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

1.1 Product identifier
   Trade name : ROST-OFF PLUS SPRAY 300 ML
   Product code : 0890 200

1.2 Relevant identified uses of the substance or mixture and uses advised against
   Use of the Substance/Mixture : Solvent
                                 Detergent

1.3 Details of the supplier of the safety data sheet
   Company : Würth Norge AS
             Gjelleråsen Næringspark, Mortenv 12
             1481 Hagan
   Telephone : +47 464 01 500
   Telefax : +47 464 01 501
   E-mail address of person responsible for the SDS : prodsafe@wuerth.com

1.4 Emergency telephone number
   +47 2259 1300

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Classification (REGULATION (EC) No 1272/2008)
   Aerosols, Category 1
   H222: Extremely flammable aerosol.
   H229: Pressurised container: May burst if heated.
   Specific target organ toxicity - single exposure, Category 3
   H336: May cause drowsiness or dizziness.
   Chronic aquatic toxicity, Category 3
   H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements
   Labelling (REGULATION (EC) No 1272/2008)
   Hazard pictograms :
   Signal word : Danger
Hazard statements:
- H222 Extremely flammable aerosol.
- H229 Pressurised container: May burst if heated.
- H336 May cause drowsiness or dizziness.
- H412 Harmful to aquatic life with long lasting effects.

Supplemental Hazard Statements:
- EUH066 Repeated exposure may cause skin dryness or cracking.

Precautionary statements:
- Prevention:
  - P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P211 Do not spray on an open flame or other ignition source.
  - P251 Do not pierce or burn, even after use.
  - P261 Avoid breathing spray.
  - P273 Avoid release to the environment.

Storage:
- P410 + P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Hazardous components which must be listed on the label:
- Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics

2.3 Other hazards
- May displace oxygen and cause rapid suffocation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No. EC-No. Registration number</th>
<th>Classification</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</td>
<td>Not Assigned 01-2119471843-32</td>
<td>Flam. Liq.3; H226 STOT SE3; H336 Asp. Tox.1; H304 Aquatic Chronic3; H412</td>
<td>&gt;= 70 - &lt; 90</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light paraffinic</td>
<td>64742-55-8 265-158-7 01-2119487077-29</td>
<td>Asp. Tox.1; H304</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
</tbody>
</table>

Substances with a workplace exposure limit:
- Carbon dioxide 124-38-9 204-696-9 Press. GasLiquefied gas; H280 >= 1 - < 10

For explanation of abbreviations see section 16.
SECTION 4: First aid measures

4.1 Description of first aid measures

General advice: In the case of accident or if you feel unwell, seek medical advice immediately. When symptoms persist or in all cases of doubt seek medical advice.

Protection of first-aiders: First Aid responders should pay attention to self-protection, and use the recommended personal protective equipment when the potential for exposure exists.

If inhaled: If inhaled, remove to fresh air. Get medical attention if symptoms occur.

In case of skin contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

In case of eye contact: Flush eyes with water as a precaution. Get medical attention if irritation develops and persists.

If swallowed: If swallowed, DO NOT induce vomiting. Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

4.2 Most important symptoms and effects, both acute and delayed

Risks: May cause drowsiness or dizziness. Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: Treat symptomatically and supportively.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Water spray
Alcohol-resistant foam
Carbon dioxide (CO2)
Dry chemical

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: Flash back possible over considerable distance. Vapours may form explosive mixtures with air. Exposure to combustion products may be a hazard to health.
If the temperature rises there is danger of the vessels bursting due to the high vapor pressure.

Hazardous combustion products: Carbon oxides

5.3 Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.
Use personal protective equipment.

Specific extinguishing methods: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Use water spray to cool unopened containers.
Remove undamaged containers from fire area if it is safe to do so.
Evacuate area.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Remove all sources of ignition.
Use personal protective equipment.
Follow safe handling advice and personal protective equipment recommendations.

6.2 Environmental precautions

Environmental precautions: Discharge into the environment must be avoided.
Prevent further leakage or spillage if safe to do so.
Prevent spreading over a wide area (e.g. by containment or oil barriers).
Retain and dispose of contaminated wash water.
Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Non-sparking tools should be used.
Soak up with inert absorbent material.
Suppress (knock down) gases/vapours/mists with a water spray jet.
For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container.
Clean up remaining materials from spill with suitable absorbent.
Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which regulations are applicable.
Sections 13 and 15 of this SDS provide information regarding certain local or national requirements.
### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

**Technical measures**: See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

**Local/Total ventilation**: Use with local exhaust ventilation. Use only in an area equipped with explosion proof exhaust ventilation.

**Advice on safe handling**: Do not get on skin or clothing. Do not breathe vapours or spray mist. Do not swallow. Avoid contact with eyes. Handle in accordance with good industrial hygiene and safety practice. Keep away from heat and sources of ignition. Take precautionary measures against static discharges. Take care to prevent spills, waste and minimize release to the environment. Do not spray on an open flame or other ignition source.

**Hygiene measures**: Ensure that eye flushing systems and safety showers are located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

#### 7.2 Conditions for safe storage, including any incompatibilities

**Requirements for storage areas and containers**: Store locked up. Keep in a cool, well-ventilated place. Store in accordance with the particular national regulations. Do not pierce or burn, even after use. Keep cool. Protect from sunlight.

**Advice on common storage**: Do not store with the following product types:
- Self-reactive substances and mixtures
- Organic peroxides
- Oxidizing agents
- Flammable solids
- Pyrophoric liquids
- Pyrophoric solids
- Self-heating substances and mixtures
- Substances and mixtures, which in contact with water, emit flammable gases
- Explosives

**Recommended storage temperature**: 10 - 40 °C

#### 7.3 Specific end use(s)

**Specific use(s)**: No data available
SECTION 8: Exposure controls/personal protection

8.1 Control parameters

**Occupational Exposure Limits**

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</td>
<td>64742-48-9</td>
<td>TWA</td>
<td>40 ppm 275 mg/m3</td>
<td>FOR-2011-12-06-1358</td>
</tr>
<tr>
<td>Distillates (petroleum), hydrotreated light paraffinic</td>
<td>64742-55-8</td>
<td>TWA</td>
<td>40 ppm 275 mg/m3</td>
<td>FOR-2011-12-06-1358</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Vapour)</td>
<td>50 mg/m3</td>
<td>FOR-2011-12-06-1358</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Mist and particles)</td>
<td>1 mg/m3</td>
<td>FOR-2011-12-06-1358</td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>TWA</td>
<td>500 ppm 900 mg/m3</td>
<td>FOR-2011-12-06-1358</td>
</tr>
<tr>
<td>Carbon dioxide</td>
<td>124-38-9</td>
<td>TWA</td>
<td>5.000 ppm 9.000 mg/m3</td>
<td>FOR-2011-12-06-1358</td>
</tr>
</tbody>
</table>

**Further information**

The EU has set an indicative limit value for this substance:

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Environmental Compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light paraffinic</td>
<td>Oral (Secondary Poisoning)</td>
<td>9,33 mg/kg food</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

**Engineering measures**

Minimize workplace exposure concentrations.
Use only in an area equipped with explosion proof exhaust ventilation.
Use with local exhaust ventilation.

**Personal protective equipment**

- **Eye protection**: Wear the following personal protective equipment:
  - Safety glasses

- **Hand protection**
  - Material: Nitrile rubber
  - Break through time: < 480 min
  - Glove thickness: 0,45 mm
  - Directive: DIN EN 374

- **Remarks**: Choose gloves to protect hands against chemicals depending on the concentration and quantity of the hazardous sub-
stance and specific to place of work. For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before breaks and at the end of workday.

Skin and body protection

Wear the following personal protective equipment:
- Flame retardant antistatic protective clothing.

Respiratory protection

Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.

- Filter type: Self-contained breathing apparatus

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Aerosol containing a liquefied gas</td>
</tr>
<tr>
<td>Propellant</td>
<td>Isobutane, Propane, Carbon dioxide</td>
</tr>
<tr>
<td>Colour</td>
<td>light yellow</td>
</tr>
<tr>
<td>Odour</td>
<td>mint-like</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>110 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Extremely flammable aerosol.</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>11 % (V)</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>1 % (V)</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Density</td>
<td>0.778 g/cm³ (20 °C)</td>
</tr>
<tr>
<td>Method: DIN 51757</td>
<td></td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>insoluble</td>
</tr>
</tbody>
</table>
SECTION 10: Stability and reactivity

10.1 Reactivity
Not classified as a reactivity hazard.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
Hazardous reactions: Extremely flammable aerosol.
Vapours may form explosive mixture with air.
If the temperature rises there is danger of the vessels bursting
due to the high vapor pressure.
Can react with strong oxidizing agents.

10.4 Conditions to avoid
Conditions to avoid: Heat, flames and sparks.

10.5 Incompatible materials
Materials to avoid: Oxidizing agents

10.6 Hazardous decomposition products
No hazardous decomposition products are known.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Information on likely routes of exposure:
Inhalation
Skin contact
Ingestion
Eye contact
**Acute toxicity**
Not classified based on available information.

**Components:**

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics:**

**Acute oral toxicity**: LD50 (Rat): > 5.000 mg/kg
Remarks: Based on data from similar materials

**Acute inhalation toxicity**: LC50 (Rat): > 4.951 mg/m3
Exposure time: 4 h
Test atmosphere: vapour
Assessment: The substance or mixture has no acute inhalation toxicity
Remarks: Based on data from similar materials

**Acute dermal toxicity**: LD50 (Rabbit): > 3.160 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: Based on data from similar materials

**Distillates (petroleum), hydrotreated light paraffinic:**

**Acute oral toxicity**: LD50 (Rat): > 5.000 mg/kg
Remarks: Based on data from similar materials

**Acute inhalation toxicity**: LC50 (Rat): > 4 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Assessment: The substance or mixture has no acute inhalation toxicity

**Acute dermal toxicity**: LD50 (Rabbit): > 5.000 mg/kg
Remarks: Based on data from similar materials

**Carbon dioxide:**

**Acute inhalation toxicity**: LC50 (Rat): 58750 ppm
Exposure time: 4 h
Test atmosphere: gas

**Skin corrosion/irritation**
Repeated exposure may cause skin dryness or cracking.

**Components:**

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics:**
Species: Rabbit
Result: Mild skin irritation

Assessment: Repeated exposure may cause skin dryness or cracking.

**Distillates (petroleum), hydrotreated light paraffinic:**
Species: Rabbit
Result: No skin irritation
Serious eye damage/eye irritation
Not classified based on available information.

Components:

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclicks, <2% aromatics:
Species: Rabbit
Method: OECD Test Guideline 405
Result: No eye irritation
Remarks: Based on data from similar materials

Distillates (petroleum), hydrotreated light paraffinic:
Species: Rabbit
Result: No eye irritation

Respiratory or skin sensitisation

Skin sensitisation
Not classified based on available information.

Respiratory sensitisation
Not classified based on available information.

Components:

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclicks, <2% aromatics:
Test Type: Maximisation Test
Exposure routes: Skin contact
Species: Guinea pig
Result: negative
Remarks: Based on data from similar materials

Distillates (petroleum), hydrotreated light paraffinic:
Test Type: Buehler Test
Exposure routes: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: negative
Remarks: Based on data from similar materials

Germ cell mutagenicity
Not classified based on available information.

Components:

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclicks, <2% aromatics:
Genotoxicity in vitro: Test Type: In vitro mammalian cell gene mutation test
Result: negative
Remarks: Based on data from similar materials

Genotoxicity in vivo: Test Type: Mammalian erythrocyte micronucleus test (in vivo cytogenetic assay)
Species: Mouse  
Application Route: Ingestion  
Result: negative  

Germ cell mutagenicity- Assessment  
Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P)  

Distillates (petroleum), hydrotreated light paraffinic:  
Genotoxicity in vitro  
Test Type: Bacterial reverse mutation assay (AMES)  
Result: negative  
Remarks: Based on data from similar materials  

Carcinogenicity  
Not classified based on available information.  

Components:  
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics:  
Species: Rat  
Application Route: inhalation (vapour)  
Exposure time: 105 weeks  
Result: negative  
Remarks: Based on data from similar materials  
Carcinogenicity - Assessment  
Classified based on benzene content < 0.1% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note P)  

Distillates (petroleum), hydrotreated light paraffinic:  
Carcinogenicity - Assessment  
Classified based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L)  

Reproductive toxicity  
Not classified based on available information.  

Components:  
Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics:  
Effects on fertility  
Test Type: Reproduction/Developmental toxicity screening test  
Species: Rat  
Application Route: inhalation (vapour)  
Result: negative  
Effects on foetal development  
Test Type: Embryo-foetal development  
Species: Rat  
Application Route: inhalation (vapour)  
Result: negative  
Remarks: Based on data from similar materials  

STOT - single exposure  
May cause drowsiness or dizziness.
Components:

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics:
Assessment: May cause drowsiness or dizziness.

STOT - repeated exposure
Not classified based on available information.

Repeated dose toxicity

Components:

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics:
Species: Rat
NOAEL: 10.186 mg/m³
Application Route: inhalation (vapour)
Exposure time: 13 Weeks

Distillates (petroleum), hydrotreated light paraffinic:
Species: Rabbit
NOAEL: 1.000 mg/kg
Application Route: Skin contact
Exposure time: 4 Weeks
Method: OECD Test Guideline 410
Remarks: Based on data from similar materials

Species: Rat
NOAEL: > 980 mg/m³
Application Route: inhalation (dust/mist/fume)
Exposure time: 4 Weeks
Remarks: Based on data from similar materials

Aspiration toxicity
Not classified based on available information.

Components:

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics:
The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Distillates (petroleum), hydrotreated light paraffinic:
The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

SECTION 12: Ecological information

12.1 Toxicity

Components:

Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics:
Toxicity to fish:
- LL50 (Oncorhynchus mykiss (rainbow trout)): > 10 - 30 mg/l
  Exposure time: 96 h
  Test substance: Water Accommodated Fraction
  Method: OECD Test Guideline 203
  Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates:
- EL50 (Daphnia magna (Water flea)): > 22 - 46 mg/l
  Exposure time: 48 h
  Test substance: Water Accommodated Fraction
  Method: OECD Test Guideline 202
  Remarks: Based on data from similar materials

Toxicity to algae:
- EL50 (Pseudokirchneriella subcapitata (green algae)): > 1.000 mg/l
  Exposure time: 72 h
  Test substance: Water Accommodated Fraction
  Method: OECD Test Guideline 201
  Remarks: Based on data from similar materials

  NOELR (Pseudokirchneriella subcapitata (green algae)): 1 mg/l
  Exposure time: 72 h
  Test substance: Water Accommodated Fraction
  Method: OECD Test Guideline 201
  Remarks: Based on data from similar materials

Distillates (petroleum), hydrotreated light paraffinic:
Toxicity to daphnia and other aquatic invertebrates:
- LL50 (Daphnia magna (Water flea)): > 10.000 mg/l
  Exposure time: 48 h
  Test substance: Water Accommodated Fraction
  Method: OECD Test Guideline 202

Toxicity to algae:
- NOEC (Pseudokirchneriella subcapitata (green algae)): > 100 mg/l
  Exposure time: 72 h
  Test substance: Water Accommodated Fraction
  Method: OECD Test Guideline 201

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):
- NOEC: 10 mg/l
  Exposure time: 21 d
  Species: Daphnia magna (Water flea)
  Test substance: Water Accommodated Fraction

Carbon dioxide:
Toxicity to fish:
- NOEC (Lepomis macrochirus (Bluegill sunfish)): > 100 mg/l
  Exposure time: 96 h
  Remarks: Based on data from similar materials

Toxicity to daphnia and other aquatic invertebrates:
- NOEC (Daphnia magna (Water flea)): > 100 mg/l
  Exposure time: 48 h
  Remarks: Based on data from similar materials
12.2 Persistence and degradability

**Components:**

**Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics:**
- **Biodegradability**: Result: Readily biodegradable.
- **Biodegradation**: 89 %
- **Exposure time**: 28 d
- **Method**: OECD Test Guideline 301F
- **Remarks**: Based on data from similar materials

**Distillates (petroleum), hydrotreated light paraffinic:**
- **Biodegradability**: Result: Not readily biodegradable.
- **Biodegradation**: 31 %
- **Exposure time**: 28 d
- **Method**: OECD Test Guideline 301F

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Not relevant

12.6 Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

**Product**: Dispose of in accordance with local regulations. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

**Contaminated packaging**: Empty containers should be taken to an approved waste handling site for recycling or disposal. Empty containers retain residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury and/or death. If not otherwise specified: Dispose of as unused product. Please ensure aerosol cans are sprayed completely empty (including propellant)

**Waste Code**: The following Waste Codes are only suggestions:

- used product
- 160504, gases in pressure containers (including halons) containing dangerous substances
SECTION 14: Transport information

14.1 UN number

| ADN  | UN 1950 |
| ADR  | UN 1950 |
| RID  | UN 1950 |
| IMDG | UN 1950 |
| IATA | UN 1950 |

14.2 UN proper shipping name

| ADN   | AEROSOLS |
| ADR   | AEROSOLS |
| RID   | AEROSOLS |
| IMDG  | AEROSOLS |
| IATA  | Aerosols, flammable |

14.3 Transport hazard class(es)

| ADN  | 2 |
| ADR  | 2 |
| RID  | 2 |
| IMDG | 2.1 |
| IATA | 2.1 |

14.4 Packing group

| ADN             | Not assigned by regulation |
| Packing group   | 5F |
| Classification Code | 5F |
| Labels | 2.1 |

| ADR             | Not assigned by regulation |
| Packing group   | 5F |
| Classification Code | 5F |
| Labels | 2.1 |
| Tunnel restriction code | (D) |

<p>| RID             | Not assigned by regulation |
| Packing group   | 5F |
| Classification Code | 5F |
| Hazard Identification Number | 23 |</p>
<table>
<thead>
<tr>
<th>Version</th>
<th>SDS Number:</th>
<th>Date of last issue: 19.09.2016</th>
<th>Date of first issue: 15.09.2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.4</td>
<td>328103-00005</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Labels**
- IMDG
  - Packing group: Not assigned by regulation
  - Labels: 2.1
  - EmS Code: F-D, S-U
- IATA (Cargo)
  - Packing instruction (cargo aircraft): 203
  - Packing instruction (LQ): Y203
  - Packing group: Not assigned by regulation
  - Labels: Flammable Gas
- IATA (Passenger)
  - Packing instruction (passenger aircraft): 203
  - Packing instruction (LQ): Y203
  - Packing group: Not assigned by regulation
  - Labels: Flammable Gas

**14.5 Environmental hazards**
- ADN
  - Environmentally hazardous: no
- ADR
  - Environmentally hazardous: no
- RID
  - Environmentally hazardous: no
- IMDG
  - Marine pollutant: no

**14.6 Special precautions for user**
- Not applicable

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**
- Remarks: Not applicable for product as supplied.

**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59): Not applicable
- Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: Not applicable
- Regulation (EC) No 850/2004 on persistent organic pollutants: Not applicable
- Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals: Not applicable

<table>
<thead>
<tr>
<th>Quantity 1</th>
<th>Quantity 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>150 t</td>
<td>500 t</td>
</tr>
</tbody>
</table>

P3a

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Petroleum products: (a) gasolines and naphthas, (b) kerosenes (including jet fuels), (c) gas oils (including diesel fuels, home heating oils and gas oil blending streams), (d) heavy fuel oils (e) alternative fuels serving the same purposes and with similar properties as regards flammability and environmental hazards as the products referred to in points (a) to (d)

Volatile organic compounds: Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control)

Volatile organic compounds (VOC) content: 84.46%

Other regulations: Young people under the age of 18 are not allowed to use or be exposed to the product professionally. Young people above the age of 15 are, however, except from this rule if the product is a necessary part of their education.

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Full text of H-Statements

H226: Flammable liquid and vapour.
H280: Contains gas under pressure; may explode if heated.
H304: May be fatal if swallowed and enters airways.
H336: May cause drowsiness or dizziness.
H412: Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Chronic: Chronic aquatic toxicity
Asp. Tox.: Aspiration hazard
Flam. Liq.: Flammable liquids
Press. Gas: Gases under pressure
STOT SE: Specific target organ toxicity - single exposure
2006/15/EC: Europe. Indicative occupational exposure limit values
FOR-2011-12-06-1358: Norway. Occupational Exposure limits
2006/15/EC / TWA: Limit Value - eight hours
FOR-2011-12-06-1358 / TWA: Long term exposure limit
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user’s end product, if applicable.

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