



Material Safety Data Sheet

Section 1—CHEMICAL PRODUCT AND COMPANY INFORMATION	
	Product Part #: 400-0160
Motorvac Technologies Inc. 1324 Blundell Road, Mississauga, ON Canada L4Y1M5 Tel (905) 615-8620 (For inquiries only)	Product Name: Power Steering Flush
	Emergency Telephone #: CHEMTREC (24 hours) 1-800-424-9300 (US only) or (703) 527-3877 outside US
	Date Effective: 10/15/09

Section 2—COMPOSITION / INFORMATION ON INGREDIENTS					
Hazardous Components (Specific Chemical Identity, Common Name(s))	CAS NUMBER	OSHA PEL	ACGIH TLV	Other Limits	% (optional)
4-Methyl-2-Pentanol	108-11-2	25 ppm	25 ppm	TLV-STEL 40 ppm	20

Section 3—HAZARDS IDENTIFICATION	
Emergency overview:	Vapors irritating to eyes and respiratory tract. Vapors may cause flash fire or explosion
Potential Health Effects:	<p>EYE Liquid, aerosols and vapors of this product are irritating and can cause pain, tearing, reddening and swelling accompanied by a stinging sensation and/or a feeling like that of fine dust in the eyes.</p> <p>SKIN Prolonged or repeated contact can result in defatting and drying of the skin which may result in skin irritation and dermatitis (rash).</p> <p>INHALATION Headaches, dizziness, nausea, decreased blood pressure, changes in heart rate and cyanosis may result from overexposure to vapor or skin exposure. Prolonged inhalation may be harmful.</p> <p>INGESTION This material may be harmful or fatal if swallowed. If a corrosive product, may cause severe and permanent damage to mouth, throat and stomach.</p>
Primary Route(s) of Entry:	Skin contact, skin absorption, inhalation, ingestion, eye contact.
Chronic Health Hazards:	Overexposure may cause nervous system damage. Overexposure may cause lung damage. Overexposure may cause kidney damage.

Section 4—FIRST AID MEASURES	
Eye:	Immediately flush eyes with plenty of water. Get medical attention if irritation persists.
Skin Contact:	Immediately flush skin with plenty of water. Remove clothing. Get medical attention immediately. Wash clothing separately before reuse.
Inhalation:	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.
Ingestion:	Get medical attention immediately. If swallowed, do NOT induce vomiting. Give victim a glass of water or milk. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.

Section 5—FIRE FIGHTING MEASURES	
Flash Point (Method Used):	106° F (setaflash closed cup)
Flammable Limits	LEL (lower explosion limit): 1.0% UEL (upper explosion limit): 7.0%
Autoignition Temperature:	ND
Extinguishing Media:	Alcohol Foam CO ₂ Dry Chemical Water Fog
Special Fire Fighting Procedures:	Containers can build up pressure if exposed to heat (fire). As in any fire, wear self-contained breathing apparatus, pressure-demand (MSHA/NIOSH-approved or



	equivalent) and full protective gear.
Unusual Fire and Explosion Hazards:	Vapors can travel to a source of ignition and flash back. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND or EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner or properly disposed of.

Section 6—ACCIDENTAL RELEASE MEASURES	
Spill or Leak Procedures:	Absorb spill with inert material (e.g. dry sand or earth) then place in a chemical waste container.

Section 7—HANDLING AND STORAGE	
Handling:	Wash thoroughly after handling.
Storage:	Keep away from heat, sparks and flame. Keep from freezing.

Section 8—EXPOSURE CONTROLS/PERSONAL PROTECTION	
Engineering:	Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.
Respiratory Protection:	A NIOSH/MSHA-approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive-pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.
Skin Protection:	Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots and chemical safety goggles, plus a face shield.
Eye Protection:	Wear safety glasses with side shields (or goggles) and a face shield.
Other Protection:	Standard industrial clothing standards should be followed.
Hygienic Practices:	Wash hands before eating. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Follow all MSDS/label precautions even after container is emptied because they may retain product residue. Avoid prolonged or repeated contact with skin. Avoid breathing vapors from heated material. Avoid contact with eyes, skin and clothing.

Section 9—PHYSICAL / CHEMICAL PROPERTIES			
Physical State:	Liquid	Freezing Point:	32°F
Appearance:	Blue	Odor Threshold:	ND
Odor:	Alcohol	Boiling Point °F (°C)	212 343 400°F / 100 172 204° C
Specific Gravity(H₂O=1):	0.8915	Vapor Density (AIR=1):	Is heavier than air
pH:	N/A	Vapor Pressure (mm Hg):	0-15
Viscosity	N/A	Viscosity	N/A
Solubility in Water	Negligible	Evaporation Rate:	Is faster than Butyl Acetate
Coefficient of Water/Oil Distribution	Complete		

Section 10—STABILITY AND REACTIVITY	
Chemical Stability:	Stable under normal storage conditions
Incompatibility:	Strong acids, alkalis, oxidizers and amines
Hazardous Decomposition Products:	Oxides of carbon, oxides of nitrogen, and may produce forms of chloride, chlorine and phosgene



Hazardous Polymerization:	Will not occur under normal conditions
Condition to Avoid	All sources of ignition, welding arcs and open flames

Section 11—TOXICOLOGICAL INFORMATION		
Product LD50:	2590 mg/kg	Product LC50 No data
Component Toxicological Information:		
Chemical Name	LD50	LC50
Hydrotreated, Severe, Lt. Naphthenic Di-4-Methyl-2-Pentanol	2590 mg/kg/rat	NE
Oleic Acid	74000 mg/kg/rat	NE
Automate Blue	NE	NE
Dimethylbenzene	4300 mg/kg/rat	30000 mg/m3/mammal
Ethylbenzene	3500 mg/kg/rat	NE
Toluene	636 mg/kg/rate	49000 mg/m3/4h/rat

Section 12—ECOLOGICAL INFORMATION
Not available.

Section 13—DISPOSAL CONSIDERATIONS
Dispose in accordance with all federal, state and local regulations.

Section 14—TRANSPORTATION INFORMATION
DOT proper shipping name: not regulated per 173.150

Section 15—REGULATORY INFORMATION						
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)						
CERCLA – SARA HAZARD CATEGORY: This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories: <table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">Immediate Health Hazard</td> <td style="width: 33%;">Fire Hazard</td> <td style="width: 33%;"></td> </tr> </table>	Immediate Health Hazard	Fire Hazard				
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SARA Section 313: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372: No SARA Section 313 components exist in this product.						
Toxic Substances Control Act: This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States: <table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">4-Methyl-2-Pentanol</td> <td style="width: 33%;">CAS No. 108-11-2</td> <td style="width: 33%;"></td> </tr> <tr> <td>Oleic Acid</td> <td>CAS No. 112-80-1</td> <td></td> </tr> </table>	4-Methyl-2-Pentanol	CAS No. 108-11-2		Oleic Acid	CAS No. 112-80-1	
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New Jersey Right-to-Know: The following substances are non-hazardous, but are among the top five components in this product: <table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">Hydrotreated, Severe, Lt. Naphthenic Dist.</td> <td style="width: 33%;">CAS No. 64742-52-5</td> <td style="width: 33%;"></td> </tr> <tr> <td>Oleic Acid</td> <td>CAS No. 112-80-1</td> <td></td> </tr> </table>	Hydrotreated, Severe, Lt. Naphthenic Dist.	CAS No. 64742-52-5		Oleic Acid	CAS No. 112-80-1	
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Oleic Acid	CAS No. 112-80-1					



Automate Blue

Mixture

Pennsylvania Right-to-Know: The following non-hazardous ingredients are present in the product at great than 3%:

Hydrotreated, Severe, Lt. Naphthenic Dist. CAS No. 64742-52-5

Oleic Acid CAS No. 112-80-1

California Proposition 65:

WARNING: The chemical(s) noted below and contained in this product, are known to the State of California to cause cancer, birth defects or other reproductive harm:

Toluene CAS No. 108-88-3

Canadian WHMIS: This MSDS has been prepared in compliance with Controlled Product Regulations except for use of the 16 headings.

Canadian WHMIS Class: D2B toxic material , B3 combustible material Flash point 41 ° C

Section 16 – OTHER INFORMATION

HMIS Ratings:

Health: 2 Flammability: 2 Reactivity: 0

Volatile Organic Compounds (VOCs):

1.34 lbs/gal. 160 grams/ltr

Legend:

NA – Not applicable NE – Not established ND – Not determined

Disclaimer: While the information and recommendations set forth herein are believed to be accurate as of the date thereof, Uview Ultraviolet Systems Inc., makes no warranty with respect thereto, and disclaims all liability from reliance therein.

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