Issue date: 09/08/2016 v 2 Last Revision Date: 09/17/2015

#### 1 Identification

- · Product identifier
  - Trade name: CarbonClean Gas/Petrol Injection Cleaner

· Part number: 400-2001, 400-2001EU

- · 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
- · 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

· Classification of the substance or mixture

Flam. Lig. 3 H226 Flammable liquid and vapor.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

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 Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- · Label elements
  - · GHS label elements

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

· Hazard pictograms





GHS02 GHS07 GHS08



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

Solvent naphtha (petroleum), light arom.

· Hazard statements

Flammable liquid and vapor.

Causes skin irritation.

Causes serious eye irritation.

May cause an allergic skin reaction.

May cause genetic defects.

May cause cancer.

May be fatal if swallowed and enters airways.

Harmful to aquatic life with long lasting effects.

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#### · Precautionary statements

Obtain special instructions before use.

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

Wash thoroughly after handling.

Avoid breathing dust/fume/gas/mist/vapors/spray

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

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Wash contaminated clothing before reuse.

IF exposed or concerned: Get medical advice/attention.

Do NOT induce vomiting.

Store in a well-ventilated place. Keep cool.

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

- · 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:			
64742-95-6	Solvent naphtha (petroleum), light arom.	50-100%	
	2-butoxyethanol	10-<25%	
64741-86-2	Distillates (petroleum), sweetened middle	2.5-<10%	
61791-44-4	Ethanol, 2,2'-iminobis-, N-tallow alkylderivs.	1-≤2.5%	
	n,n'-Disalicylidene-1,2-propanediamine	1-≤2.5%	
64742-54-7	Distillates (petroleum), hydrotreated heavy paraffinic	0.1-≤2.5%	
95-63-6	1,2,4-trimethylbenzene	0.1-<1%	
	naphthalene	0.1-≤2.5%	
100-41-4	ethylbenzene	0.1-≤2.5%	

<sup>·</sup> 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.

· After skin contact:

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation continues, consult a doctor.

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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:

Do not induce vomiting; immediately call for medical help.

A person vomiting while lying 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.

· Information for doctor: Treat Symptomatically

#### · Most important symptoms and effects, both acute and delayed

May cause eye irritation. Symptons may include discomfort or pain, excessive blinking and tear production, with possible redness and swelling.

Headache

Dizziness

Disorientation

Coughing

Nausea

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.

May cause skin irritation. Symptoms may include redness, drying, defatting and cracking of the skin. Repeated exposure to this material can result in absorption through skin causing significant health hazard.

· 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.

# **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:

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.

# 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Particular danger of slipping on leaked/spilled product.

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

Do not touch or walk through spilled material.

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#### · 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).

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:

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

#### · 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 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.

Keep in the original containers.

See section 8 for personal protective equipment.

Do not reuse container.

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

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Keep respiratory protective device available.

#### · 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 receptacle tightly sealed.
- · 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 (10-<20%)

PEL (USA) TWA: 240 mg/m<sup>3</sup>, 50 ppm

Skin

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	(Contd. of page 4)				
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				
91-20-3 naphthalene (0.25-<1%)					
PEL (USA)	TWA: 50 mg/m³, 10 ppm				
REL (USA)	STEL: 75 mg/m³, 15 ppm TWA: 50 mg/m³, 10 ppm				
TLV (USA)	TWA: 52 mg/m³, 10 ppm Skin; BEI				
EL (Canada)	STEL: 15 ppm TWA: 10 ppm Skin; IARC 2B				
EV (Canada)	STEL: 78 mg/m³, 15 ppm TWA: 52 mg/m³, 10 ppm				
· Ing	· Ingredients with biological limit values:				
111-76-2 2-b	111-76-2 2-butoxyethanol (10-<20%)				
N T	00 mg/g creatinine Medium: urine Time: end of shift Parameter: Butoxyacetic acid with hydrolysis				

· 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.

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

# · 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.

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· Body protection: Protective work clothing

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# 9 Physical and chemical properties

· Information on basic physical and chemical properties

· General Information

· Appearance:

· Form:

· Color: yellow to light orange

Odor: CharacteristicOdor threshold: Not determined.

· pH-value: Not determined.

· Change in condition

· Melting point/Melting range: Undetermined.

· Boiling point/Boiling range: 162 °C

· Flash point: 45 °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

Liquid

air/vapor mixtures are possible.

· Explosion limits:

• **Lower**: 0.7 Vol % • **Upper**: 10.6 Vol %

· Vapor pressure at 20 °C: 5 hPa

· **Density:** Not determined.

Relative density
 Vapor density
 Evaporation rate
 Not determined.
 Not determined.
 Not determined.

· 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.

• Other information No further relevant information available.

# 10 Stability and reactivity

· Reactivity No further relevant information available.

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- · 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	4684 mg/kg			
Dermal	LD50	3311 mg/kg			
Inhalative	LC50/4 h (vapor)	10.2 mg/L			
64742-95-	6 Solvent naphth	a (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)			
	2-butoxyethanol				
Oral	LD50	1414 mg/kg (gpg)			
Dermal	LD50	2000 mg/kg (gpg)			
	LC50/4 h (vapor)	- '- '- '- '- '- '- '- '- '- '- '- '- '-			
		oleum), sweetened middle			
	LC50/4 h (vapor)				
61791-44-	4 Ethanol, 2,2'-im	ninobis-, N-tallow alkylderivs.			
Oral	LD50	100 mg/kg (ATE)			
94-91-7 n,	n'-Disalicylidene	-1,2-propanediamine			
Oral	LD50	1350 mg/kg (rat)			
Dermal	LD50	>2000 mg/kg (rat)			
95-63-6 1,	2,4-trimethylben				
Oral	LD50	5000 mg/kg (rat)			
Inhalative	LC50/4 h (vapor)	18 mg/L (rat)			
91-20-3 na	aphthalene				
Oral	LD50	490 mg/kg (rat)			
Dermal	LD50	5000 mg/kg (rat)			
	ethylbenzene				
Oral	LD50	3500 mg/kg (rat)			
Dermal	LD50	17800 mg/kg (rabbit)			
Inhalative	LC50/4 h (vapor)	17.8 mg/L (rat)			

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- · Primary irritant effect:
  - · on the skin: Irritant to skin and mucous membranes.
  - · on the eye: Causes serious eye irritation.
  - · Inhalation:

Do not inhale, can cause respiratory system irritation. coughing

- · Ingestion: May be fatal if swallowed and enter airways.
- · **Sensitization:** May produce an allergic reaction.
- · Additional toxicological information:

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

 Carcinogenic.

 • IARC (International Agency for Research on Cancer)

 111-76-2
 2-butoxyethanol
 3

 91-20-3
 naphthalene
 2B

 1330-20-7
 xylene
 3

 100-41-4
 ethylbenzene
 2B

 • NTP (National Toxicology Program)

91-20-3 naphthalene

• OSHA-Ca (Occupational Safety & Health Administration)

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.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
  - Bioaccumulative potential No further relevant information available.
  - · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
  - · Remark: Harmful to fish
- · 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.

Harmful to aquatic organisms

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

NΔ -

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# 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	UN1993
· UN proper shipping name · DOT	Flammable liquids, n.o.s. (Solvent naphtha
· IMDG, IATA	(petroleum), light arom.) FLAMMABLE LIQUID, N.O.S. (Solvent naphtha (petroleum), light arom.)
· Transport hazard class(es)	
· DOT	
FLAMABLE LIGHT	
· Class	3 Flammable liquids
· Label	3
· IMDG, IATA	
· Class · Label	3 Flammable liquids 3
· Packing group · DOT, IMDG, IATA	III
· Environmental hazards: · Marine pollutant:	No
Special precautions for user     Danger code (Kemler):     EMS Number:	Warning: Flammable liquids 30 F-E, <u>S-E</u>
Transport in bulk according to Anne MARPOL73/78 and the IBC Code	x II of Not applicable.

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· Transport/Additional information:

· Excepted quantities (EQ) Code: E1

Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000

ml

· IMDG

Limited quantities (LQ)Excepted quantities (EQ)5LCode: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000

ml

· UN "Model Regulation": UN 1993 FLAMMABLE LIQUIDS, N.O.S. (SOLVENT

NAPHTHA (PETROLEUM), LIGHT AROM.), 3, III

# 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

95-63-6 1,2,4-trimethylbenzene

91-20-3 naphthalene

1330-20-7 xylene

100-41-4 ethylbenzene

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

- · Proposition 65
  - · Chemicals known to cause cancer:

91-20-3 naphthalene

100-41-4 ethylbenzene

· 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.

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# · Carcinogenic categories

· E	· EPA (Environmental Protection Agency)				
111-76-2	2-butoxyethanol	NL			
91-20-3	naphthalene	C, CBD			
1330-20-7	xylene	I			
100-41-4	ethylbenzene	D			
· T	TLV (Threshold Limit Value established by ACGIH)				
111-76-2	2-butoxyethanol	A3			
91-20-3	naphthalene	A4			
1330-20-7	xylene	A4			
100-41-4	ethylbenzene	A3			
· N	· NIOSH-Ca (National Institute for Occupational Safety and Health)				
None of the	None of the ingredients is listed.				
· Can	· Canadian substance listings:				
· C	· Canadian Domestic Substances List (DSL)				
All ingredie	All ingredients are listed.				
· C	· Canadian Ingredient Disclosure list (limit 0.1%)				
95-63-6	I,2,4-trimethylbenzene				

# 16 Other information

100-41-4 ethylbenzene

111-76-2 2-butoxyethanol

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 08/SEP/2016
- · Revision Changes:

v 1.0 - initial SDS release (25/JUN/2015)

v 2.0 - revised (08/SEP/2016)

#### · 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

· Canadian Ingredient Disclosure list (limit 1%)

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. Liq. 3: Flammable liquids - Category 3

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

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

Skin Sens. 1: Skin sensitisation - Category 1

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Muta. 1B: Germ cell mutagenicity – Category 1B
Carc. 1B: Carcinogenicity – Category 1B
Asp. Tox. 1: Aspiration hazard – Category 1
Aquatic Chronic 3: Hazardous to the aquatic environment - long-term aquatic hazard – Category 3