Issue date: 09/15/2016 Last Revision Date: 11/10/2015 v 2

1 Identification

- · Product identifier
 - · Trade name: Air Intake Cleaner
 - · Part number: 400-2018
 - · Application of the substance / the mixture Engine cleaner
- · 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. 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.

H361 Suspected of damaging fertility or the unborn child. Repr. 2

STOT SE 3 H336 May cause drowsiness or dizziness.

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.

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

- · Label elements
 - · GHS label elements

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

· Hazard pictograms









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

toluene

acetone

· 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.

Suspected of damaging fertility or the unborn child.

May cause drowsiness or dizziness.

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May cause damage to organs through prolonged or repeated exposure.

May be fatal if swallowed and enters airways.

· Precautionary statements

Obtain special instructions before use.

Do not breathe dust/fume/gas/mist/vapors/spray.

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

Do not pierce or burn, even after use.

Wash thoroughly after handling.

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

Wear protective gloves / 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.

Take off contaminated clothing and wash it before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor if you feel unwell.

Store locked up.

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

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

- · Additional information: For Professional Use Only
- · 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.

· Chemic	· Chemical components:	
67-64-1	acetone	25-50%
108-88-3	toluene	20-<25%
1330-20-7		20-<25%
123-42-2	4-hydroxy-4-methylpentan-2-one	1-≤2.5%
	propane	1-≤2.5%
	isobutane	1-≤2.5%
124-38-9	carbon dioxide	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:

Wash with soap and water for 20 minutes or until chemical is removed. Immediately remove all contaminated clothing. If skin irritation occurs, get medical attention. Launder contaminated clothing before reuse and discard leather articles saturated with the material.

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

Headache

Dizziness

Frost bites

Coughing

Nausea

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.

Cause nose, throat, and lung irritation.

Skin irritant

• 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: Mouth respiratory protective device.

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.

· 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.

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See Section 13 for disposal information.

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7 Handling and storage

- · Handling:
 - · Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
 - · Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

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.

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

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

Store in a cool location.

Observe official regulations on storing packagings with pressurized containers.

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

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

· Specific end use(s) No further relevant information available.

STEL: 560 mg/m³, 150 ppm TWA: 375 mg/m³, 100 ppm

TWA: 75 mg/m³, 20 ppm

BEI

8 Exposure controls/personal protection

· Control parameters

REL (USA)

TLV (USA)

· Compone	nts with limit values that require monitoring at the workplace:		
67-64-1 aceto	67-64-1 acetone (25-50%)		
PEL (USA)	TWA: 2400 mg/m³, 1000 ppm		
REL (USA)	TWA: 590 mg/m³, 250 ppm		
TLV (USA)	STEL: 1187 mg/m³, 500 ppm TWA: 594 mg/m³, 250 ppm BEI		
EL (Canada)	STEL: 500 ppm TWA: 250 ppm		
EV (Canada)	STEL: 750 ppm TWA: 500 ppm		
108-88-3 tolu	ene (20-<25%)		
PEL (USA)	TWA: 200 ppm CEV: 300; 500* ppm *10-min peak per 8-hr shift		

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		(Contd. of page 4)
EL (Canada)	TWA: 20 ppm	(conta. or page 4)
, , ,	R	
EV (Canada)	TWA: 20 ppm	
1330-20-7 xy	lene (20-<25%)	
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	
FL (Conodo)		
EL (Canada)	STEL: 150 ppm TWA: 100 ppm	
FV (Canada)	STEL: 650 mg/m³, 150 ppm	
Lv (Gariada)	TWA: 435 mg/m³, 100 ppm	
123-42-2 4-h	ydroxy-4-methylpentan-2-one (0.1-≤2.%)	
PEL (USA)	TWA: 240 mg/m³, 50 ppm	
REL (USA)	TWA: 240 mg/m³, 50 ppm	
TLV (USA)	TWA: 238 mg/m³, 50 ppm	
i i	TWA: 50 ppm	
' '	STEL: 360 mg/m ³ , 75 ppm	
, ,	TWA: 240 mg/m³, 50 ppm	
74-98-6 prop	ane (0.1-≤2.%)	
PEL (USA)	TWA: 1800 mg/m³, 1000 ppm	
REL (USA)	TWA: 1800 mg/m³, 1000 ppm	
TLV (USA)	refer to Appendix F inTLVs and BEIs book	
EL (Canada)	TWA: 1000 ppm	
EV (Canada)	TWA: 1.000 ppm	
75-28-5 isob	utane (0.1-≤2.%)	
TLV (USA)	STEL: 2370 mg/m³, 1000 ppm	
` ,	TWA: 800 ppm	
124-38-9 carl	bon dioxide (0.1-≤2.%)	
PEL (USA)	TWA: 9000 mg/m³, 5000 ppm	
REL (USA)	STEL: 54.000 mg/m³, 30.000 ppm	
	TWA: 9000 mg/m³, 5000 ppm	
TLV (USA)	STEL: 54.000 mg/m³, 30.000 ppm	
FL (Conodo)	TWA: 9000 mg/m³, 5000 ppm	
EL (Canada)	STEL: 15000 ppm TWA: 5000 ppm	
EV (Canada)	STEL: 54.000 mg/m³, 30.000 ppm	
Lv (Gariada)	TWA: 9.000 mg/m³, 5.000 ppm	
64742-47-8 D	istillates (petroleum), hydrotreated light (0.1-≤2.%)	
	TWA: 200 mg/m ³	
,	Skin	
_		(Contd. on page 6)

NΑ

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· Ingredients with biological limit values:

67-64-1 acetone (25-50%)

BEI (USA) 50 mg/L

Medium: urine Time: end of shift

Parameter: Acetone (nonspecific)

108-88-3 toluene (20-<25%)

BEI (USA) 0.02 mg/L

Medium: blood

Time: prior to last shift of workweek

Parameter: Toluene

0.03 mg/L Medium: urine Time: end of shift Parameter: Toluene

0.3 mg/g creatinine Medium: urine Time: end of shift

Parameter: o-Cresol with hydrolysis (background)

1330-20-7 xylene (20-<25%)

BEI (USA) 1.5 g/g creatinine

Medium: urine Time: end of shift

Parameter: Methylhippuric acids

· Additional information: The lists that were valid during the creation were used as basis.

· Exposure controls

- · Personal protective equipment:
 - · General protective and hygienic measures:

Wash hands before breaks and at the end of work.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Avoid contact with the eyes and skin.

· 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

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· Eye protection:

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

9 Physical and chemical propertie	es
· Information on basic physical and che	emical properties
· General Information	mean proportion
· Appearance:	
· Form:	Aerosol
· Color:	Light amber
· Odor:	hydrocarbon
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
 Melting point/Melting range: 	Undetermined.
 Boiling point/Boiling range: 	55 °C
· Flash point:	-17 °C
· Flammability (solid, gaseous):	Not applicable.
· Ignition temperature:	465 °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:	1.1 Vol %
· Upper:	13.0 Vol %
· Vapor pressure at 20 °C:	233 hPa
· Density at 20 °C:	0.828 S.G
Relative density	Not determined.
 Vapor density 	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with	
Water:	Not miscible or difficult to mix.
· Partition coefficient (n-octanol/wate	er): Not determined.
· Viscosity:	
· Dynamic:	Not determined.
· Kinematic:	Not determined.

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· 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/LC50 values that are relevant for classification:		
ATE (Acu	te Toxicity Estima	ates)
Oral	LD50	10780 mg/kg (rat)
Dermal	LD50	10000 mg/kg (rabbit)
67-64-1 ad	etone	
Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit)
108-88-3 t	oluene	
Oral	LD50	5000 mg/kg (rat)
Dermal	LD50	12124 mg/kg (rabbit)
Inhalative	LC50/4 h (vapor)	5320 mg/L (mouse)
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)
123-42-2	1-hydroxy-4-meth	ylpentan-2-one
Oral	LD50	4000 mg/kg (rat)
Dermal	LD50	13630 mg/kg (rab)
·	nami irritant affaa	

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

Do not inhale, can cause respiratory system irritation. asphyxiation

- · Ingestion: Result in central nervous system depression
- · Sensitization: No sensitizing effects known.

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Additional toxicological information:

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

Harmful

Irritant

- I.	ARC (International Agency for Research on Cancer)	
108-88-3	toluene	3
1330-20-7	xylene	3
- N	ITP (National Toxicology Program)	
None of th	e ingredients is listed	

OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
 - Aquatic toxicity: No further relevant information available.
- · 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.
- 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.

- · Results of PBT and vPvB assessment
 - · **PBT**: Not applicable.
 - · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

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

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(Contd. of page 9) UN proper shipping name · DOT Aerosols, flammable · IMDG **AEROSOLS** AEROSOLS, flammable ·IATA · Transport hazard class(es) · DOT · Class 2.1 · Label 2.1 · IMDG, IATA · Class 2.1 · Label 2.1 · Packing group · DOT, IMDG, IATA Not Regulated · Environmental hazards: · Marine pollutant: No · Special precautions for user Warning: Gases Danger code (Kemler): · EMS Number: F-D.S-U · 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. SG69 For AEROSOLS with a maximum capacity of · Segregation Code 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

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• Excepted quantities (EQ) Code: E0

Not permitted as Excepted Quantity

· UN "Model Regulation": UN 1950 AEROSOLS, 2.1

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):

108-88-3 toluene 1330-20-7 xylene

· TSCA (Toxic Substances Control Act):

All ingredients are listed.

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

None of the ingredients is listed.

· Chemicals known to cause reproductive toxicity for females:

108-88-3 toluene

· Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

· Chemicals known to cause developmental toxicity:

108-88-3 toluene

- · Carcinogenic categories
- EPA (Environmental Protection Agency)

 67-64-1 | acetone
 I

 108-88-3 | toluene
 II

 1330-20-7 | xylene
 I
 - TLV (Threshold Limit Value established by ACGIH)

 67-64-1
 acetone
 A4

 108-88-3
 toluene
 A4

 1330-20-7
 xylene
 A4
 - · 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.

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	(Contd. of page 1	11)
	Canadian Ingredient Disclosure list (limit 0.1%)	\Box
None of the	the ingredients is listed.	
	Canadian Ingredient Disclosure list (limit 1%)	ī
67-64-1	acetone	٦
108-88-3	toluene	П
	4-hydroxy-4-methylpentan-2-one	П
124-38-9	carbon dioxide	٦

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 15/SEP/2016
 - · Revision Changes:

v 1.0 - initial SDS release (01/JUN/2015)

v 2.0 - revised (15/SEP/2016)

· 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)

VOC: Volatile Organic Compounds (USA, EU)

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

Flam. Aerosol 1: Aerosols - Category 1

Press. Gas: Gases under pressure – Compressed gas

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

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

Repr. 2: Reproductive toxicity - Category 2

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2

Asp. Tox. 1: Aspiration hazard - Category 1

NA