1. **Identification of the substance/preparation and of the company/undertaking**

1.1 **Identification of the substance or preparation:**
   - **Product name:** Soudal PU Gun and Foam Cleaner

1.2 **Use of the substance/preparation:**
   - Cleansing agent

1.3 **Company/undertaking identification:**
   - **SOUDAL N.V.**
   - Everdongenlaan 18-20
   - B-2300 Turnhout
   - Tel: +32 14 42 42 31
   - Fax: +32 14 44 39 71
   - e-mail address: msds@soudal.com

1.4 **Emergency telephone:**
   - +32 14 58 45 45 (24h/24h)
   - Information centre on dangerous goods (BIG)
   - Technische Schoolstraat 43A, B-2440 Geel, Belgium

2. **Hazards identification**

   - Extremely flammable
   - Irritating to eyes
   - Repeated exposure may cause skin dryness or cracking
   - Vapours may cause drowsiness and dizziness

3. **Composition/information on ingredients**

<table>
<thead>
<tr>
<th>Hazardous ingredients</th>
<th>CAS No. EINECS/ELINCS No.</th>
<th>Conc. (%)</th>
<th>Hazards (R-phrases)</th>
<th>Hazard symbol</th>
</tr>
</thead>
<tbody>
<tr>
<td>acetone</td>
<td>67-64-1 200-662-2</td>
<td>&gt;25</td>
<td>11-36-66-67 (1)</td>
<td>F;Xi</td>
</tr>
<tr>
<td>propane</td>
<td>74-98-6 200-827-9</td>
<td>10 - &lt;20</td>
<td>12 (1)</td>
<td>F+</td>
</tr>
<tr>
<td>butaan</td>
<td>106-97-8 203-448-7</td>
<td>10 - &lt;20</td>
<td>12 (1)</td>
<td>F+</td>
</tr>
<tr>
<td>isobutaan</td>
<td>75-28-5 200-857-2</td>
<td>12 (1)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   (1) For R-phrases in full: see heading 16
   (2) Substance with a Community workplace exposure limit
   (3) PBT-substance
4. First aid measures

4.1 After inhalation:
- Remove the victim into fresh air
- Seek medical advice

4.2 Skin contact:
- Wash immediately with lots of water
- If irritation persists: seek medical advice

4.3 Eye contact:
- Rinse immediately with plenty of water
- Seek medical advice

4.4 After ingestion:
- Never give water to an unconscious person
- Seek medical advice

5. Fire-fighting measures

5.1 Suitable extinguishing media:
- Water spray
- BC powder
- Sand/earth

5.2 Unsuitable extinguishing media:
- None

5.3 Special exposure hazards:
- Gas/vapour spreads at floor level: ignition hazard
- May build up electrostatic charges: risk of ignition
- Upon combustion CO and CO2 are formed
- Aerosol may explode under the effect of heat

5.4 Instructions:
- Take account of toxic firefighting water
- Use firefighting water moderately and contain it
- Do not move the load if exposed to heat

5.5 Special protective equipment for fire-fighters:
- Heat/fire exposure: compressed air/oxygen apparatus
- Protective clothing for exposure to chemicals

6. Accidental release measures

6.1 Personal precautions:
See heading 8.2/13

6.2 Environmental precautions:
- Use appropriate containment to avoid environmental contamination

6.3 Methods for cleaning up:
- Take up liquid spill into a non combustible material e.g.: sand/earth
- Scoop absorbed substance into closing containers
- Carefully collect the spill/leftovers
- Take collected spill to manufacturer/competent authority
- Wash clothing and equipment after handling
Soudal PU Gun and Foam Cleaner

7. Handling and storage

7.1 Handling:
- Observe normal hygiene standards
- Use spark-/explosionproof appliances and lighting system
- Take precautions against electrostatic charges
- Clean contaminated clothing
- Insufficient ventilation: keep naked flames/sparks away

7.2 Storage:
- Keep out of direct sunlight
- Store in a cool area
- Keep away from: heat sources, ignition sources, oxidizing agents, acids, bases

Storage temperature: < 50 °C
Quantity limits: N.D. kg
Storage life: 365 days
Materials for packaging:
- suitable: aerosol

7.3 Specific use(s):
- See information supplied by the manufacturer for the identified use(s)

8. Exposure controls/Personal protection

8.1 Exposure limit values:
8.1.1 Occupational exposure:

ACETONE:

<table>
<thead>
<tr>
<th>Limit</th>
<th>Value</th>
<th>Unit</th>
<th>Value</th>
<th>Unit</th>
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</thead>
<tbody>
<tr>
<td>TLV-TWA</td>
<td>500</td>
<td>mg/m³</td>
<td>750</td>
<td>ppm</td>
</tr>
<tr>
<td>TLV-STEEL</td>
<td></td>
<td>mg/m³</td>
<td></td>
<td>ppm</td>
</tr>
<tr>
<td>TLV-Ceiling</td>
<td></td>
<td>mg/m³</td>
<td></td>
<td>ppm</td>
</tr>
<tr>
<td>WEL-LTEL</td>
<td>1210</td>
<td>mg/m³</td>
<td>500</td>
<td>ppm</td>
</tr>
<tr>
<td>WEL-STEEL</td>
<td>3620</td>
<td>mg/m³</td>
<td>1500</td>
<td>ppm</td>
</tr>
<tr>
<td>TRGS 900</td>
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<td>mg/m³</td>
<td>500</td>
<td>ppm</td>
</tr>
<tr>
<td>MAK</td>
<td>1200</td>
<td>mg/m³</td>
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<td>ppm</td>
</tr>
<tr>
<td>MAC-TGG 8 h</td>
<td>1210</td>
<td>mg/m³</td>
<td></td>
<td>ppm</td>
</tr>
<tr>
<td>MAC-TGG 15 min.</td>
<td>2420</td>
<td>mg/m³</td>
<td></td>
<td>ppm</td>
</tr>
<tr>
<td>MAC-Ceiling</td>
<td></td>
<td>mg/m³</td>
<td></td>
<td>ppm</td>
</tr>
<tr>
<td>VME-8 h</td>
<td>1210</td>
<td>mg/m³</td>
<td>500</td>
<td>ppm</td>
</tr>
<tr>
<td>VLE-15 min.</td>
<td></td>
<td>mg/m³</td>
<td></td>
<td>ppm</td>
</tr>
<tr>
<td>GWBB-8 h</td>
<td>1210</td>
<td>mg/m³</td>
<td>500</td>
<td>ppm</td>
</tr>
<tr>
<td>GWK-15 min.</td>
<td>2420</td>
<td>mg/m³</td>
<td>1000</td>
<td>ppm</td>
</tr>
<tr>
<td>Momentary value</td>
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<td>ppm</td>
</tr>
<tr>
<td>EC</td>
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</tr>
<tr>
<td>EC-STEEL</td>
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<td>mg/m³</td>
<td></td>
<td>ppm</td>
</tr>
</tbody>
</table>
Soudal PU Gun and Foam Cleaner

**PROPANE:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLV-TWA</td>
<td>mg/m³</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>TLV-STEEL</td>
<td>mg/m³</td>
<td>- ppm</td>
</tr>
<tr>
<td>TLV-Ceiling</td>
<td>mg/m³</td>
<td>- ppm</td>
</tr>
<tr>
<td>TRGS 900</td>
<td>mg/m³</td>
<td>1800 ppm</td>
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<tr>
<td>MAK</td>
<td>mg/m³</td>
<td>1800 ppm</td>
</tr>
<tr>
<td>GWBB-8 h</td>
<td>mg/m³</td>
<td>- ppm</td>
</tr>
<tr>
<td>GWK-15 min.</td>
<td>mg/m³</td>
<td>- ppm</td>
</tr>
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**ISOBUTANE:**

<table>
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<tr>
<th>Parameter</th>
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<th>Concentration</th>
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<tbody>
<tr>
<td>TRGS 900</td>
<td>mg/m³</td>
<td>2400 ppm</td>
</tr>
<tr>
<td>MAK</td>
<td>mg/m³</td>
<td>2400 ppm</td>
</tr>
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</table>

**BUTANE:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>TLV-TWA</td>
<td>mg/m³</td>
<td>1000 ppm</td>
</tr>
<tr>
<td>TLV-STEEL</td>
<td>mg/m³</td>
<td>- ppm</td>
</tr>
<tr>
<td>WEL-TEL</td>
<td>mg/m³</td>
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</tr>
<tr>
<td>WEL-STEEL</td>
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<tr>
<td>TRGS 900</td>
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<td>- ppm</td>
</tr>
<tr>
<td>MAK</td>
<td>mg/m³</td>
<td>2400 ppm</td>
</tr>
<tr>
<td>MAC-TGG 8 h</td>
<td>mg/m³</td>
<td>600 ppm</td>
</tr>
<tr>
<td>MAC-TGG 15 min.</td>
<td>mg/m³</td>
<td>1420 ppm</td>
</tr>
<tr>
<td>VME-8 h</td>
<td>mg/m³</td>
<td>1900 ppm</td>
</tr>
<tr>
<td>VLE-15 min.</td>
<td>mg/m³</td>
<td>- ppm</td>
</tr>
<tr>
<td>GWBB-8 h</td>
<td>mg/m³</td>
<td>- ppm</td>
</tr>
<tr>
<td>GWK-15 min.</td>
<td>mg/m³</td>
<td>- ppm</td>
</tr>
<tr>
<td>Momentary value</td>
<td>mg/m³</td>
<td>- ppm</td>
</tr>
</tbody>
</table>

8.2 Exposure controls:

8.2.1 Occupational exposure controls:
- Measure the concentration in the air regularly
- Work under local exhaust/ventilation

Personal protective equipment:

a) Respiratory protection:
- Gas mask with filter type A at conc. in air > exposure limit

b) Hand protection:
- Gloves

c) Eye protection:
- Protective goggles

d) Skin protection:
- Protective clothing

8.2.2 Environmental exposure controls: see headings 6.2, 6.3 and 13
9. Physical and chemical properties

9.1 General information:
Appearance (at 20°C) : Aerosol
Odour : Acetone
Colour : Colourless

9.2 Important health, safety and environmental information:
- pH value (at %) : N.D.
- Boiling point/boiling range : N.D. °C
- Flashpoint : Contains (highly) flammable component
- Explosion limits (explosive properties) : 1.5 - 12.8 vol%
- Oxidising properties : N.D.
- Vapour pressure (at 20°C) : N.D. hPa
- Vapour pressure (at 50°C) : N.D. hPa
- Relative density (at 20°C) : N.D.
- Water solubility : N.D. g/100 ml
- Soluble in : Ethanol, ether
- Relative vapour density : N.D.
- Viscosity (at °C) : N.D. Pa.s
- Partition coefficient n-octanol/water : N.D.
- Evaporation rate ratio to butyl acetate : N.D.
- ratio to ether : N.D.

9.3 Other information:
- Melting point/melting range : N.D. °C
- Auto-ignition temperature : N.D. °C
- Saturation concentration : N.D. g/m³
- Specific conductivity : N.D. pS/m

10. Stability and reactivity

10.1 Conditions to avoid:
- Unstable on exposure to heat

10.2 Materials to avoid:
- Keep away from: heat sources, ignition sources, oxidizing agents, acids, bases

10.3 Hazardous decomposition products:
- Upon combustion CO and CO₂ are formed
11. Toxicological information

11.1 Acute toxicity:

ACETONE:

LD50 oral rat : 5800 mg/kg
LD50 dermal rat : 20000 mg/kg
LC50 inhalation rat : 71 mg/l/4 h
LC50 inhalation rat : 30000 ppm/4 h

PROPANE:

LC50 inhalation rat : 513 mg/l/4 h
LC50 inhalation rat : 280000 ppm/4 h

ISOBUTANE:

LC50 inhalation rat : > 50 mg/l/4 h

BUTANE:

LC50 inhalation rat : 658 mg/l/4 h

11.2 Chronic toxicity:

ACETONE:

Carcinogenicity (TLV) : A4

11.3 Routes of exposure: inhalation, eyes and skin

11.4 Acute effects/symptoms (upon overexposure):

AFTER INHALATION:
- Feeling of weakness
- CNS depression
- Dizziness
- Narcosis
- Excited/restless
- Drunkenness
- Disturbed motor response
- Headache
- Respiratory difficulties
- Disturbances of consciousness

AFTER EYE CONTACT:
- Irritation of the eye tissue

AFTER SKIN CONTACT:
- Irritation of the skin
- Dry skin
- Burning of the skin

11.5 Chronic effects:

- Not listed in carcinogenicity class (IARC,EC,TLV,MAK)
- Not listed in mutagenicity class (EC,MAK)
- Not listed in teratogenicity class (EC,MAK)

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT:
- Red skin
- Skin rash/inflammation
- Dry/sore throat
- Headache
- Nausea
- Feeling of weakness
- Loss of weight
- Possible inflammation of the respiratory tract
12. Ecological information

12.1 Ecotoxicity:

ACETONE:
- EC50 (96 h) : 5540 mg/l (SALMO GAIREDNERI/ ONCORHYNCHUS MYKISS)
- EC50 (48 h) : 39 mg/l (DAPHNIA MAGNA)
- EC50 (96 h) : 7000 mg/l (SELENASTRUM CAPRICORNUTUM)

- Effect on waste water purification : No data available

12.2 Mobility:
- Volatile organic compounds (VOC) : 100%

For other physicochemical properties see heading 9

12.3 Persistence and degradability:
- biodegradation BOD₅ : N.D. % ThOD
- water : No data available
- soil : T ½: N.D. days

12.4 Bioaccumulative potential:
- log Pow : N.D.
- BCF : N.D.

12.5 Results of PBT assessment:
- No data available

12.6 Other adverse effects:
- WGK : 1 (Classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 17 May 1999)
- Effect on the ozone layer : Not dangerous for the ozone layer (1999/45/EC)
- Greenhouse effect : No data available

13. Disposal considerations

13.1 Provisions relating to waste:
- Hazardous waste (91/689/EEC)

13.2 Disposal methods:
- Specific treatment

13.3 Packaging/Container:
14. Transport information

14.1 Classification of the substance in compliance with UN Recommendations

<table>
<thead>
<tr>
<th>UN number</th>
<th>CLASS</th>
<th>SUB RISKS</th>
<th>PACKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>2.1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

14.2 ADR (transport by road)

<table>
<thead>
<tr>
<th>CLASS</th>
<th>PACKING</th>
<th>CLASSIFICATION CODE</th>
<th>DANGER LABEL TANKS</th>
<th>DANGER LABEL PACKAGES</th>
<th>PROPER SHIPPING NAME</th>
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</thead>
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<td>2</td>
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<td>5F</td>
<td>-</td>
<td>2.1</td>
<td>Aerosols</td>
</tr>
</tbody>
</table>

14.3 RID (transport by rail)

<table>
<thead>
<tr>
<th>CLASS</th>
<th>PACKING</th>
<th>CLASSIFICATION CODE</th>
<th>DANGER LABEL TANKS</th>
<th>DANGER LABEL PACKAGES</th>
<th>PROPER SHIPPING NAME</th>
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</thead>
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<tr>
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<td></td>
<td>5F</td>
<td>-</td>
<td>2.1</td>
<td>Aerosols</td>
</tr>
</tbody>
</table>

14.4 ADNR (transport by inland waterways)

<table>
<thead>
<tr>
<th>CLASS</th>
<th>PACKING</th>
<th>CLASSIFICATION CODE</th>
<th>DANGER LABEL TANKS</th>
<th>DANGER LABEL PACKAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
<td>5F</td>
<td>-</td>
<td>2.1</td>
</tr>
</tbody>
</table>

14.5 IMDG (maritime transport)

<table>
<thead>
<tr>
<th>CLASS</th>
<th>SUB RISKS</th>
<th>PACKING</th>
<th>MFAG</th>
<th>EMS</th>
<th>MARINE POLLUTANT</th>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14.6 ICAO (air transport)

<table>
<thead>
<tr>
<th>CLASS</th>
<th>SUB RISKS</th>
<th>PACKING</th>
<th>PACKING INSTRUCTIONS PASSENGER AIRCRAFT</th>
<th>PACKING INSTRUCTIONS CARGO AIRCRAFT</th>
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<tbody>
<tr>
<td>2.1</td>
<td></td>
<td></td>
<td>203/Y203</td>
<td>203</td>
</tr>
</tbody>
</table>

14.7 Special precautions

none

14.8 Limited quantities (LQ)

When substances and their packaging meet the conditions established by ADR/RID/ADNR in chapter 3.4, only the following prescriptions shall be complied with:

- each package shall display a diamond-shaped figure with the following inscription:
  - 'UN 1950'
- in the case of different goods with different identification numbers within a single package:
  - the letters 'LQ'
15. Regulatory information

15.1 EU legislation:

Classification according to directives 67/548/EEC and 1999/45/EC

- R36 : Irritating to eyes
- R66 : Repeated exposure may cause skin dryness or cracking
- R67 : Vapours may cause drowsiness and dizziness

- S23 : Do not breathe spray
- S(46) : (If swallowed, seek medical advice immediately and show this container or label)
- S51 : Use only in well ventilated area

Keep away from sources of ignition - No smoking.
Keep out of the reach of children.
Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C.
Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material.

15.2 National provisions:

- **The Netherlands:**
  Waterbezwaardelijkheid: 8

- **Germany:**
  WGK : 1 (Classification based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 17 May 1999)
Soudal PU Gun and Foam Cleaner

16. Other information

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

N.A. = NOT APPLICABLE
N.D. = NOT DETERMINED
(*) = INTERNAL CLASSIFICATION (NFPA)

PBT-substances = persistent, bioaccumulative and toxic substances

Exposure limits:
TLV : Threshold Limit Value - ACGIH USA
WEL : Workplace Exposure Limits - United Kingdom
TRGS 900 : Technische Regel für Gefahrstoffe 900 (Arbeitsplatzgrenzwerte) - Germany
MAK : Maximale Arbeitsplatzkonzentrationen - Germany
MAC : Maximale aanvaarde concentratie - The Netherlands
VME : Valeurs limites de Moyenne d’Exposition - France
VLE : Valeurs limites d’Exposition à court terme - France
GWBB : Grenswaarde beroepsmatige blootstelling - Belgium
GWK : Grenswaarde kortstondige blootstelling - Belgium
EC : Indicative occupational exposure limit values - directive 2000/39/EC

I : Inhalable fraction = T: Total dust = E: Einatembare Aerosolanteil
R : Respirable fraction = A: Alveolengängiger Aerosolanteil/Alveolar dust
C : Ceiling limit

a: aerosol r: rook/Rauch (fume)
d: damp (vapour) st: stof/Staub (dust)
du: dust ve: vezel (fibre)
fosph: Faser (fibre) va: vapour
fi: fibre om: oil mist
fu: fume on: olievel/Ölnebel (oil mist)
p: poussière (dust) part: particles

Chronic toxicity:
K : List of the carcinogenic substances and processes - The Netherlands

Full text of any R phrases referred to under headings 2 and 3:
R11 : Highly flammable
R12 : Extremely flammable
R36 : Irritating to eyes
R66 : Repeated exposure may cause skin dryness or cracking
R67 : Vapours may cause drowsiness and dizziness