Issue date: 11/12/2015 v 1 Last Revision Date: 11/12/2015

1 Identification

- · Product identifier
 - · Trade name: Motorvac DieselTune Complete Fuel Supplement
 - · Part number: 400-3022
 - · Application of the substance / the mixture diesel fuel additive
- · 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. Liq. 3 H226 Flammable liquid and vapor.

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H312 Harmful in contact with skin.

Acute Tox. 4 H332 Harmful if inhaled.
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 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:

2-butoxyethanol

Distillates (petroleum), hydrotreated light

Solvent naphtha (petroleum), light arom.

2-ethylhexyl nitrate

· Hazard statements

Flammable liquid and vapor.

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(Contd. of page 1)

Harmful if swallowed.

Harmful in contact with skin.

Harmful if inhaled.

Causes skin irritation.

Causes serious eve irritation.

May cause genetic defects.

May cause cancer.

May be fatal if swallowed and enters airways.

Harmful to aquatic life with long lasting effects.

· Precautionary statements

Obtain special instructions before use.

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

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 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:		
	Distillates (petroleum), hydrotreated light	40-50%
111-76-2	2-butoxyethanol	10-<20%
	2-ethylhexyl nitrate	10-<15%
64742-95-6	Solvent naphtha (petroleum), light arom.	2.5-<10%
64742-94-5	Solvent naphtha (petroleum), heavy arom.	2.5-<10%
	1,2,4-trimethylbenzene	≤2.5%
1330-20-7	xylene	1-≤2.5%
108-67-8	mesitylene	1-<2.5%
178535-25-6	Benzene, ethylenated, residues, distn. lights	0.1-<1%
	naphthalene	0.25-<1%
	ethylbenzene	0.1-<1%
102-25-0	1,3,5-triethylbenzene	0.1-<1%
98-82-8	cumene	0.1-<1%

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

NA

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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.

· After eve 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.
- · Information for doctor:
 - · Most important symptoms and effects, both acute and delayed

Headache

Dizziness

Disorientation

Nausea

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.

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.

Indication of any immediate medical attention and special treatment needed Medical supervision for at least 48 hours.

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.
- · 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.

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· 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

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

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect from heat.

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:

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

· Compone	· Components with limit values that require monitoring at the workplace:		
64742-47-8 D	64742-47-8 Distillates (petroleum), hydrotreated light (25-50%)		
EL (Canada)	TWA: 200 mg/m³ Skin		
111-76-2 2-bı	utoxyethanol (10-<20%)		
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		

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		(Contd. of page 4)
	95-63-6 1,2,4	-trimethylbenzene (≤2.5%)
	REL (USA)	TWA: 125 mg/m³, 25 ppm
	TLV (USA)	TWA: 123 mg/m³, 25 ppm
1330-20-7 xylene (1-≤2.5%)		lene (1-≤2.5%)
	PEL (USA)	TWA: 435 mg/m³, 100 ppm
	REL (USA)	STEL: 655 mg/m³, 150 ppm TWA: 435 mg/m³, 100 ppm
	TLV (USA)	STEL: 651 mg/m³, 150 ppm TWA: 434 mg/m³, 100 ppm BEI
	EL (Canada)	STEL: 150 ppm TWA: 100 ppm
	EV (Canada)	STEL: 650 mg/m³, 150 ppm TWA: 435 mg/m³, 100 ppm
	108-67-8 mes	sitylene (0.1-<2.5%)
	REL (USA)	TWA: 125 mg/m³, 25 ppm
	TLV (USA)	TWA: 123 mg/m³, 25 ppm
	91-20-3 naph	nthalene (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
	_	redients with biological limit values:
		utoxyethanol (10-<20%)
		00 mg/g creatinine
		ledium: urine ime: end of shift
		arameter: Butoxyacetic acid with hydrolysis
		lene (1-≤2.5%)
	-	.5 g/g creatinine
	M	ledium: urine
		ime: end of shift
		arameter: Methylhippuric acids onal information: The lists that were valid during the creation were used as basis

· 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.

Avoid contact with the eyes and skin.

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Safety Data Sheet

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· 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

· Partition coefficient (n-octanol/water): Not determined.

9 Physical and chemical properties

Information on basic physical and che General Information	mical properties
· Appearance:	
· Form:	Liquid
Color:	Amber colored
· Odor:	Petrol-like
· Odor 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:	210 °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:	0.5 Vol %
· Upper:	10.6 Vol %
· Vapor pressure at 20 °C:	2 hPa
· Density:	Not determined.
Relative density	Not determined.
Vapor density	Not determined.
· Evaporation rate	Not determined.
· Solubility in / Miscibility with	
· Water:	Not miscible or difficult to mix.

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· Viscosity:

Dynamic: Not determined.Kinematic: Not determined.

· Solvent content:

· Organic solvents: 27.9 %

• 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: No further relevant information available.
- · Hazardous decomposition products: May include, and are not limited to: oxides of carbon.

11 Toxicological information

- · Information on toxicological effects
 - · Acute toxicity:

· LD/	· LD/LC50 values that are relevant for classification:		
Oral	LD50	1833 mg/kg	
Dermal	LD50	1985 mg/kg	
Inhalative	LC50/4 h (vapor)	19.3 mg/L	
111-76-2 2	2-butoxyethanol		
Oral	LD50	470 mg/kg (rat)	
Dermal	LD50	400 mg/kg (rab)	
Inhalative	LC50/4 h (vapor)	3.9 mg/L (rat)	
27247-96-	7 2-ethylhexyl nit	rate	
Oral	LD50	500 mg/kg (ATE)	
Dermal	LD50	1100 mg/kg (ATE)	
Inhalative	LC50/4 h (vapor)	11 mg/L (ATE)	
64742-95-	64742-95-6 Solvent naphtha (petroleum), light arom.		
Oral	LD50	>6800 mg/kg (rat)	
Dermal	LD50	>3400 mg/kg (rab)	
95-63-6 1,	2,4-trimethylbenz	ene	
Oral	LD50	5000 mg/kg (rat)	
Inhalative	LC50/4 h (vapor)	18 mg/L (rat)	
1330-20-7	1330-20-7 xylene		
Oral	LD50	4300 mg/kg (rat)	
Dermal	LD50	2000 mg/kg (rabbit)	
Inhalative	LC50/4 h (vapor)	6700 mg/L (rat)	
		(Contd. on page 8)	

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		(Contd. of page	
178535-25	178535-25-6 Benzene, ethylenated, residues, distn. lights		
Oral	LD50	>2000 mg/kg (rat)	
91-20-3 na	aphthalene		
Oral	LD50	490 mg/kg (rat)	
Dermal	LD50	5000 mg/kg (rat)	
100-41-4 e	ethylbenzene		
Oral	LD50	3500 mg/kg (rat)	
Dermal	LD50	17800 mg/kg (rabbit)	
Inhalative	LC50/4 h (vapor)	17.8 mg/L (rat)	
98-82-8 cเ	98-82-8 cumene		
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:
 - · on the skin: Irritant to skin and mucous membranes.
 - · on the eye: Irritating effect.
- Sensitization: No sensitizing effects known.
- Additional toxicological information:

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

Harmful

Irritant

Carcinogenic.

The product can cause inheritable damage.

· Carcinogenic categories

· [,	ARC (International Agency for Research on Cancer)		
111-76-2	2-butoxyethanol	3	
1330-20-7	xylene	3	
91-20-3	naphthalene	2B	
100-41-4	ethylbenzene	2B	
98-82-8	cumene	2B	
· NTP (National Toxicology Program)			
91-20-3 n	aphthalene	R	
98-82-8 c	umene	R	
· OSHA-Ca (Occupational Safety & Health Administration)			
None of th	None of the ingredients is listed.		

12 Ecological information

- · Toxicity
 - Aquatic toxicity:

Harmful to aquatic life with long lasting effects.

Γ	111-76-2 2-butoxyethanol		
Γ	EC50 (48 h)	>1000 mg/L (daphnia)	
١	LC50 (96 h) (static)	1490 mg/L (Lepomis macrochirus)	

Persistence and degradability No further relevant information available.

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· 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:

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.

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.

UN-Number DOT, IMDG, IATA	UN1993
· UN proper shipping name · DOT · IMDG, IATA	Flammable liquids, n.o.s. (Distillates (petroleum hydrotreated light, Solvent naphtha (petroleum light arom., Xylenes, 2-butoxyethanol) FLAMMABLE LIQUID, N.O.S. (Distillate (petroleum), hydrotreated light, Solvent naphth (petroleum), light arom., XYLENES, 2 butoxyethanol)
· Transport hazard class(es) · DOT	
FLAMMERE LIDIO	
•	

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· IMDG, IATA



· Class 3 Flammable liquids

· Label

· Packing group

· DOT, IMDG, IATA

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user Warning: Flammable liquids

Danger code (Kemler): 30 F-E,S-E

· Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

· Transport/Additional information:

· IMDG

Limited quantities (LQ)
 Excepted quantities (EQ)
 Code: E1

Maximum net quantity per inner packaging: 30

Ш

ml

Maximum net quantity per outer packaging:

1000 ml

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

(DISTILLATES (PETROLEUM), HYDROTREATED LIGHT, SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM., XYLENES, 2-BUTOXYETHANOL),

3, III

15 Regulatory information

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

· Sara

· Section 355	(extremely	' hazardous su	bstances):
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None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

111-76-2 2-butoxyethanol

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

1330-20-7 xylene

91-20-3 naphthalene

100-41-4 ethylbenzene

98-82-8 cumene

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· TSCA (Toxic Substances Control Act):

All ingredients are listed.

· Proposition 65

Γ	· Chemicals known to cause cancer:	
Γ	91-20-3	naphthalene
	100-41-4	ethylbenzene
Γ	98-82-8	cumene

· 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		
1330-20-7	xylene	I		
91-20-3	naphthalene	C, CB	3D	
100-41-4	ethylbenzene	D		
98-82-8	cumene	D, CB	3D	
· TLV (Threshold Limit Value established by ACGIH)				
111-76-2	2-butoxyethanol	Α	43	
1330-20-7	xylene	Α	44	
91-20-3	naphthalene	Α	44	
100-41-4	ethylbenzene	Δ	43	

· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

· Canadian substance listings:

· Ca	nadian	Domestic	Substances	List	(DSL))
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All ingredients are listed.

· Canadian Ingredient Disclosure list (limit 0.1%)

95-63-6	1,2,4-trimethylbenzen
108-67-8	mesitylene

100-41-4 ethylbenzene

· Canadian Ingredient Disclosure list (limit 1%)

111-76-2 2-butoxyethanol

Hazard pictograms







GHS02 GHS07 GHS08

· Signal word Danger

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Hazard-determining components of labeling:

2-butoxyethanol

Distillates (petroleum), hydrotreated light

Solvent naphtha (petroleum), light arom.

2-ethylhexyl nitrate

Hazard statements

Flammable liquid and vapor.

Harmful if swallowed.

Harmful in contact with skin.

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

May cause genetic defects.

May cause cancer.

May be fatal if swallowed and enters airways.

Harmful to aquatic life with long lasting effects.

Precautionary statements

Obtain special instructions before use.

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

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 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.

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 November 12, 2015
 - · Revision Changes: v 1.0 original SDS release (November 12, 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. 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. 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 Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3