

## Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 17.03.2015

Version number 159

Revision: 17.03.2015

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

- **1.1 Product identifier**
- **Trade name:** RYMAX BRAKE CLEANER 500 ML
- **Article number:** RYM458
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture** Cleaning agent/ Cleaner
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
RYMAX  
Delweg 8  
6902 PJ Zevenaar  
T. 0031 (0) 316 740 856  
F. 0031 (0) 316 740 844  
E. info@rymax-lubricants.com
- **Further information obtainable from:** QHSE Department
- **1.4 Emergency telephone number:** 0031 (0) 316 740 856

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Skin Irrit. 2 H315 Causes skin irritation.  
STOT SE 3 H336 May cause drowsiness or dizziness.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Xi; Irritant

R38: Irritating to skin.



F+; Extremely flammable

R12: Extremely flammable.



N; Dangerous for the environment

R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R67: Vapours may cause drowsiness and dizziness.

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· **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurised container.

Has a narcotising effect.

· **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**



GHS02    GHS07    GHS09

· **Signal word Danger**

· **Hazard-determining components of labelling:**

Naphtha (petroleum), hydrotreated light (< 0,1 % benzol CAS nr. 71-43-2)

· **Hazard statements**

H222-H229 Extremely flammable aerosol. 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**

P102 Keep out of reach of children.

P260 Do not breathe spray.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 Do not pierce or burn, even after use.

P211 Do not spray on an open flame or other ignition source.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

P501 Dispose of contents/container in accordance with local regulations.

· **2.3 Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

**SECTION 3: Composition/information on ingredients**

· **3.2 Chemical characterisation: Mixtures**

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

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CAS: 64742-49-0 EC number: 921-024-6 Index number: 649-328-00-1 Reg.nr.: 01-2119475514-35-xxxx	Naphtha (petroleum), hydrotreated light (< 0,1 % benzol CAS nr. 71-43-2)  Xn R65  Xi R38  F R11  N R51/53 R67 -----  Flam. Liq. 2, H225  Asp. Tox. 1, H304  Aquatic Chronic 2, H411  Skin Irrit. 2, H315; STOT SE 3, H336	50-75%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5 Reg.nr.: 01-2119486944-21-xxxx	propane  F+ R12 -----  Flam. Gas 1, H220 Press. Gas C, H280	10-12.5%
CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0 Reg.nr.: 01-2119474691-32-xxxx	butane  F+ R12 -----  Flam. Gas 1, H220 Press. Gas C, H280	5-10%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0 Reg.nr.: 01-2119485395-27-xxxx	isobutane  F+ R12 -----  Flam. Gas 1, H220 Press. Gas C, H280	5-10%
CAS: 124-38-9 EINECS: 204-696-9	carbon dioxide  Press. Gas L, H280	1-2.5%

· **Additional information:** For the wording of the listed risk phrases refer to section 16.

#### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:** Drink plenty of water and provide fresh air. Call for a doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

#### SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

#### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Keep away from ignition sources.

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- **6.2 Environmental precautions:**  
Do not allow product to reach sewage system or any water course.  
Inform respective authorities in case of seepage into water course or sewage system.  
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:** Ensure adequate ventilation.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

**SECTION 7: Handling and storage**

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:**  
Do not spray onto a naked flame or any incandescent material.  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.  
Pressurised container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**  
Store in a cool location.  
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Protect from heat and direct sunlight.
- **7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection**

- **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

**106-97-8 butane**

WEL	Short-term value: 1810 mg/m <sup>3</sup> , 750 ppm
	Long-term value: 1450 mg/m <sup>3</sup> , 600 ppm
	Carc (if more than 0.1% of buta-1.3-diene)

**124-38-9 carbon dioxide**

WEL	Short-term value: 27400 mg/m <sup>3</sup> , 15000 ppm
	Long-term value: 9150 mg/m <sup>3</sup> , 5000 ppm

- **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

- **Personal protective equipment:**
- **General protective and hygienic measures:**  
Keep away from foodstuffs, beverages and feed.  
Immediately remove all soiled and contaminated clothing  
Wash hands before breaks and at the end of work.  
Do not inhale gases / fumes / aerosols.  
Avoid contact with the skin.  
Avoid contact with the eyes and skin.
- **Respiratory protection:** Not required.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

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Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation



Protective gloves

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Not required.

## SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

· <b>Form:</b>	Aerosol
· <b>Colour:</b>	According to product specification
· <b>Odour:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.

- **pH-value:** Not determined.

- **Change in condition**

· <b>Melting point/Melting range:</b>	Undetermined.
· <b>Boiling point/Boiling range:</b>	Not applicable, as aerosol.

- **Flash point:** < 0 °C (< 32 °F)  
Not applicable, as aerosol.

- **Flammability (solid, gaseous):** Not applicable.

- **Ignition temperature:** > 200 °C (> 392 °F)

- **Decomposition temperature:** Not determined.

- **Self-igniting:** Product is not selfigniting.

- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

- **Explosion limits:**

· <b>Lower:</b>	0.6 Vol %
· <b>Upper:</b>	10.9 Vol %

- **Vapour pressure at 20 °C (68 °F):** 5750 hPa (4313 mm Hg)

- **Density at 20 °C (68 °F):** 0.638 g/cm<sup>3</sup> (5.324 lbs/gal)

- **Relative density** Not determined.

- **Vapour density** Not determined.

- **Evaporation rate** Not applicable.

- **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

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- |   |  |
|---|--|
| · <b>Partition coefficient (n-octanol/water):</b> Not determined. |  |
| · <b>Viscosity:</b>   |  |
| <b>Dynamic:</b>   | Not determined.                            |
| <b>Kinematic:</b>   | Not determined.                            |
| · <b>Solvent content:</b>   |  |
| <b>Organic solvents:</b>  | 97.5 %                                     |
| · <b>9.2 Other information</b>                                    | No further relevant information available. |

### SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

- **LD/LC50 values relevant for classification:**

**64742-49-0 Naphtha (petroleum), hydrotreated light (< 0,1 % benzol CAS nr. 71-43-2)**

Oral	LD50	>5840 mg/kg (rat)
Dermal	LD50	>2920 mg/kg (rabbit)
Inhalative	LC50 / 4 h	>193 mg/m <sup>3</sup> (rat)
	LC50 / 4h	25.2 mg/l (rat)
	LC50 / 96 h	11.4 mg/l (fish)

**106-97-8 butane**

Inhalative	LC50 / 4 h	658000 mg/m <sup>3</sup> (rat)
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- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** No irritating effect.
- **Sensitisation:** No sensitising effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Irritant

### SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

**64742-49-0 Naphtha (petroleum), hydrotreated light (< 0,1 % benzol CAS nr. 71-43-2)**

EC50 / 48 h	3 mg/l (daphnia magna)
EC50 / 72 h	30-100 mg/l (algae)
LC50 / 96 h	93-117 mg/l (fish)

- **12.2 Persistence and degradability** No further relevant information available.

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- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:**  
Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water  
Do not allow product to reach ground water, water course or sewage system.  
Danger to drinking water if even small quantities leak into the ground.  
Also poisonous for fish and plankton in water bodies.  
Toxic for aquatic organisms
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

**SECTION 13: Disposal considerations**



- **13.1 Waste treatment methods**
- **Recommendation**  
Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

14 06 03*	other solvents and solvent mixtures
15 01 04	metallic packaging
15 01 11*	metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

- **Uncleaned packaging:**
- **Recommendation:** Non contaminated packagings may be recycled.

**SECTION 14: Transport information**

- **14.1 UN-Number**
  - **ADR, IMDG, IATA** UN1950
  - **14.2 UN proper shipping name**
  - **ADR** 1950 AEROSOLS, ENVIRONMENTALLY HAZARDOUS
  - **IMDG** AEROSOLS (Naphtha (petroleum), hydrotreated light (< 0,1 % benzol CAS nr. 71-43-2)), MARINE POLLUTANT
  - **IATA** AEROSOLS, flammable
  - **14.3 Transport hazard class(es)**
  - **ADR**
- 

- **Class** 2 5F Gases.
  - **Label** 2.1

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· **IMDG**

· **Class** 2.1  
· **Label** 2.1

· **IATA**

· **Class** 2.1  
· **Label** 2.1

· **14.4 Packing group**  
· **ADR, IMDG, IATA** Void

· **14.5 Environmental hazards:**  
· **Marine pollutant:** Yes  
Symbol (fish and tree)  
· **Special marking (ADR):** Symbol (fish and tree)

· **14.6 Special precautions for user** Warning: Gases.  
· **Danger code (Kemler):** -  
· **EMS Number:** F-D,S-U

· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** Not applicable.

· **Transport/Additional information:**

· **ADR**  
· **Limited quantities (LQ)** 1L  
· **Excepted quantities (EQ)** Code: E0  
Not permitted as Excepted Quantity  
· **Transport category** 2  
· **Tunnel restriction code** D

· **IMDG**  
· **Limited quantities (LQ)** 1L  
· **Excepted quantities (EQ)** Code: E0  
Not permitted as Excepted Quantity

· **UN "Model Regulation":** UN1950, AEROSOLS, 2.1, ENVIRONMENTALLY HAZARDOUS

\* **SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
No further relevant information available.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

\* **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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· **Relevant phrases**

- H220 *Extremely flammable gas.*  
 H225 *Highly flammable liquid and vapour.*  
 H280 *Contains gas under pressure; may explode if heated.*  
 H304 *May be fatal if swallowed and enters airways.*  
 H315 *Causes skin irritation.*  
 H336 *May cause drowsiness or dizziness.*  
 H411 *Toxic to aquatic life with long lasting effects.*
- R11 *Highly flammable.*  
 R12 *Extremely flammable.*  
 R38 *Irritating to skin.*  
 R51/53 *Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.*  
 R65 *Harmful: may cause lung damage if swallowed.*  
 R67 *Vapours may cause drowsiness and dizziness.*

· **Abbreviations and acronyms:**

- RID: *Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)*  
 ICAO: *International Civil Aviation Organisation*  
 ADR: *Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)*  
 IMDG: *International Maritime Code for Dangerous Goods*  
 IATA: *International Air Transport Association*  
 GHS: *Globally Harmonised System of Classification and Labelling of Chemicals*  
 EINECS: *European Inventory of Existing Commercial Chemical Substances*  
 ELINCS: *European List of Notified Chemical Substances*  
 CAS: *Chemical Abstracts Service (division of the American Chemical Society)*  
 LC50: *Lethal concentration, 50 percent*  
 LD50: *Lethal dose, 50 percent*  
 Flam. Gas 1: *Flammable gases, Hazard Category 1*  
 Flam. Aerosol 1: *Flammable aerosols, Hazard Category 1*  
 Press. Gas C: *Gases under pressure: Compressed gas*  
 Press. Gas L: *Gases under pressure: Liquefied gas*  
 Flam. Liq. 2: *Flammable liquids, Hazard Category 2*  
 Skin Irrit. 2: *Skin corrosion/irritation, Hazard Category 2*  
 STOT SE 3: *Specific target organ toxicity - Single exposure, Hazard Category 3*  
 Asp. Tox. 1: *Aspiration hazard, Hazard Category 1*  
 Aquatic Chronic 2: *Hazardous to the aquatic environment - Chronic Hazard, Category 2*

· **\* Data compared to the previous version altered.**

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