

Safety Data Sheet

Issue date: 12/01/2015

v 2

Last Revision Date: 06/25/2015

1 Identification· **Product identifier**· **Trade name: MotorVac CarbonClean MV-5**· **Part number:** 400-0050· **Application of the substance / the mixture** engine cleansing solution· **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

Phone: (905) 615-8620

email: customerservice@motorvac.com

· **Emergency telephone number:**

CHEMTREC International +1 (703) 527-3887 (outside the US), 1-800-424-9300 (in the US) 24 hr

2 Hazard(s) identification

Classified according to the criteria of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), OSHA Hazardous Communication Standard (29 CFR 1910.1200) and the Canadian Controlled Products Regulations.

· **Classification of the substance or mixture**

Flam. Aerosol 1 H222 Extremely flammable aerosol. Pressurized container. May burst if heated.

Press. Gas H280 Contains gas under pressure; may explode if heated.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Muta. 1B H340 May cause genetic defects.

Carc. 1B H350 May cause cancer.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

Aquatic Acute 3 H402 Harmful to aquatic life.

· **Label elements**· **GHS label elements**

The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms**

GHS02 GHS04 GHS07 GHS08

· **Signal word** Danger· **Hazard-determining components of labeling:**

Naphtha (petroleum), light alkylate

Solvent naphtha (petroleum), light arom.

Distillates (petroleum), sweetened middle

· **Hazard statements**

Extremely flammable aerosol. Pressurized container. May burst if heated.

Contains gas under pressure; may explode if heated.

Causes skin irritation.

Causes serious eye irritation.

May cause genetic defects.

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May cause cancer.

May be fatal if swallowed and enters airways.

Harmful to aquatic life.

· **Precautionary statements**

Obtain special instructions before use.

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Do not pierce or burn, even after use.

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

Wear protective gloves/protective clothing/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

IF exposed or concerned: Get medical advice/attention.

Do NOT induce vomiting.

Store locked up.

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

Store in a well-ventilated place.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· **Additional information:**

Restricted to professional users.

Buildup of explosive mixtures possible without sufficient ventilation.

· **Other hazards**

· **Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

3 Composition/information on ingredients

· **Chemical characterization: Mixtures**

· **Description:** Mixture: consisting of the following hazardous components.

· **Chemical components:**

64741-66-8	Naphtha (petroleum), light alkylate	25-50%
74-98-6	propane	10-<25%
111-76-2	2-butoxyethanol	≤10%
64742-95-6	Solvent naphtha (petroleum), light arom.	≤10%
108-11-2	4-methylpentan-2-ol	2.5-<10%
112-80-1	oleic acid, pure	2.5-<10%
64741-86-2	Distillates (petroleum), sweetened middle	0.1-≤2.5%
64742-94-5	Solvent naphtha (petroleum), heavy arom.	0.1-≤2.5%
1336-21-6	ammonia	0.1-<1%
91-20-3	naphthalene	0.1-≤2.5%

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

4 First-aid measures

· **Description of first aid measures**

· **After inhalation:**

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

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- **After skin contact:**
Immediately rinse with water. Immediately remove all contaminated clothing. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse.
- **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:**
Do not induce vomiting; immediately call for medical help.
A person vomiting while lying on their back should be turned onto their side.
- **Information for doctor:**
 - **Most important symptoms and effects, both acute and delayed**
Headache
Dizziness
May cause nose, throat, and lung irritation.
Harmful if swallowed. May be fatal if swallowed and enters airways. Swallowing a small quantity of this material will result in serious health hazard.
Irritating to skin and eyes. Could cause dermatitis. Will cause nausea and vomiting.
See section 11.
 - **Indication of any immediate medical attention and special treatment needed**
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
Treat Symptomatically

5 Fire-fighting measures

- **Extinguishing media**
 - **Suitable extinguishing agents:** CO₂, sand, extinguishing powder. Do not use water.
 - **For safety reasons unsuitable extinguishing agents:** Water
- **Special hazards arising from the substance or mixture**
See section 10 for additional information.
- **Advice for firefighters**
 - **Protective equipment:**
Recommend wearing self-contained breathing apparatus. Water may cause splattering.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Particular danger of slipping on leaked/spilled product.
- **Environmental precautions:**
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.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **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.

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7 Handling and storage· **Handling:**· **Precautions for safe handling**

Open and handle receptacle with care.

Use only in well ventilated areas.

Avoid contact with the eyes and skin.

Avoid contact with clothing.

Avoid splashes or spray in enclosed areas.

· **Information about protection against explosions and fires:**

Do not spray on a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

Pressurized 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.

· **Conditions for safe storage, including any incompatibilities**· **Storage:**· **Requirements to be met by storerooms and receptacles:**

Observe official regulations on storing packagings with pressurized containers.

See section 10 for incompatible materials.

· **Information about storage in one common storage facility:** Not required.· **Further information about storage conditions:**

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

· **Specific end use(s)** No further relevant information available.**8 Exposure controls/personal protection**· **Control parameters**· **Components with limit values that require monitoring at the workplace:****111-76-2 2-butoxyethanol ($\leq 10\%$)**PEL (USA) TWA: 240 mg/m³, 50 ppm

Skin

REL (USA) TWA: 24 mg/m³, 5 ppm

Skin

TLV (USA) TWA: 97 mg/m³, 20 ppm

BEI

EL (Canada) TWA: 20 ppm

EV (Canada) TWA: 20 ppm

Skin

108-11-2 4-methylpentan-2-ol (2.5-<10%)PEL (USA) TWA: 100 mg/m³, 25 ppm

Skin

REL (USA) STEL: 165 mg/m³, 40 ppmTWA: 100 mg/m³, 25 ppm

Skin

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TLV (USA)	STEL: 167 mg/m ³ , 40 ppm TWA: 104 mg/m ³ , 25 ppm Skin
EL (Canada)	STEL: 40 ppm TWA: 25 ppm Skin
EV (Canada)	STEL: 167 mg/m ³ , 40 ppm TWA: 104 mg/m ³ , 25 ppm Skin

Ingredients with biological limit values:

111-76-2 2-butoxyethanol (≤10%)

BEI (USA)	200 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid with hydrolysis
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· **Additional information:** The lists that were valid during the creation were used as basis.

· **Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Store protective clothing separately.

· **Breathing equipment:**

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**



Chemical resistant protective gloves

· **Eye protection:**



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

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· Information on basic physical and chemical properties	
· General Information	
· Appearance:	
· Form:	Liquid
· Color:	Yellow
· Odor:	Characteristic
· Odor threshold:	Not determined.
· pH-value at 20 °C:	9.2
· Change in condition	
· Melting point/Melting range:	Undetermined.

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· Boiling point/Boiling range:	-44 °C
· Flash point:	-97 °C
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	240 °C
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Explosion limits:	
· Lower:	0.7 Vol %
· Upper:	10.9 Vol %
· Vapor pressure at 20 °C:	8300 hPa
· Density:	Not determined.
· Relative density at 20 °C	0.817
· Vapor density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
· Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic:	Not determined.
· Solvent content:	
· Organic solvents:	76.6 %
· Other information	No further relevant information available.

10 Stability and reactivity

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

11 Toxicological information

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

· LD/LC50 values that are relevant for classification:		
ATE (Acute Toxicity Estimates)		
Oral	LD50	4700 mg/kg (rat)
Dermal	LD50	4000 mg/kg (rab)
Inhalative	LC50/4 h (vapor)	41.1 mg/L

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111-76-2 2-butoxyethanol

Oral	LD50	470 mg/kg (rat)
Dermal	LD50	400 mg/kg (rab)
Inhalative	LC50/4 h (vapor)	11 mg/L (ATE)

64742-95-6 Solvent naphtha (petroleum), light arom.

Oral	LD50	>6800 mg/kg (rat)
Dermal	LD50	>3400 mg/kg (rab)
Inhalative	LC50/4 h (vapor)	>10.2 mg/L (rat)

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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64741-86-2 Distillates (petroleum), sweetened middle

Inhalative	LC50/4 h (vapor)	4.6 mg/L (rat)
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91-20-3 naphthalene

Oral	LD50	490 mg/kg (rat)
Dermal	LD50	5000 mg/kg (rat)

· **Primary irritant effect:**

- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** May cause eye irritation.
- **Inhalation:** Do not inhale, can cause respiratory system irritation.
- **Ingestion:** May be fatal if swallowed and enter airways.

· **Sensitization:** No sensitizing effects known.· **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Carcinogenic.

· **Carcinogenic categories**· **IARC (International Agency for Research on Cancer)**

111-76-2	2-butoxyethanol	3
91-20-3	naphthalene	2B
102-71-6	2,2',2"-nitrioltriethanol	3

· **NTP (National Toxicology Program)**

91-20-3	naphthalene	R
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· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

12 Ecological information· **Toxicity**· **Aquatic toxicity:**

Harmful to aquatic life with long lasting effects.

111-76-2 2-butoxyethanol

EC50 (48 h)	>1000 mg/L (daphnia)
LC50 (96 h) (static)	1490 mg/L (Lepomis macrochirus)

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112-80-1 oleic acid, pure	
LC50 (96 h)	205 mg/L (fish)

- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**

· 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)

- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
 - **General notes:**
 - 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.
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.
- **Other adverse effects** Avoid release to the environment.

13 Disposal considerations

- **Waste treatment methods**
 - **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
 - **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number	
· DOT, IMDG, IATA	UN1950
· TDG	UN1950
· UN proper shipping name	
· DOT, IATA	Aerosols, flammable
· TDG	Aerosols, flammable
· IMDG	AEROSOLS
· Transport hazard class(es)	
· DOT	
	
· Class	2.1
· Label	2.1
· TDG	
· Class	2.1

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· Label	2.1
· IMDG, IATA	
	
· Class	2.1
· Label	2.1
· Packing group	
· DOT, IMDG, IATA	Not Regulated
· TDG	Not Regulated
· Environmental hazards:	
· Marine pollutant:	No
· Special precautions for user	Warning: Gases
· Danger code (Kemler):	-
· EMS Number:	F-D,S-U
· Segregation groups	Ammonium compounds
· Stowage Code	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
· Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· DOT (Size/package type):	LTD QTY, ORM-D (503 mL/can)
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1

NA

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15 Regulatory information

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

· **Sara**

· **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

· **Section 313 (Specific toxic chemical listings):**

111-76-2	2-butoxyethanol
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1336-21-6	ammonia
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91-20-3	naphthalene
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· **TSCA (Toxic Substances Control Act):**

All ingredients are listed.

· **Proposition 65**

· **Chemicals known to cause cancer:**

91-20-3	naphthalene
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· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenic categories**

· **EPA (Environmental Protection Agency)**

111-76-2	2-butoxyethanol	NL
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91-20-3	naphthalene	C, CBD
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· **TLV (Threshold Limit Value established by ACGIH)**

111-76-2	2-butoxyethanol	A3
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91-20-3	naphthalene	A4
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· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **Canadian substance listings:**

· **Canadian Domestic Substances List (DSL)**

All ingredients are listed.

· **Canadian Ingredient Disclosure list (limit 0.1%)**

None of the ingredients is listed.

· **Canadian Ingredient Disclosure list (limit 1%)**

111-76-2	2-butoxyethanol
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108-11-2	4-methylpentan-2-ol
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112-80-1	oleic acid, pure
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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.

- **Contact:** Engineering Department
 - **Issue Date** December 1, 2015
 - **Revision Changes:**
 - v 1.0 - original SDS release (June 25, 2015)
 - v 2.0 - modification to section 2 (December 1, 2015)
 - **Abbreviations and acronyms:**
 - 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. Aerosol 1: Flammable aerosols, Hazard Category 1
 - Press. Gas: Gases under pressure: Compressed gas
 - Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2
 - Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A
 - Muta. 1B: Germ cell mutagenicity, Hazard Category 1B
 - Carc. 1B: Carcinogenicity, Hazard Category 1B
 - Asp. Tox. 1: Aspiration hazard, Hazard Category 1
 - Aquatic Acute 3: Hazardous to the aquatic environment - AcuteHazard, Category 3

NA