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

### 1.1 Product identifier

**arecal-Thermogleit**
**Article number: 0896510400**

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

#### 1.2.1 Relevant uses

Lubricant

#### 1.2.2 Uses advised against

None known.

### 1.3 Details of the supplier of the safety data sheet

**Company**

Kellner & Kunz AG
Boschstr. 37
4600 Wels / AUSTRIA
Phone 0043-7242-484-0
Fax 0043-7242-484-924
Homepage www.reca.co.at
E-mail info@reca.co.at

**Address enquiries to**

**Technical information** info@reca.co.at

**Safety Data Sheet** sdb@chemiebuero.de

### 1.4 Emergency telephone number

**Advisory body** +43 (0) 1 406 43 43 (24h)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]

Aerosol 1: H222 Extremely flammable aerosol. H229 Pressurised container: May burst if heated.
Skin Irrit. 2: H315 Causes skin irritation.
STOT SE 3: H336 May cause drowsiness or dizziness.
Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects.
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways.

### 2.2 Label elements

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

**Hazard pictograms**



**Signal word** DANGER

**Contains:** Hydrocarbons, C6, isoalkanes, <5% n-hexane

**Hazard statements**

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

**Precautionary statements**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C / 122°F.
P261 Avoid breathing vapours / spray.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves.

### 2.3 Other hazards

**Environmental hazards** Does not contain any PBT or vPvB substances.

**Other hazards** No particular hazards known.

## SECTION 3: Composition / Information on ingredients

**Product-type:**

**3.2 The product is a mixture.**

| Range [%] | Substance |
|---|---|
| 1 - <25 | Butane |
| | CAS: 106-97-8, EINECS/ELINCS: 203-448-7, EU-INDEX: 601-004-00-0, Reg-No.: 01-2119474691-32-XXXX |
| | GHS/CLP: Flam. Gas 1: H220 - Press. Gas: H280 |
| 20 - <40 | Hydrocarbons, C6, isoalkanes, <5% n-hexane |
| | EINECS/ELINCS: 931-254-9, EU-INDEX: 649-328-00-1, Reg-No.: 01-2119484651-34-XXXX |
| | GHS/CLP: Flam. Liq. 2: H225 - Asp. Tox. 1: H304 - Skin Irrit. 2: H315 - STOT SE 3: H336 - Aquatic Chronic 2: H411 |
| 1 - <10 | Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics |
| | EINECS/ELINCS: 920-750-0, EU-INDEX: 649-328-00-1, Reg-No.: 01-2119473851-33-XXXX |
| | GHS/CLP: Flam. Liq. 2: H225 - Asp. Tox. 1: H304 - Aquatic Chronic 2: H411 - - STOT SE 3: H336 |
| 1 - <10 | Propane |
| | CAS: 74-98-6, EINECS/ELINCS: 200-827-9, EU-INDEX: 601-003-00-5 |
| | GHS/CLP: Flam. Gas 1: H220 - Press. Gas (Compressed gas): H280 |
| 1 - <10 | iso-Butane |
| | CAS: 75-28-5, EINECS/ELINCS: 200-857-2, EU-INDEX: 601-004-00-0 |
| | GHS/CLP: Flam. Gas 1: H220 - Press. Gas (Compressed gas): H280 |
| 1 - <10 | Pentane |
| | CAS: 109-66-0, EINECS/ELINCS: 203-692-4, EU-INDEX: 601-006-00-1, Reg-No.: 01-2119459286-30-XXXX |
| | GHS/CLP: Flam. Liq. 2: H225 - Asp. Tox. 1: H304 - Aquatic Chronic 2: H411 - STOT SE 3: H336 |
| 1 - <5 | Aluminium |
| | CAS: 7429-90-5, EINECS/ELINCS: 231-072-3, EU-INDEX: 013-002-00-1, Reg-No.: 01-2119529243-45-XXXX |
| | GHS/CLP: Flam. Sol. 1: H228 |
| 0,1 - <1 | Copper |
| | CAS: 7440-50-8, EINECS/ELINCS: 231-159-6, Reg-No.: 01-2119480154-42-XXXX |
| | GHS/CLP: Acute Tox. 4: H302 - Aquatic Acute 1: H400 - Aquatic Chronic 2: H411, M = 10 |

**Comment on component parts** Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**General information** Take off contaminated clothing and wash before reuse.

**Inhalation** Ensure supply of fresh air.
In the event of symptoms seek medical treatment.

**Skin contact** In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

**Eye contact** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

**Ingestion** Seek medical advice immediately.
Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.

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

Irritant effects

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

Treat symptomatically.
Forward this sheet to the doctor.

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media** foam, dry powder, water spray jet, carbon dioxide

**Extinguishing media that must not be used** Full water jet.

### 5.2 Special hazards arising from the substance or mixture

In the event of fire the following can be released:
Carbon monoxide (CO)
Not combusted hydrocarbons.
Bursting aerosols can be forcibly projected from a fire.

### 5.3 Advice for firefighters

Use self-contained breathing apparatus.

Cool containers at risk with water spray jet.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
Ensure adequate ventilation.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically.
Take up residues with absorbent material (e.g. sand, sawdust, general purpose binder, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.

### 6.4 Reference to other sections

See SECTION 8+13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Use only in well-ventilated areas.
Use solvent-resistant equipment.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.
Vapours/spray can form an explosive mixture with air.
Take precautionary measures against static discharges.

Do not eat, drink, smoke or take drugs at work.
Wash hands before breaks and after work.
Use barrier skin cream.
Take off contaminated clothing and wash before reuse.

### 7.2 Conditions for safe storage, including any incompatibilities

Provide solvent-resistant and impermeable floor.
Prevent penetration into the ground.

Do not store together with oxidizing agents.

Keep container in a well-ventilated place.
Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C.
Keep in a cool place, heat causes increase in pressure and risk of bursting.

### 7.3 Specific end use(s)

See product use, SECTION 1.2

## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

**Ingredients with occupational exposure limits to be monitored (GB)**

| Substance |
|---|
| Hydrocarbons, C6, isoalkanes, <5% n-hexane |
| EINECS/ELINCS: 931-254-9, EU-INDEX: 649-328-00-1, Reg-No.: 01-2119484651-34-XXXX |
| Long-term exposure: 1200 mg/m³ |
| Aluminium |
| CAS: 7429-90-5, EINECS/ELINCS: 231-072-3, EU-INDEX: 013-002-00-1, Reg-No.: 01-2119529243-45-XXXX |
| Long-term exposure: 10 mg/m³, inhalable dust (respirable dust: 4 mg/m³) |
| Butane |
| CAS: 106-97-8, EINECS/ELINCS: 203-448-7, EU-INDEX: 601-004-00-0, Reg-No.: 01-2119474691-32-XXXX |
| Long-term exposure: 600 ppm, 1450 mg/m³ |
| Short-term exposure (15-minute): 750 ppm, 1810 mg/m³ |
| Pentane |
| CAS: 109-66-0, EINECS/ELINCS: 203-692-4, EU-INDEX: 601-006-00-1, Reg-No.: 01-2119459286-30-XXXX |
| Long-term exposure: 600 ppm, 1800 mg/m³ |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics |
| EINECS/ELINCS: 920-750-0, EU-INDEX: 649-328-00-1, Reg-No.: 01-2119473851-33-XXXX |
| Long-term exposure: 1200 mg/m³ |
| iso-Butane |
| CAS: 75-28-5, EINECS/ELINCS: 200-857-2, EU-INDEX: 601-004-00-0 |
| Long-term exposure: 600 ppm, 1450 mg/m³, (Butane) |
| Short-term exposure (15-minute): 750 ppm, 1810 mg/m³ |
| Copper |
| CAS: 7440-50-8, EINECS/ELINCS: 231-159-6, Reg-No.: 01-2119480154-42-XXXX |
| Long-term exposure: 1 mg/m³, dusts and mists (as Cu), 0,2mg/m³* (fume) |
| Short-term exposure (15-minute): 2 mg/m³ |

**Ingredients with occupational exposure limits to be monitored (EU)**

| Substance / EC LIMIT VALUES |
|---|
| Pentane |
| CAS: 109-66-0, EINECS/ELINCS: 203-692-4, EU-INDEX: 601-006-00-1, Reg-No.: 01-2119459286-30-XXXX |
| Eight hours: 1000 ppm, 3000 mg/m³ |

**DNEL**

| Substance |
|---|
| Hydrocarbons, C6, isoalkanes, <5% n-hexane |
| Industrial, dermal, Long-term - systemic effects: 13964 mg/kg bw/d. |
| Industrial, inhalative, Long-term - systemic effects: 5306 mg/m³. |
| general population, oral, Long-term - systemic effects: 1301 mg/kg bw/d. |
| general population, dermal, Long-term - systemic effects: 1377 mg/kg bw/d. |
| general population, inhalative, Long-term - systemic effects: 1137 mg/m³. |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| worker, inhalative, Long-term - systemic effects: 2035 mg/m³. |
| worker, dermal, Long-term - systemic effects: 773 mg/kg bw. |
| general population, inhalative, Long-term - systemic effects: 608 mg/m³. |
| general population, oral, Long-term - systemic effects: 699 mg/kg bw. |

| |
|---|
| general population, dermal, Long-term - systemic effects: 699 mg/kg bw. |
| Aluminium, CAS: 7429-90-5 |
| Industrial, inhalative, Long-term - local effects: 3.72 mg/m³. |
| Industrial, inhalative, Long-term - systemic effects: 3.72 mg/m³. |
| general population, oral, Long-term - systemic effects: 3.95 mg/kg bw/day. |
| Copper, CAS: 7440-50-8 |
| Industrial, dermal, Long-term - systemic effects: 137 mg/kg bw/day. |
| Industrial, dermal, Acute - systemic effects: 273 mg/kg bw/day. |
| general population, dermal, Acute - systemic effects: 273 mg/kg bw/day. |
| general population, dermal, Long-term - systemic effects: 137 mg/kg bw/day. |
| general population, oral, Long-term - systemic effects: 41 µg/kg bw/day. |
| Pentane, CAS: 109-66-0 |
| Industrial, inhalative, Long-term - systemic effects: 3 000 mg/m³. |
| Industrial, dermal, Long-term - systemic effects: 432 mg/kg bw/day. |
| general population, dermal, Long-term - systemic effects: 214 mg/kg bw/day. |
| general population, inhalative, Long-term - systemic effects: 643 mg/m³. |
| general population, oral, Long-term - systemic effects: 214 mg/kg bw/day. |

**PNEC**

| Substance |
|---|
| Hydrocarbons, C6, isoalkanes, <5% n-hexane |
| There are no PNEC values established for the substance., |
| Aluminium, CAS: 7429-90-5 |
| sewage treatment plants (STP), 20 mg/L. |
| Copper, CAS: 7440-50-8 |
| soil, 65 mg/kg. |
| sediment (seawater), 676 mg/kg. |
| sediment (freshwater), 87 mg/kg. |
| sewage treatment plants (STP), 230 µg/L. |
| seawater, 5,2 µg/L. |
| freshwater, 7,8 µg/L. |
| Pentane, CAS: 109-66-0 |
| sewage treatment plants (STP), 3.6 mg/L. |
| sediment (seawater), 1.2 mg/kg. |
| sediment (freshwater), 1.2 mg/kg. |
| seawater, 230 µg/L. |
| freshwater, 230 µg/L. |

### 8.2 Exposure controls

| | |
|---|---|
| **Additional advice on system design** | Ensure adequate ventilation on workstation.<br>Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances. |
| **Eye protection** | Safety glasses. (EN 166:2001) |
| **Hand protection** | The details concerned are recommendations. Please contact the glove supplier for further information.<br>In full contact:<br>0,7 mm Butyl rubber, >480 min (EN 374-1/-2/-3).<br>In splash contact:<br>0,7 mm Nitrile rubber, >480 min (EN 374-1/-2/-3). |
| **Skin protection** | light protective clothing |
| **Other** | Do not inhale gases/vapours/aerosols.<br>Avoid contact with eyes and skin.<br>Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. |
| **Respiratory protection** | In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.<br>Short term: filter apparatus, filter AX (DIN EN 14387). |
| **Thermal hazards** | No information available. |
| **Delimitation and monitoring of the environmental exposition** | Protect the environment by applying appropriate control measures to prevent or limit emissions. |

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| **Form** | aerosol |
| **Color** | silver-grey |
| **Odor** | characteristic |
| **Odour threshold** | No information available. |
| **pH-value** | not applicable |
| **pH-value [1%]** | not applicable |
| **Boiling point [°C]** | not applicable |
| **Flash point [°C]** | not applicable |
| **Flammability (solid, gas) [°C]** | not applicable |
| **Lower explosion limit** | 1,4 Vol.-% |
| **Upper explosion limit** | 32 Vol.-% |
| **Oxidising properties** | no |
| **Vapour pressure/gas pressure [kPa]** | 340 |
| **Density [g/ml]** | 0,67 |
| **Bulk density [kg/m³]** | not applicable |
| **Solubility in water** | insoluble |
| **Partition coefficient [n-octanol/water]** | No information available. |
| **Viscosity** | not applicable |
| **Relative vapour density determined in air** | not applicable |
| **Evaporation speed** | not applicable |
| **Melting point [°C]** | not applicable |
| **Autoignition temperature [°C]** | not applicable |
| **Decomposition temperature [°C]** | not applicable |

### 9.2 Other information

none

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

See SECTION 10.3.

### 10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

### 10.3 Possibility of hazardous reactions

Reactions with oxidizing agents.
Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.
Because of the high vapour pressure, containers are liable to burst if temperature rises.

### 10.4 Conditions to avoid

Strong heating.
See SECTION 7.2.

### 10.5 Incompatible materials

No information available.

### 10.6 Hazardous decomposition products

Flammable gases/vapours.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

**Acute toxicity**

| Product |
|---|
| inhalative, Based on the available information, the classification criteria are not fulfilled.: |
| dermal, Based on the available information, the classification criteria are not fulfilled.: |
| oral, Based on the available information, the classification criteria are not fulfilled.: |

| Substance |
|---|
| Butane, CAS: 106-97-8 |
| LC50, inhalative, Rat: 658 mg/L (IUCLID). |
| Hydrocarbons, C6, isoalkanes, <5% n-hexane |
| LD50, dermal, Rat: > 3000 mg/kg. |
| LD50, oral, Rat: > 3000 mg/kg bw. |
| LC50, inhalative, Rat: > 20 mg/l/4h. |
| iso-Butane, CAS: 75-28-5 |
| LC50, inhalative, Rat: 570000 ppm (IUCLID). |
| Propane, CAS: 74-98-6 |
| LC50, inhalative, Rat: 658 mg/L (IUCLID). |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| LD50, dermal, Rabbit: > 2000 mg/kg. |
| LD50, oral, Rat: > 5000 mg/kg. |
| LC50, inhalative, Rat: > 20 mg/l (4h). |
| Aluminium, CAS: 7429-90-5 |
| LD50, oral, Rat: > 2000 mg/kg. |
| LC50, inhalative, Rat: > 888 mg/m³. |
| NOAEC, inhalative, Rat: 10 mg/m³. |
| Copper, CAS: 7440-50-8 |
| LC50, inhalative, Rat: 5.11 mg/L air. |
| Pentane, CAS: 109-66-0 |
| LD50, oral, Rat: > 2000 mg/kg. |
| LC50, inhalative, Rat: 25.3 mg/L(4h). |

| | |
|---|---|
| **Serious eye damage/irritation** | Based on the available information, the classification criteria are not fulfilled. |
| **Skin corrosion/irritation** | Based on the available information, the classification criteria are fulfilled.<br>Irritant<br>Calculation method [RL (EC) No. 1272/2008 Annex I 1.1.3.7] |
| **Respiratory or skin sensitisation** | Based on the available information, the classification criteria are not fulfilled. |
| **Specific target organ toxicity — single exposure** | Based on the available information, the classification criteria are fulfilled.<br>Vapours may cause drowsiness and dizziness.<br>Calculation method [RL (EC) No. 1272/2008 Annex I 1.1.3.7] |
| **Specific target organ toxicity — repeated exposure** | Based on the available information, the classification criteria are not fulfilled. |
| **Mutagenicity** | Based on the available information, the classification criteria are not fulfilled. |
| **Reproduction toxicity** | Based on the available information, the classification criteria are not fulfilled. |
| **Carcinogenicity** | Based on the available information, the classification criteria are not fulfilled. |
| **Aspiration hazard** | Based on the available information, the classification criteria are fulfilled.<br>May be fatal if swallowed and enters airways. |
| **General remarks** | |

The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

Toxicological data of complete product are not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

| Substance |
|---|
| Hydrocarbons, C6, isoalkanes, <5% n-hexane |
| LC50, (48h), Daphnia magna: 3,87 mg/l. |
| LC50, (48h), Oryzias latipes: 1 mg/l. |
| NOELR, (72h), Pseudokirchneriella subcapitata: 30 mg/l. |
| ErL50, (72h), Pseudokirchneriella subcapitata: 55 mg/l. |
| Hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics, CAS: 64742-49-0 |
| LC50, (96h), Daphnia magna: < 10 mg/l. |
| Pentane, CAS: 109-66-0 |
| EL50, (72h), Algae: 20.33 mg/. |
| EL50, (48h), Invertebrates: 48.11 mg/L. |
| LL50, (96h), fish: 27.55 mg/L. |

### 12.2 Persistence and degradability

**Behaviour in environment compartments** No information available.

**Behaviour in sewage plant** No information available.

**Biological degradability** No information available.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

not applicable

### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

### 12.6 Other adverse effects

Ecotoxicological data are not available.
The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.
Do not discharge product unmonitored into the environment.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Waste material c It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

**Product**

Dispose of as hazardous waste.
Coordinate disposal with the disposal contractor/authorities if necessary.

**Waste no. (recommended)** 160504* gases in pressure containers (including halons) containing dangerous substances

**Contaminated packaging**

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

**Waste no. (recommended)** 150110*

## SECTION 14: Transport information

### 14.1 UN number

| | |
|---|---|
| **Transport by land according to ADR/RID** | 1950 |
| **Inland navigation (ADN)** | 1950 |
| **Marine transport in accordance with IMDG** | 1950 |
| **Air transport in accordance with IATA** | 1950 |

### 14.2 UN proper shipping name

| | |
|---|---|
| **Transport by land according to ADR/RID** | Aerosols |
| **- Classification Code** | 5F |
| **- Label** |  |
| **- ADR LQ** | 1 l |
| **- ADR 1.1.3.6 (8.6)** | Transport category (tunnel restriction code) 2 (D) |
| **Inland navigation (ADN)** | Aerosols |
| **- Classification Code** | 5F |
| **- Label** |  |
| **Marine transport in accordance with IMDG** | Aerosols (Solvent Naphtha) |
| **- EMS** | F-D, S-U |
| **- Label** |  |
| **- IMDG LQ** | 1 l |
| **Air transport in accordance with IATA** | Aerosols, flammable |
| **- Label** |  |

### 14.3 Transport hazard class(es)

| | |
|---|---|
| **Transport by land according to ADR/RID** | 2 |
| **Inland navigation (ADN)** | 2 |
| **Marine transport in accordance with IMDG** | 2.1 |
| **Air transport in accordance with IATA** | 2.1 |

### 14.4 Packing group

| | |
|---|---|
| **Transport by land according to ADR/RID** | not applicable |
| **Inland navigation (ADN)** | not applicable |
| **Marine transport in accordance with IMDG** | not applicable |
| **Air transport in accordance with IATA** | not applicable |

### 14.5 Environmental hazards

| | |
|---|---|
| **Transport by land according to ADR/RID** | yes |
| **Inland navigation (ADN)** | yes |
| **Marine transport in accordance with IMDG** | MARINE POLLUTANT |
| **Air transport in accordance with IATA** | yes |

### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

### 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

No information available.

## SECTION 15: Regulatory information

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

| | |
|---|---|
| **EEC-REGULATIONS** | 1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2016/2037/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014 |
| **TRANSPORT-REGULATIONS** | ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019) |
| **NATIONAL REGULATIONS (GB):** | EH40/2005 Workplace exposure limits (Second edition, published December 2011). |
| **- Observe employment restrictions for people** | Observe employment restrictions for young people. |
| **- VOC (2010/75/CE)** | ca. 75%<br>ca. 502 g/l |

### 15.2 Chemical safety assessment

not applicable

## SECTION 16: Other information

### 16.1 Hazard statements (SECTION 03)

H400 Very toxic to aquatic life.
H302 Harmful if swallowed.
H228 Flammable solid.
H411 Toxic to aquatic life with long lasting effects.
H336 May cause drowsiness or dizziness.
H315 Causes skin irritation.
H304 May be fatal if swallowed and enters airways.
H225 Highly flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H220 Extremely flammable gas.

### 16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
ELINCS = European List of Notified Chemical Substances
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

### 16.3 Other information

**Classification procedure**

Aerosol 1: H222 Extremely flammable aerosol. (Bridging principle "Aerosols") H229 Pressurised container: May burst if heated. (Bridging principle "Aerosols")
Skin Irrit. 2: H315 Causes skin irritation. (Calculation method [RL (EC) No. 1272/2008 Annex I 1.1.3.7])
STOT SE 3: H336 May cause drowsiness or dizziness. (Calculation method [RL (EC) No. 1272/2008 Annex I 1.1.3.7])
Aquatic Chronic 2: H411 Toxic to aquatic life with long lasting effects. (Calculation method)
Asp. Tox. 1: H304 May be fatal if swallowed and enters airways. (Bridging principle "Aerosols")

**Modified position**

SECTION 8 been added: In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.

SECTION 8 deleted: Respiratory protection mask in the event of high concentrations.