>
<tr>
<td>- Persistence and degradability: -</td>
</tr>
<tr>
<td>- Bioaccumulative potential: -</td>
</tr>
<tr>
<td>- Mobility in soil: -</td>
</tr>
</tbody>
</table>

(Contd. on page 5)
Trade name: Nou-Clean-Spray

13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- European waste catalogue:
  - 16 05 04* gases in pressure containers (including halons) containing dangerous substances

- Uncleaned packaging:
  - Recommendation: Dispose of packaging according to regulations on the disposal of packagings.

14 Transport information

- UN-Number
  - ADR, IMDG, IATA UN1950

- UN proper shipping name
  - ADR 1950 AEROSOLS
  - IMDG AEROSOLS
  - IATA AEROSOLS, flammable

- Transport hazard class(es)
  - ADR
    - Class 2.1 Gases.
    - Label 2.1

  - IMDG, IATA
    - Class 2.1
    - Label 2.1

- Packing group
  - ADR, IMDG, IATA Void

- Environmental hazards:
  - Special precautions for user: Warning: Gases.
  - Danger code (Kemler): -
  - EMS Number: F-D,S-U
Trade name: Nou-Clean-Spray

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
  No further relevant information available.
- Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant phrases
  H220 Extremely flammable gas.
  H280 Contains gas under pressure; may explode if heated.
- Contact: Frau Maria Stathis
- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  IATA: International Air Transport Association
  GHS: Globally Harmonized System of Classification and Labelling of Chemicals
  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)
  LD50: Lethal dose, 50 percent
  Flam. Gas 1: Flammable gases, Hazard Category 1
  Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
  Press. Gas: Gases under pressure: Compressed gas