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| Date of issue: 13.4.2011 | Trade name:                                  | Page: 1/9    |
| Reviewed on:             | <b>I.C.-Injection and carburetor cleaner</b> | Version: 1.0 |

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

- 1.1. Product identifier : **I.C.-Injection and carburetor cleaner - R 50200 (spray)**
- 1.2. Relevant identified uses of the substance or mixture and uses advised against: Cleaner of injection units and carburetors
- 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](mailto: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.   |
| Acute Tox. 4    | H332 Harmful if inhaled.            |
| Acute Tox. 4    | H312 Harmful in contact with skin.  |
| Skin Irrit. 2   | H315 Causes skin irritation.        |
| Eye Irrit. 2    | H319 Causes serious eye irritation. |

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

|                        |  |
|------------------------|--|
| F+ Extremely flammable | R12 Extremely flammable.                               |
| Xn-Harmful             | R20/21 Harmful by inhalation and in contact with skin. |
| Xi- Irritant           | R36/38 Irritating to eyes and skin.                    |

2.2. Label elements:

Labelling according to Regulation (EC) No 1272/2008:

GHS02



DANGER

GHS07



WARNING

H222 Extremely flammable aerosol.  
H332 Harmful if inhaled.  
H312 Harmful in contact with skin.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.

Labelling according to Directive 1999/45/EC:

F+



Extremely flammable

Xn



Harmful

Special labeling of certain preparations:

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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

Dangerous components:

|                                      |   |           |
|--------------------------------------|---|-----------|
| CAS: 1330-20-7<br>EINECS: 215-535-7  | Xylene (mix)<br>R10; Xn R20/21; Xi R38<br>GHS02 Flam. Liq. 3, H226; GHS07 Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315   | 10-<25%   |
| CAS: 78-93-3<br>EINECS: 201-159-0    | Butanone<br>F R 11; Xi R36; R66; R67<br>GHS02 Flam. Liq. 2, H225; GHS07 Eye Irrit. 2, H319; STOT SE 3, H336; EUH066   | 10-<25%   |
| CAS: 74-98-6<br>EINECS: 200-827-9    | Propane<br>F+ R12<br>GHS02 Flam. Gas 1, H220; GHS04 Press. Gas, H280  | 10-<25%   |
| CAS: 67-63-0<br>EINECS: 200-661-7    | Propan-2-ol<br>F R11; Xi R36; R67<br>GHS02 Flam. Liq. 2, H225; GHS07 Eye Irrit. 2, H319; STOT SE 3, H336  | 10-<25%   |
| CAS: 64742-49-0<br>EINECS: 265-151-9 | Naphtha (petroleum); Hydrotreated light (contains less than 0.1% benzene)<br>F R11; Xi R38; N51/53; Xn R65; R67<br>GHS02 Flam. Liq. 2, H225; GHS08 Asp. Tox. 1, H304; GHS09 Aquatic Chronic 2, H411; GHS07 Skin Irrit. 2, H315; STOT SE 3, H336 | 10-<25%   |
| CAS: 100-41-4<br>EINECS: 202-849-4   | Ethylbenzene<br>F R11; Xn R20<br>GHS02 Flam. Liq. 2, H225; GHS07 Acute Tox. 4, H332   | 2.5-<10%  |
| CAS: 111-76-2<br>EINECS: 203-905-0   | 2-butoxyethanol<br>Xn R 20/21/22; Xi R36/38<br>GHS07 Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319  | 1,0-<2,5% |

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%, aromatic hydrocarbons 15-30%

**4. Section 4. First aid measures:**

4.1. Description of first aid measures:

- After inhalation: Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms
- After skin contact: Remove soaked clothing; Wash with water and soap.
- After eye contact: Rinse opened eye for several minutes under running water. If symptoms persist, consult doctor.

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After swallowing: Rinse mouth; Do not induce vomiting; Consult a physician.  
 Most important symptoms and effects, both acute and delayed: Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.  
 Indication of any immediate medical attention and special treatment needed: In case of unconsciousness place patient stably in side position for transportation.

**5. Section 5. Fire fighting measures:**

- 5.1. Extinguishing media:  
 Suitable extinguishing agents: CO<sub>2</sub>, extinguishing powder or alcohol resistant foam.  
 For safety reasons unsuitable extinguishing agents: Water jet.
- 5.2. Special hazards arising from the substance or mixture:  
 In case of fire CO may be possible.
- 5.3. Advice for firefighters: Wear protective equipment/clothing when fighting fires.  
 Aerosols may explode when overheated.  
 Cool the container with water.

**6. Section 6. Accidental release measures:**

- 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.
- 6.2. Environmental precautions:  
 Do not allow to enter drainage system, surface or ground water.  
 Inform respective authorities in case product reaches water or sewage system.
- 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). Ensure adequate ventilation. Dispose of contaminated material as waste according to see Section 13.
- 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.

**7. Section 7. Handling and storage:**

- 7.1. Information for safe handling:  
 Information about protection against explosions and fires: Ensure good ventilation/exhaustion at the workplace.  
 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.
- 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.
- 7.3. Specific end use(s): No further relevant information available.

**8. Section 8. Exposure controls and personal protection:**

- 8.1. Control parameters:  
 Components with limit values that require monitoring at the workplace:

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Additional information:

1330-20-7 Xylene (mix)

WEL Short-term value: 442 mg/cm<sup>3</sup>, 100 ppm

Long-term value: 221 mg/cm<sup>3</sup>, 50 ppm

100-41-4 Ethylbenzene

WEL Short-term value: 884 mg/cm<sup>3</sup>, 200 ppm

Long-term value: 442 mg/cm<sup>3</sup>, 100 ppm

111-76-2 2-butoxyethanol

WEL Short-term value: 246 mg/cm<sup>3</sup>, 50 ppm

Long-term value: 98 mg/cm<sup>3</sup>, 20 ppm

78-93-3 Butanone

WEL Short-term value: 900 mg/cm<sup>3</sup>, 300 ppm

Long-term value: 600 mg/cm<sup>3</sup>, 200 ppm

67-63-0 Propan-2-ol

WEL Short-term value: 1250 mg/m<sup>3</sup>, 500 ppm

Long-term value: 999 mg/m<sup>3</sup>, 400 ppm

74-98-6 Propane

WEL Short-term value: 3600 mg/cm<sup>3</sup>, 2000 ppm

Long-term value: 1800 mg/m<sup>3</sup>, 1000 ppm

Additional information: The lists that were valid during the compilation were as basis.

DNELs

67-63-0 propan-2-ol

Oral DNEL 26 mg/kg bw/day (Consumer) (Chronische Blootstelling, Systeem Effecten)

Dermal DNEL 319 mg/kg bw/day (Consumer) (Chronische Blootstelling, Systeem Effecten)

888 mg/kg bw/day (Worker) (Chronische Blootstelling, Systeem Effecten)

Inhalative DNEL 89 mg/m<sup>3</sup> (Consumer) (Chronische Blootstelling, Systeem Effecten)

500 mg/m<sup>3</sup> (Worker) (Chronische Blootstelling, Systeem Effecten)

DNELs

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

Oral DNEL 699 mg/kg bw/day (Consumer) (Chronische Blootstelling, Systeem Effecten)

Dermal DNEL 699 mg/kg bw/day (Consumer) (Chronische Blootstelling, Systeem Effecten)

773 mg/kg bw/day (Worker) (Chronische Blootstelling, Systeem Effecten)

Inhalative DNEL 608 mg/m<sup>3</sup> (Consumer) (Chronische Blootstelling, Systeem Effecten)

2035 mg/m<sup>3</sup> (Worker) (Chronische Blootstelling, Systeem Effecten)

8.2 Exposure controls:

Eye protection: Tightly safety glasses.

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.

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 clothing

8.3. General protective and hygienic measures: Wash hands during breaks and at the end of the work.

**9. Section 9. Physical and chemical properties:**

9.1. Information on basic physical and chemical properties:

Appearance:

form: Aerosol

colour: Clear

Odour threshold: Characteristic

Value pH: Not determined

Melting point/freezing point: Not determined

Initial boiling point/boiling range: -44°C



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| Dermal LD50                | 470 mg/kg (rat)                            |
| Irritation: on the skin:   | 2000 mg/l (rabbit)                         |
| on the eye:                | Irritant to skin and mucous membranes.     |
| Corrosivity:               | Irritant effect.                           |
| Sensitization:             | Not corrosive.                             |
| Repeated dose toxicity:    | No sensitizing effect known.               |
| 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:
- |  |                |  |
|--|----------------|--|
| 1330-20-7 Xylene (mix)                             | EC50           | 7,4 mg/l (Daphnia Magma 48h)                 |
|  | LC50           | 3,77-13,5 mg/l (Fish 96h)                    |
| 64742-49-0 Naphtha (petroleum), hydrotreated heavy | EC50/48h       | 3 mg/l (Daphnia magna)                       |
|  | EL50 (72h)     | 10-30 mg/l (Pseudokirchneriella subcapitata) |
|  | LL50 (96h)     | >13.4 mg/l (Oncorhynchus mykiss (96h))       |
|  | LOEC (21 days) | 0,32 mg/l (Daphnia magna)                    |
|  | NOEC (21 days) | 0,17 mg/l (Daphnia magna)                    |
|  | NOELR (72h)    | 10 mg/l (Pseudokirchneriella subcapitata)    |
| 67-63-0 propan-2-ol                                | LC50 (24h)     | 9714 mg/l (Daphnia magna)                    |
|  | LC50/96h       | 9640 mg/l (Pimephales promelas)              |
|  | LOEC (8 days)  | 1000 mg/l (algae)                            |
| 100-41-4 Ethylbenzene                              | EC50           | >100 mg/l (Daphnia Magma)                    |
|  | LC50           | >10 mg/l (Fish 96h)                          |
| 111-76-2 2-butoxyethanol                           | LC50           | 1490 mg/l (Lepomis macrochirus 96h)          |
- 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.  
Harmful to fish.  
Harmful to aquatic organisms.
- 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              |
| Danger code (Kemler): | Not determined |
| Number/Letter:        | 5F             |
| Number UN:            | 1950           |
| Description of goods: | Aerosols       |

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|--|---------------------------|
| Remarks:   | “Limited quantities”, LQ2 |
| Transport category:  | 2                         |
| Tunnel restriction code  | D                         |
| 14.2. Maritime transport:  |                           |
| IMDG-class:  | 2.1                       |
| Page:  | Not determined            |
| Number UN:   | 1950                      |
| Packaging group:   | -                         |
| EMS-group:   | F-D,S-U                   |
| Marine pollutant:  | No                        |
| Proper shipping name:  | Aerosols                  |
| 14.3. Air transport:   |                           |
| ICAO / IATA -class:  | 2.1                       |
| UN/ID number:  | 1950                      |
| Packaging group:   | Not determined            |
| 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. Safety, health and environmental regulations/legislation specific for the substance or mixture:

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:

1330-20-7 Xylene, 74-94-6 Propane

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



Xn - Harmful

Numbers and word reading associated hazard R-sentences :

R 12 Extremely flammable.

R 20/21 Harmful by inhalation and in contact with skin.

R 36/38 Irritating to eyes and skin.

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 vapours/spray.

S 24/25 Avoid contact with skin and eyes.

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.

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

Regulation (EC) No 648/2004 Contains: Aliphatic Hydrocarbons  $\geq 30\%$ , aromatic hydrocarbons 15-30%  
Density: 0.745 g/cm<sup>3</sup>  
VOC: 743.9 g/l

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).

National regulations:

Danish MAL Code 5-3

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 10 Flammable  
R 11 Highly flammable.  
R 12 Extremely flammable.  
R 20 Harmful by inhalation.  
R 20/21 Harmful by inhalation and in contact with skin.  
R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.  
R 36 Irritating to eyes.  
R 36/38 Irritating to eyes and skin.  
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.  
H220 Extremely flammable gas.  
H225 Highly flammable liquid and vapour.  
H280 Contains gas under pressure; may explode if heated.  
H302 Harmful if swallowed.  
H304 May be fatal if swallowed and enters airways.  
H312 Harmful in contact with skin.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
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

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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 Arbejdshygienisk 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.**