Last Revision: 01.10.2015 Issue date: 01.10.2015 Version 1

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

- · 1.1 Product identifier
 - Product name: DieselTune MV3D Diesel Engine Detergent
 - · Part number: 400-0010
 - · Application of the substance / the mixture diesel fuel injector 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

Mississuga, 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. Lig. 3 H226 Flammable liquid and vapour.

Muta. 1B H340 May cause genetic defects.

Carc. 1B H350 May cause cancer.

STOT SE 3 H335 May cause respiratory irritation.

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

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

Solvent naphtha (petroleum), light arom.

4-methylpentan-2-ol

Solvent naphtha (petroleum), heavy arom.

Distillates (petroleum), hydrotreated heavy naphthenic

· Hazard statements

H226 Flammable liquid and vapour.

H340 May cause genetic defects.

H350 May cause cancer.

H335 May cause respiratory irritation.

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

Obtain special instructions before use. P201

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

sources. No smoking.

Use personal protective equipment as required. P281 P271 Use only outdoors or in a well-ventilated area.

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P312 Call a POISON CENTER/doctor if you feel unwell.

P331 Do NOT induce vomiting.

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

P405 Store locked up.

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	Solvent naphtha (petroleum), light arom.	25-50%	
EINECS: 265-199-0	Flam. Liq. 3, H226; Muta. 1B, H340; Carc. 1B, H350; Asp. Tox. 1, H304		
CAS: 64742-94-5	Solvent naphtha (petroleum), heavy arom.	25-50%	
EINECS: 265-198-5	Asp. Tox. 1, H304		
CAS: 108-11-2	4-methylpentan-2-ol	10-<25%	
EINECS: 203-551-7	Flam. Liq. 3, H226; STOT SE 3, H335		
CAS: 111-76-2	2-butoxyethanol	2.5-<10%	
EINECS: 203-905-0	Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319		
CAS: 64742-52-5	Distillates (petroleum), hydrotreated heavy naphthenic	2.5-<10%	
EINECS: 265-155-0	Carc. 1B, H350		

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

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:

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. Get immediate medical attention.

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.

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Product name: DieselTune MV3D Diesel Engine Detergent

(Contd. of page 2)

Stop if victim feels sick.

· 4.2 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

See section 11.

· 4.3 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

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

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.

· 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.

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See Section 13 for disposal information.

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SECTION 7: Handling and storage

· 7.1 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 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.

Protect from heat and 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.
- · 8.1 Control parameters
 - · Ingredients with limit values that require monitoring at the workplace:

108-11-2 4-methylpentan-2-ol (10-<25%)

WEL Short-term value: 170 mg/m³, 40 ppm Long-term value: 106 mg/m³, 25 ppm

Sk

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.

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Product name: DieselTune MV3D Diesel Engine Detergent

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· 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 General Information Appearance: 	chemical properties			
· Form:	Liquid			
· Colour:	Amber coloured			
· Odour:	Petroleum-like			
· Odour threshold:	Not determined.			
· pH-value:	Not determined.			
 Change in condition Melting point/Melting range: Boiling point/Boiling range: 	Undetermined. 131 °C			
· Flash point:	45 °C			
· Flammability (solid, gaseous):	Not applicable.			
· Ignition temperature:	240 °C			
· 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:	0.7 Vol %			
· Upper:	7.5 Vol %			
· Vapour pressure at 20 °C:	7 hPa			
	(0			

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Product name: DieselTune MV3D Diesel Engine Detergent

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Density at 20 °C: 0.885 g/cm³
 Relative density Not determined.
 Vapour density Not determined.
 Evaporation rate 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.

· Solvent content:

· Organic solvents: 38.5 %

• 9.2 Other information 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.
- \cdot 10.4 Conditions to avoid Heat, open flames, sparks.
- · 10.5 Incompatible materials: Strong Oxidizers
- 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:			
Oral	LD50	5529 mg/kg (rat)		
Dermal	LD50	4706 mg/kg (rab)		
Inhalative	LC50/4 h (vapor)	45.9 mg/L (rat)		
64742-95-	64742-95-6 Solvent naphtha (petroleum), light arom.			
Oral	LD50	>6800 mg/kg (rat)		
Dermal	LD50	>3400 mg/kg (rab)		
108-11-2	108-11-2 4-methylpentan-2-ol			
Oral	LD50	2590 mg/kg (rat)		
Dermal	LD50	3560 mg/kg (rabbit)		
111-76-2	111-76-2 2-butoxyethanol			
Oral	LD50	470 mg/kg (rat)		
Dermal	LD50	400 mg/kg (rab)		
Inhalative	LC50/4 h (vapor)	3.9 mg/L (rat)		
	Bullius and fault and afficial			

· Primary irritant effect:

· Skin corrosion/irritation May cause mild skin irritation.

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· Serious eye damage/irritation

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

· Inhalation:

Do not inhale, can cause respiratory system irritation. coughing

· Ingestion: May be fatal if swallowed and enter airways.

· 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

May cause respiratory irritation.

- · 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:

111-76-2 2-butoxyethanol

EC50 (48 h) >1000 mg/L (daphnia)

LC50 (96 h) (static) 1490 mg/L (Lepomis macrochirus)

- 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)

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

- · 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.

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

· 14.1 UN-Number · ADR, IMDG, IATA	UN1993
 14.2 UN proper shipping name ADR IMDG, IATA 	UN1993 FLAMMABLE LIQUID, N.O.S. (Solver naphtha (petroleum), light arom., METHY ISOBUTYL CARBINOL, 2-butoxyethanol) FLAMMABLE LIQUID, N.O.S. (Solvent naphth (petroleum), light arom., METHYL ISOBUTY CARBINOL, 2-butoxyethanol)
· 14.3 Transport hazard class(es)	
· ADR	
· Class · Label	3 (F1) Flammable liquids. 3
· IMDG, IATA	
· Class · Label	3 Flammable liquids. 3
· 14.4 Packing group · ADR, IMDG, IATA	III
 14.5 Environmental hazards: Marine pollutant: 	No
· 14.6 Special precautions for user	Warning: Flammable liquids.
Danger code (Kemler):EMS Number:	30
	F-E, <u>S-E</u>
 14.7 Transport in bulk according to Anne of Marpol and the IBC Code 	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
 Excepted quantities (EQ) 	Code: E1
	Maximum net quantity per inne packaging: 30 ml
	Maximum net quantity per oute
Table and the formation	packaging: 1000 ml
· Transport category	3

Product name: DieselTune MV3D Diesel Engine Detergent

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· Tunnel restriction code	D/E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Size/package type:	473 mL/bottle
· UN "Model Regulation":	UN 1993 FLAMMABLE LIQUID, N.O.S. (SOLVENT NAPHTHA (PETROLEUM), LIGHT AROM., METHYL ISOBUTYL CARBINOL, 2- BUTOXYETHANOL), 3, III

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.
 - · 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
- · 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: October 1, 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 eye 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 (October 1, 2015)

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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

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals 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 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

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