MATERIAL SAFETY DATA SHEET

1 Product and Company Identification

Product Name: Intake System Cleaning Detergent
Identification Number: 400-0030 MV4
Product Use/Class: Intake System Cleaning Detergent

MotorVac Technologies, Inc.
1324 Blundell Road
Mississauga ON, L4Y1M5
Canada
905-615-8620
Emergency number : Chemtrec 1-800-424-9300 , outside North America (703)527-3887

2 Composition/Information on Ingredients

				OSHA PEL		ACGIH TWA		SARA	RQ
Item	**Chemical Name**	**CAS #**	**% by weight**	PPM	MG/M3	PPM	M/M3	Title III	LBS
01	Low Vapor Pressure Aliphatic Petroleum Distillates	Not specified	40-60	100	525	-	-		
02	Methyl Amyl alcohol	108-11-2	5-10	50	240	20	-	Yes	
03 (a,b)	Ethylene glycol monobutyl ether	111-76-2	5-10	50	200	50	200	Yes	

(A) Indicates an employee's skin exposure shall be prevented or reduced to the extent necessary in the circumstances through the use of gloves, coveralls, goggles, or other appropriate equipment.
(B) A "Yes" in the SARA Title III column in Section 2 indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.
(C) California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986, chemicals known to the sate to cause cancer or reproductive toxicity. A person in the course of doing business must warn others who may consume, come into contact with, or otherwise be exposed to this chemical.

Hazards Identification

****EMERGENCY OVERVIEW****

Straw colored liquid, potentially hazardous vapors. Flammable as defined by DOT and TDG for air/Ocean transport. Classified by DOT as Combustible for ground transport in containers less than 120 gallons. Classified as Combustible by OSHA. Can cause serious or fatal complications if swallowed. Can cause eye and skin irritation upon contact.

****Potential Health Effects****

Eye Contact: Contact causes severe irritation and pain associated with redness and swelling of the conjunctiva.

Skin Contact: Brief contact may cause slight irritation; prolonged contact may cause moderate reddening, swelling and possible necrosis.

Inhalation: High concentrations are irritating to the respiratory tract; may cause headache, dizziness, nausea, vomiting and malaise.

Ingestion: May result in vomiting; aspiration of vomitus into the lungs must be avoided; DO NOT induce vomiting. Minute amounts aspirated into the lungs can produce severe lung, chemical pneumonitis, pulmonary edema or death.

Carcinogenicity: NPT? No IARC Monographs? No OSHA Regulated? No

4 First Aid Measures

Eye Contact: Check for and remove contact lenses. Flush eyes with clear running water for 15 minutes while holding eyelids open; if irritation persists, seek medical attention.

Skin Contact: Remove contaminated clothing; wash affected area with soap & water; launder contaminated clothing before reuse; if irritation persists, seek medical attention.

Ingestion: DO NOT induce vomiting; if vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into lungs; seek immediate medical attention. Vomiting may be induced only under the supervision of a physician.

Inhalation: Remove affected person to fresh air; provide oxygen if breathing is difficult, administer CPR and seek emergency medical attention.

5 Fire Fighting Measures

Flash Point: 110°F (43.3°C)
(Method Used) TCC

Flammable Limits LEL: 1.0% UEL: 6.5%
Autoignition Temperature: Not determined NFPA Class: II

General Hazards: Product is combustible. Products of combustion include compounds of carbon, hydrogen and oxygen, including carbon monoxide.
Extinguishing Media: Carbon dioxide, water, water fog, dry chemical, chemical foam.
Fire Fighting Procedures: Self-contained respiratory equipment; cool containers to prevent pressure buildup and possible explosion when exposed to extreme heat.
Unusual Fire and Explosion Hazards: Closed containers can explode due to buildup of pressure when exposed to extreme heat.
Hazardous Combustion Products: Smoke, fumes and vapors, oxides of carbon.

6 Accidental Release Measures

Steps to be taken in case material is released or spilled: Combustible – Evacuate and ventilate area; remove all sources of sparks, ignition and open flames; confine and absorb into approved absorbent; place material into approved containers for disposal; do not wash to sewer or waterway. Refer to SARA Title III, Section 313 40 CFR 372 for detailed instructions concerning reporting requirements. Do not discharge into lakes, ponds, streams or public waters.

7 Handling and Storage

Precautions to be taken in handling and storage: This material is combustible. It should be stored in tightly closed containers in a cool, well ventilated area. Vapor may form explosive mixtures in air. All sources of ignition should be controlled. This material may be classified as COMBUSTIBLE by DOT unless transported by vessel or aircraft. Refer to 49 CFR 173.120. Keep this and other chemicals out of reach of children. Avoid inhaling concentrated fumes or vapors.

8 Exposure Controls/Personal Protection

Engineering Controls: The use of local exhaust ventilation is recommended to control emissions near the source. Provide mechanical ventilation of confined spaces. Use explosion-proof ventilation equipment.

Personal Protection:

Respiratory Protection: None required while threshold limits are kept below maximum allowable concentrations; if TWA exceeds limits, NIOSH approved respirator must be worn. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete Regulations.

Protective Gloves: Neoprene, butyl or nitrile rubber gloves with cuffs.

Eye Protection: Chemical splash goggles. Refer to 29 CFR 1910.133 or European Standard EN166.

Other Protective Clothing or Equipment: Coveralls, apron, or other equipment should be worn to minimize skin contact, safety eyewash station nearby.

Work/Hygienic Practices: Practice safe workplace habits. Minimize body contact with this, as well as all chemicals in general.

9 Physical and Chemical Properties

Vapor Pressure	17mm Hg @ 20°F	Vapor Density (Air=1)	>1
Specific Gravity (Water=1)	0.902	Evaporation Rate (Water=1)	<1
Solubility in Water	Emulsifies	Freezing Point	32°F
pH	Not determined	Appearance & Odor-	Straw colored liquid, characteristic hydrocarbon odor
Boiling Point	>212°F (>100°C)	Physical State	Liquid
Viscosity	Not specified	Volatile Organic Compounds (total VOC's) -1.4#/gal (160 grams/liter)	

10 Stability and Reactivity

Stability **Unstable:**
Stable: XXX

Conditions to Avoid: Extreme temperatures, open flames
Incompatibility (Materials to avoid): Strong oxidizers, strong acids.
Hazardous Decomposition or Byproducts: Decomposition will not occur if handled and stored properly. In case of a fire, oxides of carbon, hydrocarbons, fumes or vapors, and smoke may be produced.
Hazardous Polymerization May Occur:
Will Not Occur: XXX
Conditions to Avoid: None

11 Toxological Information

Hazardous Ingredients

----------Chemical Name----------	-----CAS #------	----------LD50---------	-----LC50---------
Petroleum distillate mixture, aliphatic & aromatic	Not specified	5000 MG/KG/Oral-rat	Not determined
Ethylene glycol monobutyl ether (a,b)	111-76-2	470 mg/kg Oral-rat	450ppm/4H inhalation-rat
Methyl Amyl Alcohol	108-11-2	2060 mg/kt Oral-rat	Not established

12 Ecological Information

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

13 Disposal Considerations

Waste Disposal Method: Dispose of in accordance with Local, State, and Federal Regulations. This product may produce hazardous vapors in a closed disposal container creating a dangerous environment. Refer to “40 CFR Protection of Environment Parts 260-299” for complete waste disposal regulations. Consult your local, state, or Federal Environment Protection Agency before disposing of any chemicals. Do not flush to sanitary sewer or waterway.

14 Transport Information

Proper Shipping Name: Flammable liquid, n.o.s. (Petroleum distillates). Note: Not regulated for ground transport in containers <120 gallons. Flammable liquids, n.o.s. For air/ocean transport. If in bottles, Domestic Ground: Consumer Commodity ORM-D.

DOT Hazard Class/Pack Group: 3/III **Label:** Flammable Liquid
Reference: 49 CFR 173.150, .203, .242 **Hazard Symbols:** F
UN/NA Identification Number: UN1993 **Hazard Identification Number(HIM):** 30

Note: Transportation information provided is for reference only. Client is urged to consult CFR 49 parts 100-177, IMDG, IATA, EC, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

15 Regulatory Information

TSCA (Toxic Substance Control Act)
All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA) Inventory or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA Title 313 (Superfund Amendments and Reauthorization Act)
313/312 Hazard Categories
Immediate health

313 Reportable Ingredients:
(b) Indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

CERCLA (Comprehensive Response Compensation and Liability Act)
None

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986
There are no chemicals present known to the state of California to cause cancer or reproductive toxicity.

CPR (Canadian Controlled Products Regulations)
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations. WHMIS Classification: D2B, B3

IDL (Canadian Ingredient Disclosure List)

Components of this product identified by CAS number and listed on the Canadian Ingredient Disclosure List are shown in Section 2.

DSL/NDSL (Canadian Domestic Substances List/Non-Domestic Substances List)

Components of this product identified by CAS number are listed on the DSL or NDSL, or are otherwise in compliance with the New Substances Notification (NSN) regulations. Only ingredients classified as “hazardous” are listed in Section 2 unless otherwise indicated.

U.S. State regulations as follows:
New Jersey Right-To-Know: The following materials are non hazardous but are among the top 5 components in this product.
Water CAS #7732-18-5
Pennsylvania Right-To-Know: The following non hazardous ingredients are present in the product at greater than 3%.
Water CAS #7732-18-5
Oleic Acid CAS #112-80-1

16 Other Information

Specific toxicity tests have not been conducted on this product. Our hazard evaluation is based on information from similar products, the ingredients, technical literature, and/or professional experience.

HMIS Hazard Ratings	Health	2	* = Chronic Health Hazard	2=Moderate
	Flammability:	2	0 = Insignificant	3=High
	Physical Hazard	0	1 = Slight	4=Extreme
Personal Protective Equipment		D	Face Shield, gloves, Apron	

WHMIS Classification: B3, Combustible Liquid
D2B, Toxic Material

Issue Date : Jan-04-2011

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of need that information is current, applicable and suited to the circumstances of use. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, vendor assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed. Any questions regarding this product should be directed to the manufacturer of the product as described in Section 1.

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