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

VM 022

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

Relevant identified uses of the substance or mixture:
Hydraulic oil

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)
The mixture is not classified as dangerous in the terms of the Regulation (EC) 1272/2008 (CLP).

2.2 Label elements

Labeling according to Regulation (EC) 1272/2008 (CLP)

EUH210-Safety data sheet available on request.

2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
SECTION 3: Composition/information on ingredients

3.1 Substance
n.a.

3.2 Mixture
Distillates (petroleum), solvent-dewaxed light paraffinic

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration number (REACH)</td>
<td>01-2119480132-48-XXXX</td>
</tr>
<tr>
<td>Index</td>
<td>649-469-00-9</td>
</tr>
<tr>
<td>EINECS, ELINCS, NLP</td>
<td>265-159-2</td>
</tr>
<tr>
<td>CAS</td>
<td>64742-56-9</td>
</tr>
<tr>
<td>content %</td>
<td>25-50</td>
</tr>
</tbody>
</table>

Classification according to Regulation (EC) 1272/2008 (CLP)  
Asp. Tox. 1, H304

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
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.

- eyes, reddened
- Watering eyes
- reddening of the skin
- Drying of the skin.
- Dermatitis (skin inflammation)
- With oil mist formation:
  - Irritation of the respiratory tract
- Ingestion of large quantities:
  - Nausea
  - diarrhoea

4.3 Indication of any immediate medical attention and special treatment needed
Symptomatic treatment.
In case of skin injury by high pressure, a risk of penetration of lubricant into the skin exists.  
Immediate admittance to a hospital.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media
5.2 Special hazards arising from the substance or mixture
In case of fire the following can develop:
- Oxides of carbon
- Toxic gases
- Danger of bursting (explosion) when heated

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
Do not take any measures that are associated with personal risk or have not been sufficiently trained.
Keep unprotected persons away.
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 from entering drainage system.
Prevent surface and ground-water infiltration, as well as ground penetration.
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 formation of oil mist.
Avoid contact with eyes or skin.
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
Not to be stored in gangways or stair wells.
Store product closed and only in original packing.
Do not store with oxidizing agents.
Protect from direct sunlight and warming.
Store in a well-ventilated place.
Store in a dry place.
Store cool.

### 7.3 Specific end use(s)

No information available at present.

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### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters

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

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

**WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period)**

EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany).


EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.

** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.


(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BLV = Biological limit value | Other information: Carc1A, Carc1B = carcinogenic substance, Cat. 1A or 1B. Muta1A, Muta1B = mutagenic substance, Cat. 1A or 1B. Repr1A, Repr1B = Substances known to be toxic for reproduction, Cat. 1A or 1B. Sk = can be absorbed through skin. Asphx = asphyxiant. Sen = Respiratory sensitizer. BOELV = Binding Occupational Exposure Limit Values. IOELV = Indicative Occupational Exposure Limit Values.

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#### 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".

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#### 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).
Recommended
Protective nitrile gloves (EN 374).
Minimum layer thickness in mm:
>= 0,35
Permeation time (penetration time) in minutes:
>= 480
Protective hand cream recommended.
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.

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>Physical state:</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour:</td>
<td>Amber</td>
</tr>
<tr>
<td>Odour:</td>
<td>Like oil</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>-36 °C (Pourpoint)</td>
</tr>
<tr>
<td>Initial boiling point and boiling range:</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flash point:</td>
<td>&gt;160 °C (Pensky-Martens, closed cup)</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not determined</td>
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<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>Not determined</td>
</tr>
<tr>
<td>Vapour density (air = 1):</td>
<td>Not determined</td>
</tr>
<tr>
<td>Density:</td>
<td>&lt;1000 kg/m3 (15°C)</td>
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<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>
<tr>
<td>Partition coefficient (n-octanol/water):</td>
<td>Not determined</td>
</tr>
</tbody>
</table>
Auto-ignition temperature: Not determined
Decomposition temperature: Not determined
Viscosity: 20.85 mm²/s (40°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
Hazardous reactions will not occur during storage and handling under normal conditions.
Hazardous polymerisation will not occur during storage and handling under normal conditions.

10.4 Conditions to avoid
Heating, open flame, ignition sources

10.5 Incompatible materials
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).

### VM 022

<table>
<thead>
<tr>
<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 dermal route:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n.d.a.</td>
<td></td>
</tr>
<tr>
<td>Acute toxicity, by inhalation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n.d.a.</td>
<td></td>
</tr>
<tr>
<td>Skin corrosion/irritation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n.d.a.</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/irritation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n.d.a.</td>
<td></td>
</tr>
<tr>
<td>Respiratory or skin sensitisation:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n.d.a.</td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n.d.a.</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n.d.a.</td>
<td></td>
</tr>
<tr>
<td>Reproductive toxicity:</td>
<td></td>
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<td></td>
<td></td>
<td>n.d.a.</td>
<td></td>
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<tr>
<td>Aspiration hazard:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n.d.a.</td>
<td></td>
</tr>
<tr>
<td>Symptoms:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n.d.a.</td>
<td></td>
</tr>
</tbody>
</table>

**Distillates (petroleum), solvent-dewaxed light paraffinic**

<table>
<thead>
<tr>
<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>
</tr>
</tbody>
</table>
Acute toxicity, by dermal route:
LD₅₀ >5000 mg/kg Rabbit OECD 402 (Acute Dermal Toxicity)

Acute toxicity, by inhalation:
LC₅₀ >5,53 mg/l Rat OECD 403 (Acute Inhalation Toxicity) Mist

Skin corrosion/irritation:
Rabbit Not irritant

Serious eye damage/irritation:
Rabbit Not irritant

Respiratory or skin sensitisation:
Guinea pig No (skin contact)

Germ cell mutagenicity:
Mammalian OECD 474 (Mammalian Erythrocyte Micronucleus Test) Negative

Germ cell mutagenicity:
OECD 471 (Bacterial Reverse Mutation Test) Negative

Germ cell mutagenicity:
OECD 473 (In Vitro Mammalian Chromosome Aberration Test) Negative

Germ cell mutagenicity:
OECD 476 (In Vitro Mammalian Cell Gene Mutation Test) Negative

Carcinogenicity:
Mouse Female, Negative

Reproductive toxicity:
NOAEL >2000 mg/kg bw/d Rat OECD 414 (Prenatal Developmental Toxicity Study)

Reproductive toxicity:
NOAEL >1000 mg/kg bw/d Rat OECD 421 (Reproduction/Developmental Toxicity Screening Test)

Aspiration hazard:
Yes

Symptoms:
drying of the skin, vomiting, nausea

SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

<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>12.5. Results of PBT and vPvB assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n.d.a.</td>
<td></td>
</tr>
<tr>
<td>12.6. Other adverse effects:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>n.d.a.</td>
<td></td>
</tr>
</tbody>
</table>

Distillates (petroleum), solvent-dewaxed light 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>
</table>
12.1. Toxicity to daphnia: NOEC/NOEL 21d 10 mg/l Daphnia magna OECD 211 (Daphnia magna Reproduction Test)

12.1. Toxicity to fish: LL50 96h >100 mg/l Pimephales promelas OECD 203 (Fish, Acute Toxicity Test)

12.1. Toxicity to daphnia: EL50 48h >10000 mg/l Daphnia magna OECD 202 (Daphnia sp. Acute Immobilisation Test)

12.1. Toxicity to daphnia: LL50 48h >1000 mg/l Gammarus sp. OECD 202 (Daphnia sp. Acute Immobilisation Test)

12.1. Toxicity to algae: NOEC/NOEL 72h >100 mg/l Pseudokirchneriella subcapitata OECD 201 (Alga, Growth Inhibition Test)

12.2. Persistence and degradability: Inherent

12.3. Bioaccumulative potential: Log Pow >3 Low

SECTION 13: Disposal considerations

13.1 Waste treatment methods
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 01 10 mineral based non-chlorinated hydraulic oils
Recommendation:
Sewage disposal shall be discouraged.
Pay attention to local and national official regulations.
E.g. dispose at suitable refuse site.
E.g. suitable incineration plant.
For contaminated packing material
Pay attention to local and national official regulations.
Empty container completely.
Uncontaminated packaging can be recycled.
Dispose of packaging that cannot be cleaned in the same manner as the substance.
15 01 10 packaging containing residues of or contaminated by hazardous substances

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:
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
A chemical safety assessment is not provided for mixtures.

SECTION 16: Other information

Revised sections: 8, 15

Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):
Not applicable

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).

H304 May be fatal if swallowed and enters airways.

Asp. Tox. — Aspiration hazard

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
appr., 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
The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

No responsibility.

These statements were made by:
Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90