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

- · 1.1 Product identifier
 - · Product name: MV CarbonClean MV4
 - · Part number: 400-0030
 - · Application of the substance / the mixture fuel cleaner additive
- · 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

Phone: (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. 3 H226 Flammable liquid and vapour.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 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.

- · 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:

Solvent naphtha (petroleum), light arom.

Solvent naphtha (petroleum), heavy arom.

Distillates (petroleum), hydrotreated heavy naphthenic

· Hazard statements

H226 Flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H340 May cause genetic defects.

H350 May cause cancer.

H304 May be fatal if swallowed and enters airways.

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· Precautionary statements

P201 Obtain special instructions before use.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse

skin with water/shower.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P370+P378 In case of fire: Use for extinction: CO2, sand, extinguishing powder.

P301+P310+P331 IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT

induce vomiting.

P403+P235 Store in a well-ventilated place. Keep cool.

P501 Dispose of contents/container in accordance with local/regional/national/

international regulations.

· Additional information:

Restricted to professional users.

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

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

· Dangerous components:		
CAS: 64742-95-6 EINECS: 265-199-0	Solvent naphtha (petroleum), light arom. Flam. Liq. 3, H226; Muta. 1B, H340; Carc. 1B, H350; Asp. Tox. 1, H304	10-<25%
CAS: 64742-94-5 EINECS: 265-198-5	Solvent naphtha (petroleum), heavy arom.	10-<25%
CAS: 108-93-0 EINECS: 203-630-6	cyclohexanol Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; STOT SE 3, H335	2.5-<10%
CAS: 111-76-2 EINECS: 203-905-0	2-butoxyethanol Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	2.5-<10%
CAS: 64742-52-5 EINECS: 265-155-0	Distillates (petroleum), hydrotreated heavy naphthenic Carc. 1B, H350	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	1-≤2.5%

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

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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 persist.

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

· 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:

A person vomiting while laying on their back should be turned onto their side.

Rinse mouth with water.

Remove victim to fresh air and keep at rest in a position comfortable for breathing.

If conscious, give small quantities of water to drink.

Stop if victim feels sick.

Do not induce vomitting.

If symptoms persist consult doctor.

4.2 Most important symptoms and effects, both acute and delayed

Coughing

Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Harmful if swallowed. May be fatal if swallowed and enters airways. Swallowing a small quantity of this material will result in serious health hazard.

May cause respiratory tract irritation.

Skin irritant

- · Information for doctor: Treat Symptomatically
- · 4.3 Indication of any immediate medical attention and special treatment needed

Medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
 - Suitable extinguishing agents: CO2, 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.

Ensure adequate ventilation

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Use respiratory protective device against the effects of fumes/dust/aerosol.

Do not touch or walk through spilled material.

· 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.

Prevent from spreading (e.g. by damming-in or oil barriers).

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.

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

Open and handle receptacle with care.

Avoid contact with the eyes and skin.

Avoid contact with clothing.

Use only in well ventilated areas.

Avoid splashes or spray in enclosed areas.

Keep in the original containers.

See section 8 for personal protective equipment.

Do not reuse container.

· Information about fire - and explosion protection:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

· 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.

Store in cool, dry, dark place, away from 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.

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· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

108-93-0 cyclohexanol (2.5-<10%)

WEL Long-term value: 208 mg/m³, 50 ppm

111-76-2 2-butoxyethanol (2.5-<10%)

WEL Short-term value: 246 mg/m³, 50 ppm

Long-term value: 123 mg/m³, 25 ppm

Sk, BMGV

· Ingredients with biological limit values:

111-76-2 2-butoxyethanol (2.5-<10%)

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

Store protective clothing separately.

Do not eat, drink, smoke or sniff while working.

· 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.

· Body protection: Protective work clothing

SECTION 9: Physical and chemical properties

- 9.1 Information on basic physical and chemical properties
 - · General Information
 - · Appearance:

· Form:

Liquid

· Colour:

Amber coloured

· Odour:

Petrol-like

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· Odour threshold:	Not determined.			
· pH-value at 20 ℃:	9.3			
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Undetermined. 160 ℃			
· Flash point:	45 ℃			
· Flammability (solid, gaseous):	Not applicable.			
· Ignition temperature:	240 ℃			
· 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: · Lower: · Upper:	0.7 Vol % 7.5 Vol %			
· Vapour pressure at 20 °C:	5 hPa			
 Density: Relative density Vapour density Evaporation rate 	Not determined. Not determined. Not determined. Not determined.			
· Solubility in / Miscibility with · water:	Not miscible or difficult to mix.			
· Partition coefficient (n-octanol/wat	· Partition coefficient (n-octanol/water): Not determined.			
· Viscosity: · Dynamic: · Kinematic:	Not determined. Not determined.			
· Solvent content: · Organic solvents:	27.5 %			
· Solids content: · 9.2 Other information	7.5 % 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: Strong Oxidizers

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• 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

· LD/	· LD/LC50 values relevant for classification:				
ATE (Acu	ATE (Acute Toxicity Estimates)				
Oral	LD50	5103 mg/kg (rat)			
Dermal	LD50	4060 mg/kg (rab)			
Inhalative	LC50/4 h	16.5 mg/l			
64742-95-	64742-95-6 Solvent naphtha (petroleum), light arom.				
Oral	LD50	>6800 mg/kg (rat)			
Dermal	LD50	>3400 mg/kg (rab)			
Inhalative	LC50/4 h	>10.2 mg/l (rat)			
108-93-0	108-93-0 cyclohexanol				
Oral	LD50	2060 mg/kg (rat)			
Inhalative	LC50/4 h	11 mg/l (ATE)			
111-76-2 2	2-butoxye	thanol			
Oral	LD50	470 mg/kg (rat)			
Dermal	LD50	400 mg/kg (rab)			
Inhalative	LC50/4 h	2.2 mg/l (rat)			
112-80-1	112-80-1 oleic acid, pure				
Oral	LD50	74000 mg/kg (rat)			

- Primary irritant effect:
 - · Skin corrosion/irritation

Causes skin irritation.

· Serious eye damage/irritation

Causes serious eye irritation.

- · Inhalation: May cause respiratory tract irritation.
- · Ingestion: Irritating to mouth, throat and stomach.
- · Respiratory or skin sensitisation

Based on available data, the classification criteria are not met.

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
 - · Germ cell mutagenicity

May cause genetic defects.

· Carcinogenicity

May cause cancer.

- · 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.

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SECTION 12: Ecological information

· 12.1 Toxicity

 Aquatic toxicity 	•		
111-76-2 2-butoxyethanol			
	>1000 mg/L (daphnia)		
LC50 (96 h) (static)	1490 mg/l (Lepomis macrochirus)		
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

112-80-1 oleic acid, pure

Bioaccumulation LogPow 7.73 (-) (potential high)

- · 12.4 Mobility in soil No further relevant information available.
 - · Additional ecological information:
 - General notes:

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.

- 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.

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

SECTION 14: Transport information				
· 14.1 UN-Number · ADR, IMDG, IATA	UN1993			
· 14.2 UN proper shipping name · ADR	UN1993 FLAMMABLE LIQUID, N.O.S. (Solver naphtha (petroleum), light arom., 2 butoxyethanol, cyclohexanol)			
· IMDG, IATA	FLAMMABLE LIQUID, N.O.S. (Solvent naphth (petroleum), light arom., 2-butoxyethano cyclohexanol)			

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(Contd. of page 8) · 14.3 Transport hazard class(es) · ADR · Class 3 (F1) Flammable liquids. · Label · IMDG, IATA · Class 3 Flammable liquids. · Label · 14.4 Packing group · ADR, IMDG, IATA Ш · 14.5 Environmental hazards: · Marine pollutant: No · 14.6 Special precautions for user Warning: Flammable liquids. Danger code (Kemler): 30 · EMS Number: F-E,S-E · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code Not applicable. · Transport/Additional information: · ADR · Limited quantities (LQ) 5L · Transport category 3 · Tunnel restriction code D/E ·IMDG · Limited quantities (LQ) 5L Excepted quantities (EQ) Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml · UN "Model Regulation": UN 1993 FLAMMABLE LIQUID, N.O.S. (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM., 2-BUTOXYETHÁNOL, CYCLOHEXANOL), 3, III

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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 None of the ingredients is listed.
- · National regulations:
 - · Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation. Exceptions can be made by the authorities in certain cases.

· 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.

- · Issue Date: August 27, 2015
 - · Relevant phrases

H226 Flammable liquid and vapour.

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 eve irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H340 May cause genetic defects.

H350 May cause cancer.

- · Contact: Engineering Department
 - · Revision Changes: v 1.0 original SDS release (August 27, 2015)
 - · 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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent

Flam. Liq. 3: Flammable liquids, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

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Muta. 1B: Germ cell mutagenicity, Hazard Category 1B Carc. 1B: Carcinogenicity, Hazard Category 1B STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 Asp. Tox. 1: Aspiration hazard, Hazard Category 1