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

1.1 **Product identifier**
- **Trade Name:** MATHY®-BE Benzin-Systemreiniger
- **Article No.:** 1270
- **Preparation No.:** n.av.
- **Registration No.:** n.ap.

1.2 **Relevant identified uses of the substance or mixture and uses advised against**
- Identified uses: fuel additive

1.3 **Details of the supplier of the safety data sheet**
1.3.1 **Address of the Company / Supplier:**
MVG® Mathé-Schmierstofftechnik GmbH, Spiekerhof 15, D - 29614 Soltau
Telephone: +49 - 5191-16004, Telefax: +49 - 5191-18155, E-Mail: info@mathy.de

1.3.2 **Responsible for the data sheet:**
CoSiChem AG, Ernst-Lemmer-Straße 23, 35041 Marburg, info@cosichem.de

1.4 **Emergency telephone number**
- Emergency - Telephone of Company / Undertaking
  - Information Centre Specialising in Symptoms of Poisoning
  - Telephone: +49 - 5191-16004 (8:00 – 16:30)
  - Telephone: +44 870 600 6266

**SECTION 2: Hazards identification**

2.1 **Classification of the substance or mixture**
- Flamm. Liq. 2; H225 / Asp. Tox. 1; H304 / Eye Irrit. 2; H319 / STOT SE 3; H336 / Aquatic Chronic 3; H412

2.2 **Label elements**
- Classification according to 1272/2008/EC: Yes.
- Applicable Exemptions: No.
- Signal word(s): Danger
- Component(s): contains Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics

**H - Phrases:**
- H225: Highly flammable liquid and vapour.
- H304: May be fatal if swallowed and enters airways.
- H319: Causes serious eye irritation.
- H336: May cause drowsiness or dizziness.
- H412: Harmful to aquatic life with long lasting effects.

**P - Phrases:**
- P102: Keep out of reach of children.
- P308+P313: IF exposed or concerned: Call a POISON CENTER/doctor.
- P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P243: Take action to prevent static discharges.
- P260: Do not breathe dust/fume/gas/mist/vapours/spray.
- P271: Use only outdoors or in a well-ventilated area.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/doctor.
- P331: Do NOT induce vomiting.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+P313: If eye irritation persists: Get medical advice/attention.
- P501: Dispose of contents/container to special waste collection point.

**Additional Markings:**
- EUH066: Repeated exposure may cause skin dryness or cracking.

**Tactile warning of danger / child resistant fastenings:**
- Other hazards
  - In use, may form flammable/explosive vapour-air mixture.
### Section 3: Composition/Information on Ingredients

#### 3.1 Substances
n.ap.

#### 3.2 Mixtures

**Chemical Characterisation:**
Mixture mineral oil based

**Dangerous Ingredients:**

<table>
<thead>
<tr>
<th>Material</th>
<th>CAS - No.</th>
<th>Index - No.</th>
<th>EC - No.</th>
<th>REACH - No.</th>
<th>m% - range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics</td>
<td>1174921-73-3</td>
<td>n.ap.</td>
<td>927-241-2</td>
<td>n.av.</td>
<td>50 - 100%</td>
</tr>
<tr>
<td>Flame. Liq. 3; H226 / Asp. Tox. 1; H304 / STOT SE 3; H336 / Aquatic Chronic 3, H412</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Propan-2-ol</td>
<td>67-63-0</td>
<td>603-117-00-0</td>
<td>200-661-7</td>
<td>01-2119457558-25-xxxx</td>
<td>10 - 20%</td>
</tr>
<tr>
<td>Flame. Liq. 2; H225 / Eye Irrit. 2, H319 / STOT SE 3; H336</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2)-N-methyl-N-(1-oxo-9-octadeceny1)glycine</td>
<td>110-25-8</td>
<td>n.av.</td>
<td>203-749-3</td>
<td>01-2119488991-20-xxxx</td>
<td>0.1 - 1%</td>
</tr>
<tr>
<td>Skin Irrit. 2, H315 / Eye Dam. 1, H318 / Aquatic Acute 1, H400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol</td>
<td>95-38-5</td>
<td>n.av.</td>
<td>202-414-9</td>
<td>01-2119777867-13-xxxx</td>
<td>0.1 - 1%</td>
</tr>
<tr>
<td>Acute Tox. 4; H302 / Skin Corr. 1, H314 / STOT RE 2; H373 (Intestinaltrakt und Thymus) / Aquatic Acute 1; H400 M=10 / Aquatic Chronic 1; H410 M=1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-Propene, 2-methyl-, homopolymer, hydroformylation products, reaction products with ammonia</td>
<td>337367-30-3</td>
<td>n.av.</td>
<td>n.av.</td>
<td>n.av.</td>
<td>1 - 3%</td>
</tr>
<tr>
<td>Skin Irrit. 2, H315 / Aquatic Chronic 3, H412</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxirane, ethyl-, homopolymer, monoisotridecyl ether</td>
<td>173140-85-7</td>
<td>n.ap.</td>
<td>n.av.</td>
<td>n.av.</td>
<td>1 - 3%</td>
</tr>
<tr>
<td>Skin Irrit. 2, H315</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Text of H - phrases: see section 16

m% - range: \( x \leq m \leq y \)

### Section 4: First Aid Measures

#### 4.1 Description of first aid measures

**Inhalation:**
Move to fresh air in case of accidental inhalation of vapours or decomposition products.
If symptoms persist, call a physician.

**Skin Contact:**
Wash off with soap and water. If symptoms persist, call a physician.

**Eye Contact:**
In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If eye irritation persists, consult a specialist.

**Ingestion:**
Call a physician immediately.
Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting.

#### 4.2 Most important symptoms and effects, both acute and delayed

Risk of product entering the lungs on vomiting after ingestion. Smallest quantities reaching the lungs through swallowing or subsequent vomiting may result in lung oedema or pneumonia. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Vapours may cause drowsiness and dizziness. Causes serious eye irritation.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically. Later control for pneumonia and lung oedema.
SECTION 5: Firefighting measures

5.1 Extinguishing media
5.1.1 Suitable Extinguishing Media:
Use dry chemical, CO₂, water spray or "alcohol" foam.
5.1.2 Extinguishing Media to Avoid:
High volume water jet.
5.2 Special hazards arising from the substance or mixture
In the event of fire the following can be released: Carbon oxides.
5.3 Advice for firefighters
5.3.1 Special Protective Equipment:
Wear positive pressure self-contained breathing apparatus. Wear full protective clothing.
5.3.2 Additional Information:
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. In the event of fire, cool tanks with water spray.

SECTION 6: Accidental release measures

5.1 Personal precautions, protective equipment and emergency procedures
See chapter 8.2.2
Remove all sources of ignition. Contaminated surfaces will be extremely slippery.
Do not breathe vapours or spray mist.
5.2 Environmental precautions
Do not flush into surface water or sanitary sewer system.
Do not allow material to contaminate ground water system.
Local authorities should be advised if significant spillages cannot be contained.
5.3 Methods and material for containment and cleaning up
Soak up with inert absorbent material (e.g. sand, universal binder, sawdust).
Sweep up and shovel into suitable containers for disposal.
5.4 Reference to other sections
None.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
7.1.1 Precautions for Safe Handling:
When using, do not eat, drink or smoke.
Take off all contaminated clothing immediately.
Wash hands before breaks and at the end of workday.
Avoid contact with skin and eyes.
Do not breathe vapours or spray mist.
7.1.2 Precautions in Case of Fire and Explosion:
Keep away from sources of ignition - No smoking.
Take measures to prevent the build up of electrostatic charge.
In use, may form flammable/explosive vapour-air mixture.
7.2 Conditions for safe storage, including any incompatibilities
7.2.1 Storage Instructions:
Keep containers tightly closed in a dry, cool and well-ventilated place.
Provide adequate ventilation.
7.2.2 Store away from:
Incompatible with oxidizing agents.
7.2.3 Further Information on Storage Conditions:
None.
7.3 Specific end use(s)
n.av.
SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Material
Propan-2-ol
2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol
Limit Value
200 ppm | 500 mg/m³
0,05 mg/m³

8.2 Exposure controls

8.2.1 Appropriate engineering controls
Provide appropriate exhaust ventilation at machinery.

8.2.2 Individual protection measures

8.2.2a Respiratory Protection:
In case of insufficient ventilation, wear suitable respiratory equipment.
Recommended filter type: A

8.2.2b Hand Protection:
Protective gloves complying with EN 374.
Nitrile rubber (0,45 mm) break through time > 8 h
The data about break through time/strength of material are standard values!
The exact break through time/strength of material has to be obtained from the producer of the protective glove.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

8.2.2c Eye Protection:
Safety glasses with side-shields conforming to EN166

8.2.2d Skin Protection:
Protective suit

8.2.2e Further Information:
Observe wearing time limits:

8.2.3 Environmental exposure controls:
N.a.v.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

9.1.1 Form: liquid
Colour: yellow
Odour: amine-like
Odour threshold: N.a.v.

9.1.2 pH-value, undiluted:
N.a.p.

9.1.3 pH-value, 1% aqueous solution:
N.a.p.

9.1.4 Boiling point / Boiling - range (°C):
82
Melting point / Melting range (°C):
N.a.v.

9.1.5 Flash point (°C):
< 13, closed cup

9.1.6 Flammability:
N.a.v.

9.1.7 Ignition temperature (°C):
N.a.v.

9.1.8 Auto-flammability:
No.

9.1.9 Oxidising properties:
No.

9.1.10 Explosion hazard:
None.

9.1.11 In use, may form flammable/explosive vapour-air mixture.

9.1.12 Explosion limits (Vol.%) lower:
0,6, upper: 12

9.1.13 Vapour pressure:
N.a.v.

9.1.14 Vapour density (Air = 1):
N.a.v.

9.1.15 Density (g/ml):
0,756

9.1.16 Solubility (in Water):
Immiscible

9.1.17 Partition coefficient, n-Octanol / Water:
N.a.v.

9.1.18 Viscosity:
< 7 mm² / s

9.1.19 Solvent content (m %):
5 – 15

9.1.20 Thermal decomposition (°C):
N.a.v.

9.1.21 Evaporation rate:
N.a.v.

9.2 Other information
N.a.v.
Safety Data Sheet in Accordance with regulation 2015/830

Trade Name: MATHY®-BE Benzin-Systemreiniger
Company / Supplier: MVG® Mathé-Schmierstofftechnik GmbH, Spiekerhof 15, D - 29614 Soltau
Telephone: +49 - 5191-16004, Date of issue: 15.04.2019 Replaces Data Sheet of: 15.02.2018

SECTION 10: Stability and reactivity

10.1 Reactivity
None.

10.2 Chemical stability
Stable under normal conditions.

10.3 Possibility of hazardous reactions
In use, may form flammable/explosive vapour-air mixture.

10.4 Conditions to avoid
Heat, flames and sparks.

10.5 Incompatible materials
Strong oxidizing agents, strong acids, and strong bases.

10.6 Hazardous decomposition products
No decomposition if stored and applied as directed.
To avoid thermal decomposition, do not overheat.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute Health Effects:
Inhalation: n.av.
Ingestion: n.av.
Skin Contact: n.av.
Skin corrosion / irritation: Slight
Serious eye damage / irritation: Causes serious eye irritation.
Respiratory or skin sensitisation: None.
Germ cell mutagenicity: n.av.
Carcinogenicity: n.av.
Reproductive toxicity: n.av.
STOT-single exposure: May cause drowsiness or dizziness.
STOT-repeated exposure: n.av.
Aspiration hazard: May be fatal if swallowed and enters airways.

11.1.1 – Practical Experience
11.1.11 n.av.
11.1.12 Practical Experience
Observations relevant for classification:
EUH066: Repeated exposure may cause skin dryness or cracking.
Further Observations:
None.
Classification of the preparation has been done by calculation in accordance with EEC directives.

SECTION 12: Ecological information

12.1 Toxicity
We have no quantitative data concerning the ecological effects of this product.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol LC₅₀/96h/Brachydano rerio = 0,3 mg / l
LC₅₀/48h/daphnia = 0,163 mg / l
EC₅₀/72h/algae = 0,03 mg / l

12.2 Persistence and degradability
The product is slightly soluble in water. It can be eliminated from water by abiotic processes.

12.3 Bioaccumulative potential
n.av.

12.4 Mobility in soil
n.av.

12.5 Results of PBT and vPvB assessment
This mixture contains no substances which are assessed to be PBT or vPvB.
### 12.6 Other adverse effects

<table>
<thead>
<tr>
<th>12.6.1</th>
<th>COD-Value, mg/g:</th>
<th>n.av.</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.6.2</td>
<td>BOD5-Value, mg/g:</td>
<td>n.av.</td>
</tr>
<tr>
<td>12.6.3</td>
<td>AOX-Remarks:</td>
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<tr>
<td>12.6.4</td>
<td>Significant Components:</td>
<td>Hydrocarbons, 2-(2-Heptadec-8-enyl-2-imidazolin-1-yl)ethanol</td>
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<td>12.6.5</td>
<td>Other adverse effects:</td>
<td>Not applicable.</td>
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</table>

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

<table>
<thead>
<tr>
<th>Recommendation:</th>
<th>D 10 / R1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waste - Code - No.:</td>
<td>07 07 04</td>
</tr>
<tr>
<td>The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.</td>
<td></td>
</tr>
<tr>
<td>In addition comply with the regional authorities.</td>
<td></td>
</tr>
</tbody>
</table>

#### 13.2 Contaminated Packaging

| Recommendation: | Wash with suitable cleaner. Otherwise as described under Residues. |
| Safe Handling: | As described under Residues. |

### SECTION 14: Transport information

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1</td>
<td>UN number</td>
<td>1993</td>
</tr>
<tr>
<td>14.2</td>
<td>UN proper shipping name</td>
<td>Flammable liquid, n.o.s. (Hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, &lt;2% aromatics, Propan-2-ol)</td>
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<tr>
<td>14.3</td>
<td>Transport hazard class(es)</td>
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<tr>
<td>14.4</td>
<td>Packing group</td>
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<td>14.5</td>
<td>Environmental hazards</td>
<td>No.</td>
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<tr>
<td>14.6</td>
<td>Special precautions for user</td>
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<td>Transport category: 2</td>
<td>F-E, S-E</td>
<td>Packing Instructions (Passenger) 353</td>
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<tr>
<td>Classification Code: F1</td>
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<td>Packing Instructions (Cargo) 364</td>
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<tr>
<td>Hazard - No.: 33</td>
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<td></td>
</tr>
<tr>
<td>LQ: 1 L</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.7</td>
<td>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code</td>
<td>n.av.</td>
</tr>
</tbody>
</table>
Safety Data Sheet in Accordance with regulation 2015/830

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Telephone: +49 - 5191-16004, Date of issue: 15.04.2019 Replaces Data Sheet of: 15.02.2018

SECTION 15: Regulatory information
15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
   n.av.
15.2 Chemical safety assessment :
   n.ap.

SECTION 16: Other information
Text of H phrases mentioned in Section 3
EUH066: Repeated exposure may cause skin dryness or cracking.
H225: Highly flammable liquid and vapour.
H226: Flammable liquid and vapour.
H302: Harmful if swallowed.
H304: May be fatal if swallowed and enters airways.
H314: Causes severe skin burns and eye damage.
H315: Causes skin irritation.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H400: Very toxic to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
H412: Harmful to aquatic life with long lasting effects.

This datasheet has been compiled in accordance with EU regulation 2015/830.
The statements in this Material Safety Data Sheet were made to the best of our knowledge and are as accurate as possible. They are given for information only. They do not constitute a contractual guarantee of a product’s properties. They must neither be altered nor transferred to other products.
Prepared by: CoSiChem AG, Ernst-Lemmer-Straße 23, 35041 Marburg, info@cosichem.de, +49 6421 97905 0
Receipt of Data: 07.06.2011, Smvg_0089