1.1. Product identifier

BIZOL Octane Power+ g81

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture
Additive

1.3. Details of the supplier of the safety data sheet

Company name: BIZOL BITA Trading GmbH
Street: Martin-Buber-Str. 12
Place: D-14163 Berlin
Telephone: +49 (30) 804 869-0
Fax: +49 (30) 804 869-2860
E-mail: support@bizol.de
Internet: www.bizol.com

1.4. Emergency telephone number:

Germany: +49 (30) 804 869-0 (08.00-17.00, Mo-Fr)
In England and Wales: NHS Direct: 0845 4647 or 111 In Scotland: NHS 24 - 08454 24 24 24 In Republic of Ireland: 01 809 2166

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008
Hazard categories:
- Aspiration hazard: Asp. Tox. 1
- Skin corrosion/irritation: Skin Irrit. 2
- Serious eye damage/eye irritation: Eye Dam. 1
- Reproductive toxicity: Repr. 1B
- Specific target organ toxicity - single exposure: STOT SE 3
- Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements:
- May be fatal if swallowed and enters airways.
- Causes skin irritation.
- Causes serious eye damage.
- May damage fertility or the unborn child.
- May cause drowsiness or dizziness.
- Toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008
Hazard components for labelling
- hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%)
- solvent naphtha (petroleum), heavy aromatic
- potassium 1,2-bis(2-ethylhexyloxy carbonyl)ethanesulphonate
- ferrocene

Signal word: Danger

Pictograms:

Hazard statements
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H360 May damage fertility or the unborn child.
Precautionary statements

P201 Obtain special instructions before use.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P310 Immediately call a POISON CENTER/doctor.
P331 Do NOT induce vomiting.
P362+P364 Take off contaminated clothing and wash it before reuse.
P403+P405 Store in a well-ventilated place. Keep container tightly closed.
P501 Dispose of waste according to applicable legislation.

2.3. Other hazards

Results of PBT and vPvB assessment: not applicable.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Mineral oil-based mixture. Mineral oil with DMSO extract < 3 % as measured by IP 346.

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures
General information
When in doubt or if symptoms are observed, get medical advice. If unconscious place in recovery position and seek medical advice. Remove contaminated, saturated clothing immediately.

After inhalation
Remove casualty to fresh air and keep warm and at rest.

After contact with skin
After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes
After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

After ingestion
If swallowed, rinse mouth with water (only if the person is conscious). Let water be drunken in little sips (dilution effect). Call a physician immediately. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed
When in doubt or if symptoms are observed, get medical advice.

4.3. Indication of any immediate medical attention and special treatment needed
No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
alcohol resistant foam, Extinguishing powder, Carbon dioxide (CO2).

Unsuitable extinguishing media
High power water jet.

5.2. Special hazards arising from the substance or mixture
Hazardous decomposition products: Carbon monoxide Carbon dioxide (CO2). Do not inhale explosion and combustion gases.

5.3. Advice for firefighters
In case of fire: Wear self-contained breathing apparatus.

Additional information
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Do not allow to enter into soil/subsoil.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
See protective measures under point 7 and 8.

6.2. Environmental precautions
Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil. Clean contaminated articles and floor according to the environmental legislation.

6.3. Methods and material for containment and cleaning up
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections
See protective measures under point 7 and 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Advice on safe handling
Use personal protection equipment. Do not eat, drink or smoke when using this product. Provide fresh air. Handle and open container with care. Conditions to avoid: generation/formation of aerosols.

Advice on protection against fire and explosion
No special measures are necessary.
7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Protect against: Frost. Keep away from heat. Protect against direct sunlight. Keep container tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s)
Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Exposure limits (EH40)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>TWA (8 h)</th>
<th>STEL (15 min)</th>
</tr>
</thead>
<tbody>
<tr>
<td>91-20-3</td>
<td>Naphthalene</td>
<td>10 ppm</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50 mg/m³</td>
<td></td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls
See chapter 7. No additional measures necessary.

Protective and hygiene measures
When using do not eat, drink, smoke, sniff.

Eye/face protection
Eye glasses with side protection.

Hand protection
Wear suitable gloves. Recommended glove articles: DIN EN 374. Suitable material: NBR (Nitrile rubber). Breakthrough time (maximum wearing time): > 480 min (Thickness of the glove material: 0.4 mm). Breakthrough times and swelling properties of the material must be taken into consideration. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Skin protection
Protective clothing.

Respiratory protection
With correct and proper use, and under normal conditions, breathing protection is not required. When splashes or fine mist form, a permitted breathing apparatus suitable for these purposes must be used. Suitable respiratory protection apparatus: Filtering Half-face mask (DIN EN 149), e.g. FFA P / FFP3.

Environmental exposure controls
Do not allow to enter into surface water or drains.

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>Physical state:</td>
<td>liquid</td>
</tr>
<tr>
<td>Colour:</td>
<td>light brown</td>
</tr>
<tr>
<td>Odour:</td>
<td>like: Mineral oil</td>
</tr>
<tr>
<td>pH-Value:</td>
<td>not determined</td>
</tr>
</tbody>
</table>

Changes in the physical state

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point:</td>
<td>not determined</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>&gt; 160 °C</td>
</tr>
<tr>
<td>Pour point:</td>
<td>not determined</td>
</tr>
<tr>
<td>Flash point:</td>
<td>&gt; 61 °C</td>
</tr>
<tr>
<td>Lower explosion limits:</td>
<td>not determined</td>
</tr>
<tr>
<td>Upper explosion limits:</td>
<td>not determined</td>
</tr>
</tbody>
</table>
Ignition temperature: not determined
Decomposition temperature: No information available.
Vapour pressure: < 100 hPa (at 50 °C)
Density (at 20 °C): 1 g/cm³
Water solubility: Immiscible
Partition coefficient: not determined
Viscosity / dynamic: not determined (at 40 °C)
Viscosity / kinematic: < 20,5 mm²/s
Flow time: not determined
Vapour density: not determined
Evaporation rate: not determined

### 9.2. Other information
No information available.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity
No information available.

#### 10.2. Chemical stability
No information available.

#### 10.3. Possibility of hazardous reactions
No hazardous reaction when handled and stored according to provisions.

#### 10.4. Conditions to avoid
Heat.

#### 10.5. Incompatible materials
No information available.

#### 10.6. Hazardous decomposition products
No information available.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

**Acute toxicity**
Based on available data, the classification criteria are not met.
### Chemical name

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%)</td>
</tr>
<tr>
<td></td>
<td>hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)</td>
</tr>
<tr>
<td></td>
<td>64742-94-5 solvent naphtha (petroleum), heavy aromatic</td>
</tr>
<tr>
<td></td>
<td>102-54-5 ferrocene</td>
</tr>
<tr>
<td></td>
<td>91-20-3 naphthalene</td>
</tr>
</tbody>
</table>

### Exposure route

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>oral</td>
<td>LD50 mg/kg</td>
<td>&gt; 4150</td>
<td>Rat</td>
<td>ECHA Dossier</td>
</tr>
<tr>
<td></td>
<td>dermal</td>
<td>LD50 mg/kg</td>
<td>&gt; 2000,0</td>
<td>Rabbit</td>
<td>ECHA Dossier</td>
</tr>
<tr>
<td></td>
<td>inhalative (4 h) aerosol</td>
<td>LC50 mg/l</td>
<td>&gt; 5,28</td>
<td>Rat</td>
<td>ECHA Dossier</td>
</tr>
<tr>
<td></td>
<td>oral</td>
<td>LD50 mg/kg</td>
<td>&gt; 15000</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dermal</td>
<td>LD50 mg/kg</td>
<td>&gt; 3400</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>oral</td>
<td>LD50 mg/kg</td>
<td>&gt; 5000</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>oral</td>
<td>LD50 mg/kg</td>
<td>1320</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dermal</td>
<td>LD50 mg/kg</td>
<td>&gt; 3000</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>inhalative vapour</td>
<td>ATE</td>
<td>11 mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>inhalative aerosol</td>
<td>ATE</td>
<td>1,5 mg/l</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>oral</td>
<td>LD50 mg/kg</td>
<td>490</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>dermal</td>
<td>LD50 mg/kg</td>
<td>&gt; 2500</td>
<td>Rat</td>
<td></td>
</tr>
<tr>
<td></td>
<td>inhalative (4 h) aerosol</td>
<td>LC50 mg/l</td>
<td>&gt; 110</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Irritation and corrosivity
- Causes skin irritation.
- Causes serious eye damage.

### Sensitising effects
- Based on available data, the classification criteria are not met.

### Carcinogenic/mutagenic/toxic effects for reproduction
- May damage fertility or the unborn child. (ferrocene)
- Germ cell mutagenicity: Based on available data, the classification criteria are not met.
- Carcinogenicity: Based on available data, the classification criteria are not met.

### STOT-single exposure
- May cause drowsiness or dizziness. (solvent naphtha (petroleum), heavy aromatic)

### STOT-repeated exposure
- Based on available data, the classification criteria are not met.

### Aspiration hazard
- May be fatal if swallowed and enters airways. (hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%); hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%); solvent naphtha (petroleum), heavy aromatic; distillates (petroleum), hydrotreated light)

### Practical experience

### Other observations
- Keeping to the general worker's protection rules and the industrial hygienics, there is no risk in handling this product through the personnel.
SECTION 12: Ecological information

12.1. Toxicity
There are no data available on the mixture itself.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Aquatic toxicity</th>
<th>Dose [h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>102-54-5</td>
<td>ferrocene</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>24,5</td>
<td>96</td>
<td>24,5 mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>2,4 - 3,8</td>
<td>72</td>
<td>2,4 - 3,8 mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>1,5 - 2,6</td>
<td>48</td>
<td>1,5 - 2,6 mg/l</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Crustacea toxicity</td>
<td>NOEC</td>
<td>&lt;0,002</td>
<td>21</td>
<td>&lt;0,002 mg/l</td>
<td></td>
</tr>
</tbody>
</table>

| 91-20-3 | naphthalene | Acute fish toxicity | LC50 | 0,51 | 96 | 0,51 mg/l |
| | | Acute crustacea toxicity | EC50 | 2,19 | 48 | 2,19 mg/l |

12.2. Persistence and degradability
There are no data available on the mixture itself.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Method</th>
<th>Value</th>
<th>d</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Evaluation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30%)</td>
<td>OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D</td>
<td>60,7%</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ECHA Dossier</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Readily biodegradable (according to OECD criteria)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)</td>
<td>Biodegradation</td>
<td>74,7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Readily biodegradable (according to OECD criteria)</td>
</tr>
</tbody>
</table>

12.3. Bioaccumulative potential
There are no data available on the mixture itself.

Partition coefficient n-octanol/water

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>64742-94-5</td>
<td>solvent naphtha (petroleum), heavy aromatic</td>
<td>&gt; 3,50</td>
</tr>
<tr>
<td>102-54-5</td>
<td>ferrocene</td>
<td>3,10</td>
</tr>
<tr>
<td>91-20-3</td>
<td>naphthalene</td>
<td>3,28</td>
</tr>
</tbody>
</table>

12.4. Mobility in soil
No data available

12.5. Results of PBT and vPvB assessment
No data available

12.6. Other adverse effects
No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods
Advice on disposal
Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to EC directives 75/442/EEC and 91/689/EEC in the corresponding versions,
covering waste and dangerous waste.

**Waste disposal number of waste from residues/unused products**

130899 OIL WASTES AND WASTES OF LIQUID FUELS (EXCEPT EDIBLE OILS, AND THOSE IN CHAPTERS 05, 12 AND 19); oil wastes not otherwise specified; wastes not otherwise specified; hazardous waste

**Contaminated packaging**

Non-contaminated packages may be recycled. Consult the appropriate local waste disposal expert about waste disposal.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

14.1. **UN number:** UN 3082

14.2. **UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (solvent naphtha (petroleum), heavy aromatic; naphthalene)

14.3. **Transport hazard class(es):** 9

14.4. **Packing group:** III

Hazard label: 9

Classification code: M6

Special Provisions: 274 335 375 601

Limited quantity: 5 L

Excepted quantity: E1

Transport category: 3

Hazard No: 90

Tunnel restriction code: -

**Marine transport (IMDG)**

14.1. **UN number:** UN 3082

14.2. **UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (solvent naphtha (petroleum), heavy aromatic; naphthalene)

14.3. **Transport hazard class(es):** 9

14.4. **Packing group:** III

Hazard label: 9

Marine pollutant: YES

Special Provisions: 274, 335, 969

Limited quantity: 5 L

Excepted quantity: E1

EmS: F-A, S-F

**Air transport (ICAO-TI/IATA-DGR)**

14.1. **UN number:** UN 3082

14.2. **UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (solvent naphtha (petroleum), heavy aromatic; naphthalene)

14.3. **Transport hazard class(es):** 9

14.4. **Packing group:** III

Hazard label: 9
Special Provisions: A97 A158 A197
Limited quantity Passenger: 30 kg G
Passenger LQ: Y964
Excepted quantity: E1
IATA-packing instructions - Passenger: 964
IATA-max. quantity - Passenger: 450 L
IATA-packing instructions - Cargo: 964
IATA-max. quantity - Cargo: 450 L

**14.5. Environmental hazards**

<table>
<thead>
<tr>
<th>ENVIRONMENTALLY HAZARDOUS:</th>
<th>yes</th>
</tr>
</thead>
</table>

Danger releasing substance: solvent naphtha (petroleum), heavy aromatic

**14.6. Special precautions for user**

No data available

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

No data available

### SECTION 15: Regulatory information

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

<table>
<thead>
<tr>
<th>EU regulatory information</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010/75/EU (VOC): not determined</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>National regulatory information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water contaminating class (D): 2 - clearly water contaminating</td>
</tr>
</tbody>
</table>

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

**Changes**

This data sheet contains changes from the previous version in section(s): 1,2,3,7,8,9,13,14,15.

**Abbreviations and acronyms**

- ADR: Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- RID: Règlement concernant le transport international ferroviaire des marchandises dangereuses (Regulations concerning the International Carriage of Dangerous Goods by Rail)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- ICAO: International Civil Aviation Organization
- CAS: Chemical Abstracts Service (a division of the American Chemical Society)
- DNEL/DMEL: Derived No-Effect Level / Derived Minimal Effect Level
- PNEC: Predicted No Effect Concentration
- WEL (UK): Workplace Exposure Limits
- TWA (EC): Time-Weighted Average
- STEL (EC): Short Term Exposure Limit
- ATE: Acute Toxicity Estimate
- LD50: Lethal Dose, 50% (median lethal dose)
- LC50: Lethal Concentration, 50% (median lethal concentration)
- EC50: half maximal Effective Concentration
- ErC50: EC50 in terms of reduction of growth rate
- VwVwS: Verwaltungsvorschrift wassergefährdende Stoffe
Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

<table>
<thead>
<tr>
<th>Classification</th>
<th>Classification procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asp. Tox. 1; H304</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Skin Irrit. 2; H315</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Eye Dam. 1; H318</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Repr. 1B; H360</td>
<td>Calculation method</td>
</tr>
<tr>
<td>STOT SE 3; H336</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Aquatic Chronic 2; H411</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

Relevant H and EUH statements (number and full text)

- H226 Flammable liquid and vapour.
- H228 Flammable solid.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H332 Harmful if inhaled.
- H336 May cause drowsiness or dizziness.
- H351 Suspected of causing cancer.
- H360 May damage fertility or the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.
- EUH066 Repeated exposure may cause skin dryness or cracking.

Further Information


The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)