

## Safety data sheet

Issue date: 17.07.2017

Version 2

Last Revision: 17.07.2017

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

- **1.1 Product identifier**
  - **Product name: CarbonClean MV-6 Fuel System Cleaner**
    - **Part number:** 400-0060
    - **Application of the substance / the mixture** Engine and fuel system cleaner
- **1.3 Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:**  
Motorvac, division of, CPS Products Canada Ltd.  
1324 Blundell Road  
Mississauga, ON L4Y 1M5  
Canada  
Tel: (905) 615-8620
  - **email of person responsible:** customerservice@motorvac.com
- **1.4 Emergency telephone number:** CHEMTREC International +1 (703) 527-3887 24 hr

## SECTION 2: Hazards identification

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

Flam. Liq. 2	H225 Highly flammable liquid and vapour.
Skin Irrit. 2	H315 Causes skin irritation.
Eye Irrit. 2	H319 Causes serious eye irritation.
Asp. Tox. 1	H304 May be fatal if swallowed and enters airways.
Aquatic Chronic 3	H412 Harmful to aquatic life with long lasting effects.

- **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 GHS08

- **Signal word** Danger
- **Hazard-determining components of labelling:**  
Naphtha (petroleum), light alkylate
- **Hazard statements**  
H225 Highly flammable liquid and vapour.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H304 May be fatal if swallowed and enters airways.  
H412 Harmful 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.  
P264 Wash thoroughly after handling.

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P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.  
 P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P405 Store locked up.  
 P501 Dispose of contents 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 Mixtures**· **Chemical components:**

CAS: 64741-66-8 EINECS: 265-068-8	Naphtha (petroleum), light alkylate Asp. Tox. 1, H304	25-50%
CAS: 111-76-2 EINECS: 203-905-0	2-butoxyethanol Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	2.5-10%
CAS: 108-11-2 EINECS: 203-551-7	4-methylpentan-2-ol Flam. Liq. 3, H226; STOT SE 3, H335	2.5-10%
CAS: 112-80-1 EINECS: 204-007-1	oleic acid, pure Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	2.5-10%
CAS: 95-63-6 EINECS: 202-436-9	1,2,4-trimethylbenzene Flam. Liq. 3, H226; Aquatic Chronic 2, H411; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335	2.5-10%
CAS: 64742-47-8 EINECS: 265-149-8	Distillates (petroleum), hydrotreated light Flam. Liq. 3, H226; Asp. Tox. 1, H304	≤ 2.5%
CAS: 64742-94-5 EINECS: 265-198-5	Solvent naphtha (petroleum), heavy arom. Asp. Tox. 1, H304	≤ 2.5%
CAS: 7664-41-7 EINECS: 231-635-3	ammonia, anhydrous Acute Tox. 3, H331; Skin Corr. 1B, H314; Aquatic Acute 1, H400; Acute Tox. 4, H302; Flam. Gas 2, H221; Press. Gas C, H280	≤ 2.5%
CAS: 91-20-3 EINECS: 202-049-5	naphthalene Carc. 2, H351; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302	≤ 2.5%
CAS: 98-82-8 EINECS: 202-704-5	cumene Flam. Liq. 3, H226; Carc. 2, H351; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; STOT SE 3, H335	≤ 2.5%

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

**SECTION 4: First aid measures**· **4.1 Description of first aid measures**

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.

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- **After eye contact:**  
Rinse cautiously with water. Remove contact lenses, if present and easy to do. Get medical attention if eye irritation develops or persists.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed**  
Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.  
See section 11.
  - **Information for doctor:** Treat Symptomatically
- **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>, sand, extinguishing powder. Do not use water.
  - **For safety reasons unsuitable extinguishing agents:** Water
- **5.2 Special hazards arising from the substance or mixture** See section 10 for additional information.
- **5.3 Advice for firefighters**
  - **Protective equipment:**  
Wear full protective firegear including self-containing breathing apparatus operated in the positive pressure mode with full facepiece, coat, pants, gloves and boots. Do not use a water jet.

**SECTION 6: Accidental release measures**

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Inform respective authorities in case of seepage into water course or sewage system.  
Remove ignition sources. Use special care to avoid static electric charges. No naked lights. No smoking.  
Take precautions to avoid release to the environment. Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.  
Do not flush with water or aqueous cleansing agents
- **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.  
Prevent formation of aerosols.

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- **Information about fire - and explosion protection:**  
Keep ignition sources away - Do not smoke.  
Protect against electrostatic charges.
- **7.2 Conditions for safe storage, including any incompatibilities**
  - **Storage:**
    - **Requirements to be met by storerooms and receptacles:**  
See section 10 for incompatible materials.
    - **Information about storage in one common storage facility:** Not required.
    - **Further information about storage conditions:** Keep container tightly sealed.
- **7.3 Specific end use(s)** No further relevant information available.

**SECTION 8: Exposure controls/personal protection**· **8.1 Control parameters**

· <b>Ingredients with limit values that require monitoring at the workplace:</b>	
<b>111-76-2 2-butoxyethanol (≤10%)</b>	
WEL	Short-term value: 246 mg/m <sup>3</sup> , 50 ppm Long-term value: 123 mg/m <sup>3</sup> , 25 ppm Sk, BMGV
<b>108-11-2 4-methylpentan-2-ol (2.5-&lt;10%)</b>	
WEL	Short-term value: 170 mg/m <sup>3</sup> , 40 ppm Long-term value: 106 mg/m <sup>3</sup> , 25 ppm Sk
<b>95-63-6 1,2,4-trimethylbenzene (2.5-&lt;10%)</b>	
WEL	Long-term value: 125 mg/m <sup>3</sup> , 25 ppm ILV
<b>7664-41-7 ammonia, anhydrous (0.25-&lt;1%)</b>	
WEL	Short-term value: 25 mg/m <sup>3</sup> , 35 ppm Long-term value: 18 mg/m <sup>3</sup> , 25 ppm
<b>98-82-8 cumene (0.25-&lt;2.%)</b>	
WEL	Short-term value: 250 mg/m <sup>3</sup> , 50 ppm Long-term value: 125 mg/m <sup>3</sup> , 25 ppm Sk
· <b>Ingredients with biological limit values:</b>	
<b>111-76-2 2-butoxyethanol (≤10%)</b>	
BMGV	240 mmol/mol creatinine Octanol-Water: urine 0.1: post shift 7.3: butoxyacetic acid

- **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  
Avoid contact with the eyes and skin.

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· **Respiratory protection:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

· **Protection of hands:**

Chemical resistant protective gloves (EN 374)

· **Eye protection:**

Safety glasses. If potential for splash or mist exists, wear chemical goggles or faceshield.

**SECTION 9: Physical and chemical properties**· **9.1 Information on basic physical and chemical properties**· **General Information**· **Appearance:**

- |                           |                 |
|---------------------------|-----------------|
| · <b>Form:</b>            | Fluid           |
| · <b>Colour:</b>          | Yellow          |
| · <b>Odour:</b>           | Characteristic  |
| · <b>Odour threshold:</b> | Not determined. |

· **pH-value:** Not determined.

· **Change in condition**

- |   |               |
|---|---------------|
| · <b>Melting point/freezing point:</b>            | Undetermined. |
| · <b>Initial boiling point and boiling range:</b> | Undetermined. |

· **Flash point:** 20 °C

· **Flammability (solid, gas):** Not applicable.

· **Ignition temperature:**

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

· **Explosion limits:**

- |                 |                 |
|-----------------|-----------------|
| · <b>Lower:</b> | Not determined. |
| · <b>Upper:</b> | Not determined. |

· **Vapour pressure:** Not determined.

· **Density:**

- |                                    |                 |
|------------------------------------|-----------------|
| · <b>Relative density at 20 °C</b> | Not determined. |
| · <b>Vapour density</b>            | 0.77-0.83       |
| · <b>Evaporation rate</b>          | Not determined. |

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- |  |  |
|--|--|
| · <b>Solubility in / Miscibility with</b><br>· <b>water:</b> | Not miscible or difficult to mix.          |
| · <b>Partition coefficient: n-octanol/water:</b>             | Not determined.                            |
| · <b>Viscosity:</b>  |  |
| · <b>Dynamic:</b>  | Not determined.                            |
| · <b>Kinematic:</b>  | Not determined.                            |
| · <b>9.2 Other information</b>                               | No further relevant information available. |

**SECTION 10: Stability and reactivity**

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
  - **Thermal decomposition / conditions to be avoided:**  
Flammable liquid and vapour. May form flammable/explosive vapour-air mixture.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** Heat, open flames, sparks.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** May include, and are not limited to: oxides of carbon.

**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
  - **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:****ATE (Acute Toxicity Estimates)**

Oral	LD50	8971 mg/kg
Dermal	LD50	13284 mg/kg
Inhalative	LC50/4 h (vapor)	96.5 mg/L

**111-76-2 2-butoxyethanol**

Oral	LD50	1414 mg/kg (gpg)
Dermal	LD50	2000 mg/kg (gpg)
Inhalative	LC50/4 h (vapor)	11.5 mg/L (gpg)

**108-11-2 4-methylpentan-2-ol**

Oral	LD50	2590 mg/kg (rat)
Dermal	LD50	3560 mg/kg (rabbit)

**112-80-1 oleic acid, pure**

Oral	LD50	74000 mg/kg (rat)
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**95-63-6 1,2,4-trimethylbenzene**

Oral	LD50	5000 mg/kg (rat)
Inhalative	LC50/4 h (vapor)	18 mg/L (rat)

**7664-41-7 ammonia, anhydrous**

Oral	LD50	350 mg/kg (rat)
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Inhalative	LC50/4 h (vapor)	2000 mg/L (rat)
<b>91-20-3 naphthalene</b>		
Oral	LD50	490 mg/kg (rat)
Dermal	LD50	5000 mg/kg (rat)
<b>98-82-8 cumene</b>		
Oral	LD50	1400 mg/kg (rat)
Dermal	LD50	12300 mg/kg (rabbit)
Inhalative	LC50/4 h (vapor)	24.7 mg/L (mouse)

- **Primary irritant effect:**
  - **Skin corrosion/irritation**  
Causes skin irritation.
  - **Serious eye damage/irritation**  
Causes serious eye irritation.
- **Respiratory or skin sensitisation**  
Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
  - **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
  - **Carcinogenicity** Based on available data, the classification criteria are not met.
  - **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard**  
May be fatal if swallowed and enters airways.

**SECTION 12: Ecological information**

- **12.1 Toxicity**
  - **Aquatic toxicity:**  
Harmful to aquatic life with long lasting effects.

**112-80-1 oleic acid, pure**

LC50 (96 h) | 205 mg/L (fish)

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

- **12.3 Bioaccumulative potential**

**108-11-2 4-methylpentan-2-ol**

Bioaccumulation | LogPow 1.43 (-) (potential low)

**112-80-1 oleic acid, pure**

Bioaccumulation | LogPow 7.73 (-) (potential high)

- **12.4 Mobility in soil** No further relevant information available.

- **Ecotoxicological effects:**

- **Remark:** Harmful to 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.

Harmful to aquatic organisms

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- **12.5 Results of PBT and vPvB assessment**
  - **PBT:** Not applicable.
  - **vPvB:** Not applicable.
- **12.6 Other adverse effects** Avoid release to the environment.

**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.
  - **Uncleaned packaging:**
    - **Recommendation:** Disposal must be made according to official regulations.

**SECTION 14: Transport information**

- |   |  |
|---|--|
| · <b>14.1 UN-Number</b>   |  |
| · <b>ADR, IMDG, IATA</b>  | UN1993   |
| · <b>14.2 UN proper shipping name</b>   |  |
| · <b>ADR</b>  | UN1993 FLAMMABLE LIQUID, N.O.S. (METHYL ISOBUTYL CARBINOL, 1,2,4-trimethylbenzene, 2-butoxyethanol, Distillates (petroleum), hydrotreated light) |
| · <b>IMDG, IATA</b>   | FLAMMABLE LIQUID, N.O.S. (METHYL ISOBUTYL CARBINOL, 1,2,4-trimethylbenzene, 2-butoxyethanol, Distillates (petroleum), hydrotreated light)        |
| · <b>14.3 Transport hazard class(es)</b>  |  |
| · <b>ADR</b>  |  |
|  |  |
| · <b>Class</b>  | 3 (F1) Flammable liquids.  |
| · <b>Label</b>  | 3  |
| · <b>IMDG, IATA</b>   |  |
|  |  |
| · <b>Class</b>  | 3 Flammable liquids.   |
| · <b>Label</b>  | 3  |
| · <b>14.4 Packing group</b>   |  |
| · <b>ADR, IMDG, IATA</b>  | II   |

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· 14.5 Environmental hazards:	Not applicable.
· 14.6 Special precautions for user	Warning: Flammable liquids.
· Danger code (Kemler):	33
· EMS Number:	F-E,S-E
· Segregation groups	Alkalis
· Stowage Category	B
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	1L
· Transport category	2
· Tunnel restriction code	D/E
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1993 FLAMMABLE LIQUID, N.O.S. (METHYL ISOBUTYL CARBINOL, 1,2,4-TRIMETHYLBENZENE, 2-BUTOXYETHANOL, DISTILLATES (PETROLEUM), HYDROTREATED LIGHT), 3, II

**SECTION 15: Regulatory information**

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

No REACH Annex XVII restrictions  
Contains no REACH candidate substance

## · Directive 2012/18/EU

- Named dangerous substances - ANNEX I ammonia, anhydrous
- Seveso category P5c FLAMMABLE LIQUIDS
- Qualifying quantity (tonnes) for the application of lower-tier requirements 5,000 t
- Qualifying quantity (tonnes) for the application of upper-tier requirements 50,000 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 5

## · 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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- **Issue Date:** 17/JUL/2017

- **Contact:** Engineering Department

- **Revision Changes:** v 2.0 - initial SDS release (17/JUL/2017)

- **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)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

Flam. Gas 2: Flammable gases – Category 2

Press. Gas C: Gases under pressure – Compressed gas

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Acute Tox. 4: Acute toxicity – Category 4

Acute Tox. 3: Acute toxicity – Category 3

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Carc. 2: Carcinogenicity – Category 2

Carc. 2: Carcinogenicity – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard – Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard – Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3

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