BIZOL Gasoline System Clean+ g80

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

1.1. Product identifier

BIZOL Gasoline System Clean+ g80

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
Telefax: +49 (30) 804 869-2860
e-mail: support@bizol.de
Internet: www.bizol.com

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

1.4. Emergency telephone number:

Germany: +49 (30) 804 869-0 (08.00-17.00, Mo-Fr)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:
Aspiration hazard: Asp. Tox. 1
Hazardous to the aquatic environment: Aquatic Chronic 3

Hazard Statements:
May be fatal if swallowed and enters airways.
Harmful to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling
hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, <2% aromatics
hydrocarbons, C10, aromatics, >1% naphthalene
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics

Signal word: Danger

Pictograms:

Hazard statements
H304 May be fatal if swallowed and enters airways.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements
P102 Keep out of reach of children.
P101 If medical advice is needed, have product container or label at hand.
P301 P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P331 Do NOT induce vomiting.
P405 Store locked up.
P501 Dispose of waste according to applicable legislation.

Special labelling of certain mixtures
EUH066 Repeated exposure may cause skin dryness or cracking.

2.3. Other hazards

Results of PBT and vPvB assessment: not applicable.
SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Quantity</th>
<th>EC No</th>
<th>Index No</th>
<th>REACH No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</td>
<td>80 - &lt; 100 %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>918-481-9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Asp. Tox. 1; H304 EUH066</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>64742-94-5</td>
<td>hydrocarbons, C10, aromatics, &gt;1% naphthalene</td>
<td>1 - &lt; 2.5 %</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>919-284-0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carc. 2, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H351 H336 H304 H411</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>91-20-3</td>
<td>naphthalene</td>
<td>0,1 - &lt; 0,25 %</td>
<td></td>
<td>601-052-00-2</td>
<td>01-2119561346-37</td>
</tr>
<tr>
<td>202-049-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carc. 2, Acute Tox. 4, Aquatic Acute 1 (M-Factor = 1), Aquatic Chronic 1; H351 H302 H400 H410</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
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>ppm</th>
<th>mg/m³</th>
<th>fibres/ml</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>91-20-3</td>
<td>Naphthalene</td>
<td>10</td>
<td>50</td>
<td>-</td>
<td>TWA (8 h)</td>
<td>EU</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>STEL (15 min)</td>
<td>EU</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: Butyl caoutchouc (butyl 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>Physical state</th>
<th>liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>light yellow</td>
</tr>
<tr>
<td>Odour</td>
<td>characteristic</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH-Value:</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Changes in the physical state</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point:</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
</tr>
<tr>
<td>Pour point:</td>
</tr>
<tr>
<td>Flash point:</td>
</tr>
<tr>
<td>Lower explosion limits:</td>
</tr>
<tr>
<td>Upper explosion limits:</td>
</tr>
<tr>
<td>Ignition temperature:</td>
</tr>
<tr>
<td>Decomposition temperature:</td>
</tr>
<tr>
<td>Vapour pressure:</td>
</tr>
<tr>
<td>Density (at 20 °C):</td>
</tr>
<tr>
<td>Water solubility:</td>
</tr>
<tr>
<td>Partition coefficient:</td>
</tr>
<tr>
<td>Viscosity / dynamic:</td>
</tr>
<tr>
<td>Viscosity / kinematic:</td>
</tr>
<tr>
<td>(at 40 °C)</td>
</tr>
<tr>
<td>Flow time:</td>
</tr>
<tr>
<td>Vapour density:</td>
</tr>
<tr>
<td>Evaporation rate:</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Chemical name</th>
<th>Exposure route</th>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</td>
<td>oral</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt;5000 mg/kg</td>
<td>Rabbit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative (4 h) vapour</td>
<td>LC50</td>
<td>&gt;4951 mg/l</td>
<td>Rat</td>
</tr>
<tr>
<td>91-20-3</td>
<td>naphthalene</td>
<td>oral</td>
<td>LD50</td>
<td>490 mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>dermal</td>
<td>LD50</td>
<td>&gt; 2500 mg/kg</td>
<td>Rat</td>
</tr>
<tr>
<td></td>
<td></td>
<td>inhalative (4 h) aerosol</td>
<td>LC50</td>
<td>&gt; 110 mg/l</td>
<td></td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Based on available data, the classification criteria are not met.

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

Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.

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

STOT-repeated exposure
Repeated exposure may cause skin dryness or cracking.

Aspiration hazard
May be fatal if swallowed and enters airways.

Practical experience
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>Dose</th>
<th>[h]</th>
<th>[d]</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>&gt;1000 mg/l</td>
<td>96</td>
<td>Oncorhynchus mykiss (Rainbow trout)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute algae toxicity</td>
<td>ErC50</td>
<td>&gt;1000 mg/l</td>
<td>72</td>
<td>Pseudokirchneriella subcapitata</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>&gt;1000 mg/l</td>
<td>48</td>
<td>Daphnia magna (Big water flea)</td>
</tr>
<tr>
<td>91-20-3</td>
<td>naphthalene</td>
<td>Acute fish toxicity</td>
<td>LC50</td>
<td>0.51 mg/l</td>
<td>96</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acute crustacea toxicity</td>
<td>EC50</td>
<td>2.19 mg/l</td>
<td>48</td>
<td>Daphnia magna (Big water flea)</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
There are no data available on the mixture itself.
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>91-20-3</td>
<td>naphthalene</td>
<td>3,3</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

<table>
<thead>
<tr>
<th>Waste disposal number of waste from residues/unused products</th>
</tr>
</thead>
<tbody>
<tr>
<td>070704 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fine chemicals and chemical products not otherwise specified; other organic solvents, washing liquids and mother liquors</td>
</tr>
</tbody>
</table>

Classified as 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: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.
Marine pollutant: NO

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number: No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name: No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es): No dangerous good in sense of this transport regulation.
14.4. Packing group: No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

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

**EU regulatory information**
- 2010/75/EU (VOC): 96% (764.1 g/l)

**National regulatory information**
- Water contaminating class (D): 2 - water contaminating

15.2. Chemical safety assessment

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

SECTION 16: Other information

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
- VvVwVwS: Verwaltungsvorschrift wassergefährdende Stoffe

Relevant H and EUH statements (number and full text)
- H302: Harmful if swallowed.
- H304: May be fatal if swallowed and enters airways.
- H336: May cause drowsiness or dizziness.
- H351: Suspected of causing cancer.
- 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.)*