

## Valve and Injector Cleaner

### SECTION 1. IDENTIFICATION

<b>Product Identifier</b>	Valve and Injector Cleaner
<b>Part number</b>	PLI-008
<b>Product Family</b>	Mixture
<b>Recommended Use</b>	Cleaner.
<b>Restrictions on Use</b>	None known.
<b>Supplier Identifier</b>	Performa Lubricants International, Inc., 42 Montrose Crescent, Whitby, ON, L1R 1C5, 905.668.1440 1.800.808.3062
<b>Emergency Phone No.</b>	CANUTEC, +1.613.996.6666, Operation hours: 24/7

### SECTION 2. HAZARD IDENTIFICATION

#### Classification

Flammable liquid - Category 2; Skin irritation - Category 2; Eye irritation - Category 2A; Specific target organ toxicity (single exposure) - Category 3; Aspiration hazard - Category 1

#### Label Elements



#### Danger

Highly flammable liquid and vapour.

May be fatal if swallowed and enters airways.

Causes skin irritation.

Causes serious eye irritation.

May cause respiratory irritation.

Keep away from heat, sparks, open flames, and hot surfaces. – No smoking.

Keep container tightly closed.

Ground and bond container and receiving equipment.

Use explosion-proof equipment.

Use non-sparking tools.

Take precautionary measures against static discharge.

Avoid breathing vapours, spray.

Wash hands and skin thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Wear protective gloves/eye protection/face protection.

IF SWALLOWED: Immediately call a POISON CENTRE or doctor.

Do NOT induce vomiting.

IF ON SKIN: Wash with plenty of water.

Take off contaminated clothing and wash it before reuse.

If skin irritation occurs: Get medical advice or attention.

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

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice or attention.

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Call a POISON CENTRE or doctor if you feel unwell.

In case of fire: Use carbon dioxide, dry chemical powder to extinguish.

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

Pressurized container: may burst if heated.

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

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture:

Chemical Name	CAS No.	%	Other Identifiers
Naphtha (petroleum), hydrotreated light	64742-49-0	30-60	heptane
Solvent naphthat (petroleum), light aromatic	64742-95-6	7-13	
1,2,4-Trimethylbenzene	95-63-6	5-10	
Methyl isobutyl carbinol	108-11-2	1-5	
1,3,5-Trimethylbenzene	108-67-8	1-5	
2-Butoxyethanol	111-76-2	1-5	
Oleic acid	112-80-1	1-5	
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	1-5	
Distillates (petroleum), hydrotreated light naphthenic	64742-47-8	1-5	
Xylene (mixed isomers)	1330-20-7	0.1-1.0	
Diethylbenzene	25340-17-4	0.1-1.0	
Cumene	98-82-8	0.1-1.0	

### SECTION 4. FIRST-AID MEASURES

#### First-aid Measures

##### Inhalation

Not a hazard under normal conditions of use. If breathing has stopped, trained personnel should begin rescue breathing. Get medical attention immediately.

##### Skin Contact

Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes. If skin irritation occurs, get medical advice or attention.

##### Eye Contact

Immediately rinse the contaminated eye(s) with lukewarm, gently flowing water for 15-20 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice or attention.

##### Ingestion

Never give anything by mouth if person is rapidly losing consciousness, or is unconscious or convulsing. Do not induce vomiting. Drink two glasses of water. If vomiting occurs naturally, lie on your side in the recovery position. Rinse mouth with water again. Seek medical attention.

### SECTION 5. FIRE-FIGHTING MEASURES

#### Extinguishing Media

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### Suitable Extinguishing Media

Carbon dioxide or dry chemical.

### Unsuitable Extinguishing Media

Do not use a direct stream of water.

### Specific Hazards Arising from the Product

Extremely flammable liquid and vapour. Can ignite at room temperature. Releases vapour that can form explosive mixture with air. Vapours are heavier than air. May travel a considerable distance to a source of ignition and flash back to a leak or open container.

Carbon oxides, sulphur, nitrogen, phosphorous.

### Special Protective Equipment and Precautions for Fire-fighters

See Skin Protection in Section 8 (Exposure Controls/Personal Protection) for advice on suitable chemical protective materials.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

### Personal Precautions, Protective Equipment, and Emergency Procedures

Evacuate the area immediately. Isolate the hazard area. Keep out unnecessary and unprotected personnel. Eliminate all ignition sources. Use grounded, explosion-proof equipment. Do not touch damaged containers or spilled product unless wearing appropriate protective equipment.

### Environmental Precautions

If the spill is inside a building, prevent product from entering drains, ventilation systems and confined areas. Do not allow into any sewer, on the ground or into any waterway.

### Methods and Materials for Containment and Cleaning Up

Contain and soak up spill with absorbent that does not react with spilled product. Place used absorbent into suitable, covered, labelled containers for disposal. Contaminated absorbent poses the same hazard as the spilled product.

## SECTION 7. HANDLING AND STORAGE

### Precautions for Safe Handling

Eliminate heat and ignition sources such as sparks, open flames, hot surfaces and static discharge. Post "No Smoking" signs. Only use where there is adequate ventilation. It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling. Containers of this material may contain hazardous residues when "emptied". Do not weld, cut or perform hot work on empty container until all traces of product have been removed.

### Conditions for Safe Storage

Store in an area that is: cool, dry, well-ventilated, out of direct sunlight and away from heat and ignition sources. Store in a closed container. Empty containers may contain hazardous residue. Store separately. Keep closed. Follow all precautions given on this safety data sheet.

Store at temperatures not exceeding: 35°C.

Keep from freezing.

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters

Chemical Name	ACGIH® TLV®		OSHA PEL	
	TWA	STEL [C]	TWA	Ceiling
Methyl isobutyl carbinol	25 ppm Skin	40 ppm	25 ppm	Not established
1,3,5-Trimethylbenzene	25 ppm	Not established	Not established	Not established
2-Butoxyethanol	20 ppm A3	Not established	240 mg/m3	Not established
Calcium hydroxide	5 mg/m3	Not established	15 mg/m3 *	Not established
Xylene (mixed isomers)	100 ppm A4	150 ppm A4	435 mg/m3	Not established
Ammonium hydroxide	25 ppm	35 ppm	Not established	Not established

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1,2,4-Trimethylbenzene	25 ppm	Not established	Not established	Not established
Cumene	50 ppm	Not established	50 ppm	Not established

### Appropriate Engineering Controls

Sufficient mechanical ventilation to maintain exposures below the TLV. Under normal conditions of use, general ventilation should be satisfactory. Local ventilation is recommended if the product is misted or used in a confined space or if the TLV is exceeded. Make up air should always be supplied to balance air exhausted. Provide eyewash and safety shower if contact or splash hazard exists.

### Individual Protection Measures

#### Eye/Face Protection

Safety glasses with side shields. Contact lenses should not be worn, they may contribute to the severity of the injury.

#### Skin Protection

Wear chemical protective clothing e.g. gloves, aprons, boots.  
Suitable materials are: nitrile rubber.

#### Respiratory Protection

Not normally required if product is used as directed.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### Basic Physical and Chemical Properties

<b>Appearance</b>	Clear amber liquid.
<b>Odour</b>	Ammonia-like
<b>Odour Threshold</b>	Not available
<b>pH</b>	Not applicable
<b>Melting Point/Freezing Point</b>	Not available (melting)
<b>Initial Boiling Point/Range</b>	Not available
<b>Flash Point</b>	-8 °C (closed cup)
<b>Evaporation Rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not applicable (liquid).
<b>Upper/Lower Flammability or Explosive Limit</b>	Not available (upper); Not available (lower)
<b>Vapour Pressure</b>	Not available
<b>Vapour Density (air = 1)</b>	> 1
<b>Relative Density (water = 1)</b>	0.797 at 15 °C
<b>Solubility</b>	Slightly soluble in water
<b>Partition Coefficient, n-Octanol/Water (Log Kow)</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Viscosity</b>	< 14 centistokes at 40°C (kinematic)
<b>Other Information</b>	
<b>VOC %</b>	Not available
<b>Flame projection</b>	Not applicable
<b>NFPA Classification</b>	Flammable liquid, Class IB

## SECTION 10. STABILITY AND REACTIVITY

### Reactivity

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Hazardous polymerization will not occur.

#### Chemical Stability

Stable at ambient temperatures and pressures.

#### Possibility of Hazardous Reactions

None known.

#### Conditions to Avoid

Open flames, sparks, static discharge, heat and other ignition sources.

#### Incompatible Materials

Increased risk of fire and explosion on contact with: strong oxidizing agents (e.g. perchloric acid). Reacts violently with: strong acids (e.g. hydrochloric acid).

#### Hazardous Decomposition Products

Carbon oxides. And other unidentified organic compounds.

## SECTION 11. TOXICOLOGICAL INFORMATION

Information presented below is for the entire product, unless otherwise specified.

#### Likely Routes of Exposure

Inhalation.

Skin contact.

Eye contact.

Ingestion.

#### Acute Toxicity

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
1,3,5-Trimethylbenzene	24000 mg/m <sup>3</sup> (rat) (4-hour exposure)	Not available	Not available
2-Butoxyethanol	450 ppm (female rat) (4-hour exposure)	530 mg/kg (female rat)	400-500 mg/kg (rabbit)
Oleic acid	Not available	> 19200 mg/kg (male rat)	Not available
Calcium hydroxide	Not applicable	7340 mg/kg (rat)	Not available
Xylene (mixed isomers)	6350 ppm (male rat) (4-hour exposure)	3523 mg/kg (rat)	> 1700 mg/kg (rabbit)
Ammonium hydroxide	3670 ppm (rat) (4-hour exposure)	350 mg/kg (rat)	Not available
Diethylbenzene	> 30000 mg/m <sup>3</sup> (mouse)	1200 mg/kg (rat)	> 5000 mg/kg (rabbit)
Calcium sulfonate based corrosion inhibitor	Not available	Not available	Not available
Distillates (petroleum), hydrotreated heavy naphthenic	2180 mg/m <sup>3</sup> (rat) (4-hour exposure)	> 5000 mg/kg (rat)	> 2000 mg/kg (rabbit)
Distillates (petroleum), hydrotreated light naphthenic	2180 mg/m <sup>3</sup> (rat)	> 5000 mg/kg (rat)	> 2000 mg/kg (rabbit)
Water	Not applicable	> 89840 mg/kg (rat)	Not applicable
1,2,4-Trimethylbenzene	18000 mg/m <sup>3</sup> (rat) (4-hour exposure)	5000 mg/kg (rat)	Not available
Cumene	39 mg/L (rat) (4-hour exposure)	1400 mg/kg (rat)	10627 mg/kg (rabbit)
Naphtha (petroleum), hydrotreated light	Not available	5000 mg/kg	2000 mg/kg

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Solvent naphthat (petroleum), light aromatic	> 14.4 mg/L (rat) (6-hour)	8400 mg/kg (rat)	> 3160 mg/kg (rabbit)
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7% of the mixture consists of an ingredient or ingredients of unknown acute toxicity (inhalation)

5% of the mixture consists of an ingredient or ingredients of unknown acute toxicity (oral)

69% of the mixture consists of an ingredient or ingredients of unknown acute toxicity (dermal)

#### Skin Corrosion/Irritation

Causes skin irritation.

#### Serious Eye Damage/Irritation

May cause serious eye irritation based on information for closely related materials. The vapour also irritates the eyes.

#### STOT (Specific Target Organ Toxicity) - Single Exposure

##### Inhalation

High concentrations may cause respiratory irritation and central nervous system depression with results ranging from dizziness and headache to unconsciousness.

##### Skin Absorption

No information was located.

##### Ingestion

If small amounts are swallowed not likely to cause injury. If large amounts are swallowed can cause effects as described for inhalation.

#### Aspiration Hazard

May cause lung damage if aspirated based on physical properties (e.g. kinematic viscosity) and chemical family (hydrocarbon). Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.

#### STOT (Specific Target Organ Toxicity) - Repeated Exposure

No information was located.

#### Respiratory and/or Skin Sensitization

Not known to be a respiratory sensitizer.

Not known to be a skin sensitizer.

#### Carcinogenicity

Chemical Name	ACGIH®	IARC	NTP	OSHA
2-Butoxyethanol	A3	Group 3	Not Listed	Not Listed
Xylene (mixed isomers)	A4	Group 3	Not Listed	Not Listed
Cumene	Not designated	Group 2B	Not Listed	Not Listed
Solvent naphthat (petroleum), light aromatic	Not Listed	Not evaluated	Not Listed	Not Listed

#### Reproductive Toxicity

##### Development of Offspring

Contains a component that contains xylene, which is reported to be fetotoxic.

No information was located for: Sexual Function and Fertility, Effects on or via Lactation, Germ Cell Mutagenicity, Interactive Effects

## SECTION 12. ECOLOGICAL INFORMATION

This section is not required by WHMIS.

This section is not required by OSHA HCS 2012.

## SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal Methods

Do not puncture, incinerate or expose to heat when empty. Dispose of or recycle empty containers through an

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approved waste management facility. Dispose of in accordance with municipal, provincial/state or federal regulations.

## SECTION 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canadian TDG	UN1268	Petroleum products, n.o.s.	3	II
IATA (Air)	UN1268	Petroleum products, n.o.s.	3	II
IMDG (Marine)	UN1268	Petroleum products, n.o.s.	3	II
US DOT	UN1268	Petroleum products, n.o.s.	3	II

**Special Precautions** Please note: Flash point -8°C

**Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

**Emergency Response Guide No.** 128 EmS F-E, S-E

**Other Information** ICAO/IATA PI Y341/353/364  
Product may ship as LTD QTY if TDG, ICAO/IATA or IMDG Limited Quantity provisions are met.

## SECTION 15. REGULATORY INFORMATION

### Safety, Health and Environmental Regulations

#### Canada

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

All ingredients are listed on the DSL/NDSL.

##### CEPA - National Pollutant Release Inventory (NPRI)

(2-Butoxyethanol) Part 1A.

(Xylene (mixed isomers)) Part 1A.

(Solvent naphtha (petroleum), light aromatic) Part 5.

(1,2,4-Trimethylbenzene) Part 1A.

(Cumene) Part 1A.

#### USA

##### Additional USA Regulatory Lists

CERCLA. (Xylene (mixed isomers)). (Ammonium hydroxide). (Cumene)

SARA Title III - Section 302: Not applicable.

SARA Title III - Section 313. (Xylene (mixed isomers)). (1,2,4-Trimethylbenzene). (Cumene)

California Proposition 65: Not applicable.

Massachusetts Right To Know: Not applicable.

New Jersey Right To Know. (Methyl isobutyl carbinol). (2-Butoxyethanol). (Calcium hydroxide). (Xylene (mixed isomers)). (Ammonium hydroxide). (Diethylbenzene). (1,2,4-Trimethylbenzene). (Cumene)

Pennsylvania Right To Know. (Methyl isobutyl carbinol). (2-Butoxyethanol). (Oleic acid). (Calcium hydroxide).

(Xylene (mixed isomers)). (Ammonium hydroxide). (1,2,4-Trimethylbenzene). (Cumene)

## SECTION 16. OTHER INFORMATION

**NFPA Rating**      **Health - 2**      **Flammability - 3**      **Instability - 0**  
**Based on**      Naphtha (petroleum), hydrotreated light

**SDS Prepared By**      Regulatory Compliance

**Phone No.**      905.847.0222

**Date of Preparation**      October 15, 2015

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<b>Date of Last Revision</b>	February 18, 2016
<b>Revision Indicators</b>	The following SDS content was changed on October 28, 2015: Section 11 - Toxicological Information; LC50/LD50 values. The following SDS content was changed on February 17, 2016: SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS; Ingredient Information.
<b>Key to Abbreviations</b>	ACGIH® = American Conference of Governmental Industrial Hygienists CANUTEC = Canadian Transportation Emergency Centre CAS = Chemical Abstract Services CCOHS = Canadian Centre for Occupational Health & Safety CNS = Central nervous system GESTIS Substance Database HSDB® = Hazardous Substances Data Bank IARC = International Agency for Research on Cancer ICAO = International Civil Aviation Organization IMDG = International Maritime Dangerous Goods Code LC = Lethal concentration LD = Lethal dose NFPA = National Fire Prevention Association NTP = National Toxicology Program OSHA = US Occupational Safety and Health Administration PPM = Parts per million RTECS® = Registry of Toxic Effects of Chemical Substances STEL = Short term exposure limit TDG = Transportation of Dangerous Goods Regulations (Canada) TWA = Time weighted average
<b>References</b>	Material Safety Data Sheet from manufacturer. CHEMINFO database. Canadian Centre for Occupational Health and Safety (CCOHS). HSDB® database. US National Library of Medicine. Available from Canadian Centre for Occupational Health and Safety (CCOHS). Registry of Toxic Effects of Chemical Substances (RTECS®) database. Dassault Systèmes/BIOVIA ("BIOVIA"). Available from Canadian Centre for Occupational Health and Safety (CCOHS). ECHA - European Chemical Agency, Classification and Labelling Inventory GESTIS Substance Database OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2015.
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