

Date of issue: 20.05.2011	Trade name:	Page: 1/7
Reviewed on:	BRAKE CLEANER	Version: 1.0

1. Section 1. Identification of the substance/mixture and of the company/undertaking:

- 1.1. Product identifier : **BRAKE CLEANER – R 34217 (spray)**
- 1.2. Relevant identified uses of the substance or Cleaner for brakes
mixture and uses advised against:
- 1.3. Details of the supplier of the safety data sheet:
Identification of manufacturer/Supplier:
RETECH, s.r.o.
Vackova 1541/4
150 00 Praha-5 Stodůlky
Telephone/Fax: +420 327 596 128, +420 327 596 428
Information: info@retech.cz
- 1.4. Emergency telephone number:
RETECH Suchdol 212, Suchdol u Kutné Hory
Tel.+420 327 596 128 (7.30-16.00 hour)
Toxicology information number, Na bojišti 1, 128 08 PRAHA 2
Tel. +420 224 919 293, +420 224 915 402 (24 hours a day)

2. Section 2. Hazard identification:

The product is labeled due to the calculation procedure of the “General Classification guideline for preparations of the EU” in the latest valid version.
The classification is in line with current EC lists, It is expanded, however, by information from technical literature and by information furnished by supplier companies.

- 2.1. Classification of the substance or mixture:
Classification according to Regulation (EC) No 1272/2008:
- | | |
|-------------------|---|
| Flam. Aerosol 1 | H222 Extremely flammable aerosol. |
| Skin Irrit. 2 | H315 Causes skin irritation. |
| Eye Irrit. 2 | H319 Causes serious eye irritation. |
| STOT SE 3 | H336 May cause drowsiness or dizziness. |
| Aquatic Chronic 2 | H411 Toxic to aquatic life with long lasting effects. |

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

F+ Extremely flammable	R12 Extremely flammable
Xi-Irritant	R36/38 Irritating to eye and skin.
N-Dangerous for the environment	R51/53 Toxic to aquatic organisms, may cause long-term effects in aquatic environment.

R67 Vaporous may cause drowsiness and dizziness.

- 2.2. Label elements:
Labelling according to Regulation (EC) No 1272/2008:

GHS02



DANGER

GHS07



WARNING

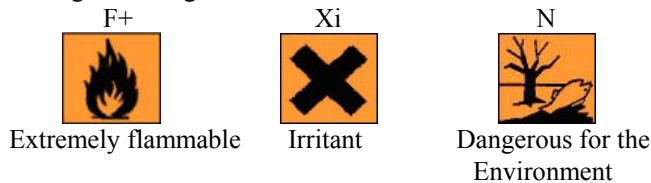
GHS09



H222 Extremely flammable aerosol.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

Date of issue: 20.05.2011	Trade name:	Page: 2/7
Reviewed on:	BRAKE CLEANER	Version: 1.0

Labelling according to Directive 1999/45/EC:



- R12 Extremely flammable
R36/38 Irritating to eye and skin.
R51/53 Toxic to aquatic organisms, may cause long-term effects in aquatic environment.
R67 Vaporous may cause drowsiness and dizziness.

Special labeling of certain preparations:

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use.

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition.- No smoking. Keep out of reach of children.

- 2.3. Other hazards:
Results of PBT and vPvB assessment:
PBT: Not applicable
vPvB: Not applicable
Buildup of explosive mixtures possible without sufficient ventilation.

3. Section 3. Composition/information on ingredients:

- 3.2. Mixtures:
Description: The active ingredient in propellants (CO2)

Dangerous components:

CAS: 64742-49-0 EINECS: 265-151-9	Naphtha (petroleum); Hydrotreated light (contains less than 0.1% benzene) F R11; Xi R38; N51/53; Xn R65; R67 GHS02 Flam. Liq. 2, H225; GHS08 Asp. Tox. 1, H304; GHS09 Aquatic Chronic 2, H411; GHS07 Skin Irrit. 2, H315; STOT SE 3, H336	50-75%
CAS: 67-64-1 EINECS: 200-662-2	Acetone F R11; Xi R36; R66,R67 GHS02 Flam. Liq. 2, H225; GHS07 Eye Irrit. 2, H319; STOT SE 3 H336; EUH066	20-25%

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

Ingredients according to detergents guideline 648/2004/EC: Aliphatic hydrocarbons ≥30%

4. Section 4. First aid measures:

- 4.1. Description of first aid measures:
- After inhalation: Supply fresh air; rest, if necessary seek medical advice.
- After skin contact: Remove soaked clothing; Immediately wash with water and soap and rinse thoroughly.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.
- After swallowing: Rinse mouth; Do not induce vomiting; Consult a physician.
- Most important symptoms and effects, both acute and delayed: In case of unconsciousness place patient stable in side position for transportation.
- Indication of any immediate medical attention and special treatment needed: No further relevant information available.

Date of issue: 20.05.2011	Trade name:	Page: 3/7
Reviewed on:	BRAKE CLEANER	Version: 1.0

<p>5. Section 5. Fire fighting measures:</p> <p>5.1. Suitable extinguishing agents: CO₂, extinguishing powder or alcohol resistant foam. For safety reasons unsuitable extinguishing agents: Water jet.</p> <p>5.2. Special hazards arising from the substance or mixture: Information not available.</p> <p>5.3. Advice for firefighters: Wear protective equipment/clothing when fighting fires. Aerosols may explode when overheated. Cool the container with water.</p>		
<p>6. Section 6. Accidental release measures:</p> <p>6.1. Personal precautions, protective equipment and emergency procedures: Wear protective equipment see Section 8.2. Ensure adequate ventilation. Keep unprotected person away. Keep away from ignition sources.</p> <p>6.2. Environmental precautions: Do not allow product to reach sewage system, surface or ground water. Inform respective authorities in case of seepage into water course or sewage system.</p> <p>6.3. Methods and material for containment and cleaning up: Ensure adequate ventilation. Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to Section 13.</p> <p>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.</p>		
<p>7. Section 7. Handling and storage:</p> <p>7.1. Information for safe handling: Ensure good ventilation/exhaustion at the workplace. Information about protection against explosions and fires: Beware: Container is pressurized. Keep away from direct sun exposure and temperatures over 50°C. Do not open by force or throw into fire even after use. Do not spray on flames or red-hot objects. Keep ignition sources away - Do not smoke. Protect against electrostatic charges.</p> <p>7.2. Conditions for safe handling, including any incompatibilities: Requirements to be met by storerooms and containers: Store in cool location. Observe official regulations on storing packaging with pressurized containers. Information about storage in one common storage facility: Observe official regulations on storing packaging with pressurized containers. Further information about storage conditions: Store in cool, dry conditions. Protect from heat and direct sunlight.</p> <p>7.3. Specific end use(s): No further relevant information available.</p>		
<p>8. Section 8. Exposure controls and personal protection:</p> <p>8.1. Control parameters: Components with limit values that require monitoring at the workplace: 67-64-1 acetone WEL Short-term value: not applicable Long-term value: 1210 mg/m³, 500 ppm 64742-49-0 Naphtha (petroleum) – Long-term value: 315 ppm</p> <p>8.2. Exposure controls: Eye protection: Tightly safety glasses.</p>		

Date of issue: 20.05.2011	Trade name:	Page: 4/7
Reviewed on:	BRAKE CLEANER	Version: 1.0

Breathing equipment:	Use suitable respiratory protective device in case of insufficient ventilation. In case of brief exposure or low pollution use respiratory filter device-filter AX/P2. In case of intensive or longer exposure use self-contained respiratory protective device.
Protection of hands:	Selection of glove material on consideration of the penetration times, rates of diffusion and the degradation Material of gloves: Nitrile rubber, NBR The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
Protection of skin:	Protective working clothes.
8.3. General protective and hygienic measures:	Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands during breaks and at the end of the work. Do not inhale gases/fumes/aerosols.

9.	Section 9. Physical and chemical properties:
	Appearance:
	form: Aerosol
	colour: Colourless
	Odour threshold: Characteristic
	Value pH: Not determined
	Melting point/freezing point: Not determined
	Melting point/freezing point: Not determined
	Initial boiling point/boiling range: Not determined
	Flash point: <21°C
	Evaporation rate: Not determined
	Flammability (solid,gas): Not applicable
	Ignition temperature: 200°C
	Explosive properties: Product is not explosive. However, formation of explosive air/steam mixtures is possible.
	Upper/lower flammability or explosive limits:
	Explosion limits: lower (% Vol): 1.1
	upper (% Vol): 13.0
	Vapour pressure (at 20°C): 330 hPa
	Vapour density (at 20 °C): Not determined
	Relative density: 0.707 g/cm ³
	Solubility in/miscibility with
	- water Not miscible or difficult to mix
	Partition coefficient (n-octanol/water): Not determined
	Auto-ignition temperature: Not determined
	Decomposition temperature: Not determined
	Viscosity: Not determined
	Oxidative properties: Not determined
9.2.	Other information:
	Organic solvents: 99.9%
	VOC: 706.3 g/l

10.	Section 10. Stability and reactivity:
10.1.	Reactivity: No further relevant information available.
10.2.	Chemical stability: No further relevant information available.
10.3.	Possibility of hazardous reactions: No dangerous reactions known.
10.4.	Conditions to avoid: There are known no conditions to avoid.
10.5.	Incompatible materials: There are known no incompatible materials.
10.6.	Hazardous products of decomposition: No dangerous decomposition product known.

Date of issue: 20.05.2011	Trade name:	Page: 5/7
Reviewed on:	BRAKE CLEANER	Version: 1.0

11. Section 11. Toxicological information:

11.1 Information on toxicological effects:

Acute toxicity:

64742-49-0 Naphtha (petroleum), hydrotreated light

Oral LD50 >5000 mg/kg (rat)

Dermal LD50 >2600 mg/kg (rab)

Inhalative LC50/4h >193 mg/l (rat)

67-64-1 aceton

Oral LD50 5800 mg/kg (rat)

Dermal LD50 20000 mg/kg (rab)

Inhalative LC50/4h 39 mg/l (rat)

Irritation: on the skin: Irritant to skin and mucous membranes.

on the eye: Irritating effect.

Corrosivity: Not corrosive.

Sensitization: No sensitizing effect known.

Repeated dose toxicity: No further relevant information available.

Carcinogenicity: No further relevant information available.

Mutagenicity: No further relevant information available.

Toxicity for reproduction: No further relevant information available.

Other information: No data.

12. Section 12. Ecological information:

12.1. Toxicity:

Ecotoxicological effects:

Acquatic toxicity:

64742-49-0 Naphtha (petroleum), hydrotreated light

LC50 (48h) 127-159 mg/l (Leuciscus idus)

67-64-1 aceton

EC50 / 48 h 39 mg/l (daphnia magna)

LC50 / 48h 2262 mg/l (daphnia magna)

LC50 / 96 h 5540 mg/l (fish)

(statically)

Water hazard class 2 (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.

Toxic to fish.

12.2. Persistence and degradability: No further relevant information available.

12.3. Bioaccumulative potential: No further relevant information available.

12.4. Mobility in soil: No further relevant information available.

12.5. Results of PBT and vPvB assessment:

PBT: Not applicable

vPvB: Not applicable

12.6. Other adverse effects: No further relevant information available.

13. Section 13. Disposal considerations:

13.1 Waste treatment methods:

Product:

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Disposal must be made according to official regulations.

14. Section 14. Transport information:

14.1. Land transport:

ADR/RID-GGVS/E class: 2

Number/Letter: 5F

Date of issue: 20.05.2011	Trade name:	Page: 6/7
Reviewed on:	BRAKE CLEANER	Version: 1.0

Danger code (Kemler):	-
Number UN:	1950
Special marking:	Symbol (fish and tree)
Remarks:	"Limited quantities", LQ2
Transport category:	2
Tunnel restriction code	D
Description of goods:	Aerosols
14.2. Maritime transport:	
IMDG-class:	2.1
Page:	-
Number UN:	1950
Packaging group:	-
Marine pollutant:	No
EMS-group:	F-D,S-U
Proper shipping name:	Aerosols
14.3. Air transport:	
ICAO / IATA -class:	2.1
UN/ID number:	1950
Packaging group:	-
Proper shipping name:	Aerosols, flammable
· UN "Model Regulation":	UN1950; AEROSOLS; 2.1
Special precautions for users - Waring:	Gases
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not applicable

15. Section 15. Regulatory information:

15.1. Labelling according to law line:

The product has been labeled in accordance with EC Directives / relevant national laws.

Danger of determining components and mark to labelling:

67-64-1 Acetone, 64742-49-0 Naphtha (petroleum), hydrotreated light

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after burn. Do not spray on a naked flame or any incandescent material.

Labelling hazardousness:



F+ - Extremely flammable



Xi- Irritant



N- Dangerous for the environment

Numbers and word reading associated hazard R-sentences :

R 12 Extremely flammable.

R 36/38 Irritating to eyes and skin.

R 51/53 Toxic to aquatic organisms, may cause long-term effects in aquatic environment.

R 67 Vaporous may cause drowsiness and dizziness.

Numbers and word reading associated security S-sentences:

S 2 Keep out of reach of children.

S 16 Keep away from sources of ignition – No smoking.

S 23 Do not breathe vapor/aerosol.

S 25 Avoid contact with eyes.

S 37 Wear suitable gloves.

S 46 If swallowed, seek medical advice immediately and show this container or label.

S 51 Use only in well-ventilated areas.

S 56 Dispose of this material and its container at hazardous or special waste collection point.

Date of issue: 20.05.2011	Trade name:	Page: 7/7
Reviewed on:	BRAKE CLEANER	Version: 1.0

On the packaging there is not included info in accordance with European Regulation No 1999/45/EC (chapter 2.5.).

Density: 0,707 g/cm³

VOC: 706.3 g/l

Regulation (EC) No 648/2004: ≥30% Aliphatic Hydrocarbons

Used legislation:

European Regulation (EC) No 1907/2006 – REACH.

Commission Regulation (EU) No 453/2010.

European Regulation No 67/548EEC and 1999/45/EC.

Commission Regulation (EC) No 1272/2006 – CLP.

Commission Regulation (EC) No 790/2009.

Regulation (EC) No 648/2004 (detergents).

15.2. Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16. Section 16. Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relative R+H phrases:

R 11 Highly flammable.

R 36 Irritating to eyes.

R 38 Irritating to skin.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R 65 Harmful: May cause lung damage if swallowed.

R 66 Repeated exposure may cause skin dryness or cracking.

R 67 Vapours may cause drowsiness and dizziness.

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects

EUH066 Repeated exposure may cause skin dryness or cracking.

Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International

Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)

WEL- Workplace exposure limits

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

***Compared to the last version the data has been changed.**