Safety data sheet
according to Regulation (EC) No 1907/2006, Annex II

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

1.1 Product identifier

VMA 055
Distillates (petroleum), hydrotreated heavy paraffinic
Registration number (ECHA): --
Index: 649-467-00-8
EINECS, ELINCS, NLP: 265-157-1
CAS: 64742-54-7

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

Relevant identified uses of the substance or mixture:
Lubricant

Uses advised against:
No information available at present.

1.3 Details of the supplier of the safety data sheet

Busch Produktions GmbH
Schauinslandstraße 1
79689 Maulburg
Tel.: +49 (0)7622 681-0

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

1.4 Emergency telephone number

Emergency information services / official advisory body:

National Poisons Information Centre, Beaumont Hospital, Dublin 9, Ireland, Tel.: +353 (0)1 809 2166 (Public Poisons Info Line, 8am-10pm, 7 days a week)
+353 (0)1 809 2566 (Info for Healthcare Professionals ONLY, 24 h, 7 days a week)

Telephone number of the company in case of emergencies:
+49 (0) 700 / 24 112 112 (BPC)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) 1272/2008 (CLP)
Not applicable

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)
Not applicable

2.3 Other hazards

No vPvB substance
No PBT substance
SECTION 3: Composition/information on ingredients

3.1 Substance

| Distillates (petroleum), hydrotreated heavy paraffinic | --- |
| Registration number (REACH) | --- |
| Index | 649-467-00-8 |
| EINECS, ELINCS, NLP | 265-157-1 |
| CAS | 64742-54-7 |
| content % | 
| Classification according to Regulation (EC) 1272/2008 (CLP) | --- |

3.2 Mixture

n.a.

For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
The substances named in this section are given with their actual, appropriate classification!
For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all
notes that may be given here for the named classification have been taken into account.

SECTION 4: First aid measures

4.1 Description of first aid measures
First-aiders should ensure they are protected!
Never pour anything into the mouth of an unconscious person!

Inhalation
Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.

Skin contact
Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.

Eye contact
Remove contact lenses.
Wash thoroughly for several minutes using copious water. Seek medical help if necessary.

Ingestion
Rinse the mouth thoroughly with water.
Do not induce vomiting. Consult doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed
If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.
Drying of the skin.
Dermatitis (skin inflammation)

4.3 Indication of any immediate medical attention and special treatment needed
n.c.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
Water jet spray/foam/CO2/dry extinguisher

Unsuitable extinguishing media
High volume water jet

5.2 Special hazards arising from the substance or mixture
In case of fire the following can develop:
Oxides of carbon
Toxic gases
5.3 Advice for firefighters
In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary.
Cool container at risk with water.
Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid formation of oil mist.
Remove possible causes of ignition - do not smoke.
Ensure sufficient supply of air.
Avoid contact with eyes or skin.
If applicable, caution - risk of slipping.

6.2 Environmental precautions
If leakage occurs, dam up.
Resolve leaks if this possible without risk.
Prevent surface and ground-water infiltration, as well as ground penetration.
Prevent from entering drainage system.
If accidental entry into drainage system occurs, inform responsible authorities.

6.3 Methods and material for containment and cleaning up
Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth) and dispose of according to Section 13.
Fill the absorbed material into lockable containers.

6.4 Reference to other sections
For personal protective equipment see Section 8 and for disposal instructions see Section 13.

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

7.1 Precautions for safe handling
7.1.1 General recommendations
Ensure good ventilation.
Avoid contact with eyes.
Avoid long lasting or intensive contact with skin.
Do not carry cleaning cloths soaked in product in trouser pockets.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Observe directions on label and instructions for use.

7.1.2 Notes on general hygiene measures at the workplace
General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

7.2 Conditions for safe storage, including any incompatibilities
Store product closed and only in original packing.
Not to be stored in gangways or stair wells.
Protect from direct sunlight and warming.
Store in a well-ventilated place.
Store in a dry place.

7.3 Specific end use(s)
No information available at present.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Chemical Name: Oil mist, mineral

<table>
<thead>
<tr>
<th>Content %</th>
<th>WEL-TWA: 5 mg/m³ (Mineral oil, excluding metal working fluids, ACGIH)</th>
<th>WEL-TEL: ---</th>
<th>---</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring procedures:</td>
<td>Draeger - Oil Mist 1/a (67 33 031)</td>
<td>BMGV: ---</td>
<td>Other information: ---</td>
</tr>
</tbody>
</table>

**Chemical Name**

<table>
<thead>
<tr>
<th>Content %</th>
<th>OELV-8h: 5 mg/m³ (Mineral oil, pure, highly &amp; severely refined (inhalable))</th>
<th>OELV-15min: ---</th>
<th>---</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring procedures:</td>
<td>Draeger - Oil Mist 1/a (67 33 031)</td>
<td>BLV: ---</td>
<td>Other information: ---</td>
</tr>
</tbody>
</table>

Distillates (petroleum), hydrotreated heavy paraffinic

<table>
<thead>
<tr>
<th>Area of application</th>
<th>Environment - oral (animal feed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exposition route / Environmental compartment</td>
<td>Effect on health</td>
</tr>
<tr>
<td>Descripto r</td>
<td>Value</td>
</tr>
<tr>
<td>Note</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction. If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn. Applies only if maximum permissible exposure values are listed here. Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques. These are specified by e.g. BS EN 14042. BS EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable. Wash hands before breaks and at end of work. Keep away from food, drink and animal feedingstuffs. Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:
- Chemical resistant protective gloves (EN 374).
- If applicable
- Protective nitrile gloves (EN 374).
- Protective gloves made of polyvinyl alcohol (EN 374)
- Protective Viton® / fluoroelastomer gloves (EN 374)

Minimum layer thickness in mm:
0,5

Permeation time (penetration time) in minutes:
>= 240

The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.
The recommended maximum wearing time is 50% of breakthrough time.
Protective hand cream recommended.

Skin protection - Other:
- Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:
- Normally not necessary.
- With oil mist formation:
  - Filter A P2 (EN 14387), code colour brown, white
  - Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:
- Not applicable

Additional information on hand protection - No tests have been performed.
In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

### 8.2.3 Environmental exposure controls
No information available at present.

### 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 yellow, Clear</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH-value</td>
<td>Not determined</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>&lt;=-10 °C (Pourpoint)</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>112 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>213 °C (ASTM D 93 (Pensky-Martens, closed cup))</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>n.a.</td>
</tr>
<tr>
<td>Lower explosive limit</td>
<td>Not determined</td>
</tr>
<tr>
<td>Upper explosive limit</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>&lt;0,01 hPa (25°C)</td>
</tr>
<tr>
<td>Vapour density (air = 1)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Density</td>
<td>0,87 g/ml (25°C, relative density )</td>
</tr>
<tr>
<td>Bulk density</td>
<td>n.a.</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Not determined</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Insoluble</td>
</tr>
</tbody>
</table>
Partition coefficient (n-octanol/water): Not determined
Auto-ignition temperature: Not determined
Decomposition temperature: Not determined
Viscosity: 55 mm²/s (40°C)
Viscosity: 8.1 mm²/s (100°C)
Explosive properties: Product is not explosive.
Oxidising properties: No

9.2 Other information
Miscibility: Not determined
Fat solubility / solvent: Not determined
Conductivity: Not determined
Surface tension: Not determined
Solvents content: Not determined

SECTION 10: Stability and reactivity

10.1 Reactivity
The product has not been tested.

10.2 Chemical stability
Stable with proper storage and handling.

10.3 Possibility of hazardous reactions
No dangerous reactions are known.

10.4 Conditions to avoid
None known

10.5 Incompatible materials
Avoid contact with strong oxidizing agents.

10.6 Hazardous decomposition products
No decomposition when used as directed.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Possibly more information on health effects, see Section 2.1 (classification).

<table>
<thead>
<tr>
<th>Distillates (petroleum), hydrotreated heavy paraffinic</th>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity, by oral route:</td>
<td>LD50</td>
<td>&gt;5000</td>
<td>mg/kg</td>
<td>Rat</td>
<td>OECD 401 (Acute Oral Toxicity)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute toxicity, by dermal route:</td>
<td>LD50</td>
<td>&gt;5000</td>
<td>mg/kg</td>
<td>Rabbit</td>
<td>OECD 402 (Acute Dermal Toxicity)</td>
<td>Analogous conclusion</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity, by inhalation:</td>
<td>LC50</td>
<td>&gt;5,53</td>
<td>mg/l/4h</td>
<td>Rat</td>
<td>OECD 403 (Acute Inhalation Toxicity)</td>
<td>Aerosol</td>
<td></td>
</tr>
<tr>
<td>Skin corrosion/irritation:</td>
<td></td>
<td></td>
<td></td>
<td>Rabbit</td>
<td>OECD 404 (Acute Dermal Irritation/Corrosion)</td>
<td>Not irritant, Analogous conclusion</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/irritation:</td>
<td></td>
<td></td>
<td></td>
<td>Rabbit</td>
<td>OECD 405 (Acute Eye Irritation/Corrosion)</td>
<td>Not irritant, Analogous conclusion</td>
<td></td>
</tr>
<tr>
<td>Respiratory or skin sensitisation:</td>
<td></td>
<td></td>
<td></td>
<td>Guinea pig</td>
<td>OECD 406 (Skin Sensitisation)</td>
<td>No (skin contact), Analogous conclusion</td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity:</td>
<td></td>
<td></td>
<td></td>
<td>Salmonella typhimurium</td>
<td>OECD 471 (Bacterial Reverse Mutation Test)</td>
<td>Negative, Analogous conclusion</td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity:</td>
<td></td>
<td></td>
<td></td>
<td>Mammalian</td>
<td>OECD 473 (In Vitro Mammalian Chromosome Aberration Test)</td>
<td>Negative, Analogous conclusion</td>
<td></td>
</tr>
</tbody>
</table>

Page 6 of 10
### Germ cell mutagenicity:

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Species</th>
<th>Test Method</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouse</td>
<td>OECD 476 (In Vitro Mammalian Cell Gene Mutation Test)</td>
<td>Negative, Analogous conclusion</td>
<td></td>
</tr>
</tbody>
</table>

### Carcinogenicity:

- Negative

### Reproductive toxicity:

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Species</th>
<th>Test Method</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOAEL  &gt;=1000 mg/kg bw/d</td>
<td>Rat</td>
<td>OECD 421 (Reproductive/Developmental Toxicity Screening Test)</td>
<td>Negative, Analogous conclusion</td>
</tr>
</tbody>
</table>

### Reproductive toxicity (Developmental toxicity):

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Species</th>
<th>Test Method</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOAEL  30 mg/kg</td>
<td>Rat</td>
<td>OECD 414 (Prenatal Developmental Toxicity Study)</td>
<td>Negative, Analogous conclusion</td>
</tr>
</tbody>
</table>

### Specific target organ toxicity - single exposure (STOT-SE):

n.d.a.

### Specific target organ toxicity - repeated exposure (STOT-RE):

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Species</th>
<th>Test Method</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOAEL  30 mg/kg</td>
<td>Rat</td>
<td>OECD 411 (Subchronic Dermal Toxicity - 90-day Study)</td>
<td>Analogous conclusion</td>
</tr>
<tr>
<td>NOAEL  220 mg/m3</td>
<td>Rat</td>
<td>OECD 412 (Subacute Inhalation Toxicity - 28-Day Study)</td>
<td>Analogous conclusion</td>
</tr>
</tbody>
</table>

### Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.:

n.d.a.

### Aspiration hazard:

n.d.a.

### Symptoms:

n.d.a.

### Section 12: Ecological information

#### Distillates (petroleum), hydrotreated heavy paraffinic

<table>
<thead>
<tr>
<th>Toxicity / effect</th>
<th>Endpoint</th>
<th>Time</th>
<th>Value</th>
<th>Unit</th>
<th>Organism</th>
<th>Test method</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1. Toxicity to fish:</td>
<td>NOEC/NOEL</td>
<td>14d</td>
<td>&gt;=1000</td>
<td>mg/l</td>
<td>Oncorhynchus mykiss</td>
<td>QSAR</td>
<td></td>
</tr>
<tr>
<td>12.1. Toxicity to fish:</td>
<td>LL50</td>
<td>96h</td>
<td>&gt;100</td>
<td>mg/l</td>
<td>Pimephales promelas</td>
<td>OECD 203 (Fish, Acute Toxicity Test)</td>
<td>Analogous conclusion</td>
</tr>
<tr>
<td>12.1. Toxicity to daphnia:</td>
<td>NOEC/NOEL</td>
<td>21d</td>
<td>10</td>
<td>mg/l</td>
<td>Daphnia magna</td>
<td>OECD 211 (Daphnia magna Reproduction Test)</td>
<td>Analogous conclusion</td>
</tr>
<tr>
<td>12.1. Toxicity to daphnia:</td>
<td>EC50</td>
<td>48h</td>
<td>&gt;1000</td>
<td>mg/l</td>
<td>Daphnia magna</td>
<td>OECD 202 (Daphnia sp. Acute Immobilisation Test)</td>
<td>Analogous conclusion</td>
</tr>
<tr>
<td>12.1. Toxicity to algae:</td>
<td>NOEC/NOEL</td>
<td>72h</td>
<td>&gt;=100</td>
<td>mg/l</td>
<td>Pseudokirchneriella subcapitata</td>
<td>OECD 201 (Alga, Growth Inhibition Test)</td>
<td>Analogous conclusion</td>
</tr>
<tr>
<td>12.2. Persistence and degradability:</td>
<td>28d</td>
<td>31</td>
<td>%</td>
<td>OECD 301 F (Ready Biodegradability - Manometric Respirometry Test)</td>
<td>Not readily biodegradable, Analogous conclusion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12.5. Results of PBT and vPvB assessment: No PBT substance, No vPvB substance
12.6. Other adverse effects: n.d.a.
Water solubility: Insoluble

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of.

For the substance / mixture / residual amounts

EC disposal code no.: The waste codes are recommendations based on the scheduled use of this product. Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)
13 02 05 mineral-based non-chlorinated engine, gear and lubricating oils
Recommendation: Sewage disposal shall be discouraged. Pay attention to local and national official regulations. E.g. suitable incineration plant. E.g. dispose at suitable refuse site.

For contaminated packing material
Pay attention to local and national official regulations. Uncontaminated packaging can be recycled. Dispose of packaging that cannot be cleaned in the same manner as the substance.

SECTION 14: Transport information

General statements
14.1. UN number: n.a.

Transport by road by rail (ADR/RID)
14.2. UN proper shipping name: n.a.
14.3. Transport hazard class(es): n.a.
14.4. Packing group: n.a.
Classification code: n.a.
LQ: n.a.
14.5. Environmental hazards: Not applicable
Tunnel restriction code:

Transport by sea (IMDG-code)
14.2. UN proper shipping name: n.a.
14.3. Transport hazard class(es): n.a.
14.4. Packing group: n.a.
Marine Pollutant: n.a
14.5. Environmental hazards: Not applicable

Transport by air (IATA)
14.2. UN proper shipping name: n.a.
14.3. Transport hazard class(es): n.a.
14.4. Packing group: n.a.
14.5. Environmental hazards: Not applicable

14.6. Special precautions for user
Unless specified otherwise, general measures for safe transport must be followed.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Non-dangerous material according to Transport Regulations.
SECTION 15: Regulatory information

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

Observe restrictions:
General hygiene measures for the handling of chemicals are applicable.

Directive 2010/75/EU (VOC): 0 %

15.2 Chemical safety assessment

No chemical safety assessment was carried out.

SECTION 16: Other information

Revised sections: 8, 11, 12, 15

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).

Any abbreviations and acronyms used in this document:

acc., acc. to according, according to
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route ( = European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOX Adsorbable organic halogen compounds
approx. approximately
Art., Art. no. Article number
ASTM ASTM International (American Society for Testing and Materials)
BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
BauA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin ( = Federal Institute for Occupational Health and Safety, Germany)
BSEF The International Bromine Council
bw body weight
CAS Chemical Abstracts Service
CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMR carcinogenic, mutagenic, reproductive toxic
DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level
dw dry weight
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
EC European Community
ECHA European Chemicals Agency
EEC European Economic Community
EINECS European Inventory of Existing Commercial Chemical Substances
ELINCS European List of Notified Chemical Substances
EN European Norms
EPA United States Environmental Protection Agency (United States of America)
etc. et cetera
EU European Union
EVAL Ethylene-vinyl alcohol copolymer
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC (Code) International Bulk Chemical (Code)
IMDG-code International Maritime Code for Dangerous Goods