SAFETY DATA SHEET

SECTION 1: Product and Company Identification

RV Premium Gas Additive

Product type: Fuel Additive

Application: Cleaning/Maintenance/Performance. Add to any gasoline fuel. Do not ingest.

Supplier/Manufacturer:

Lubrication Specialties Inc.
3975 Morrow Meadows Drive
Mount Gilead, OH 43338
US Phone: (419) 947-2647
Telefax: (415) 946-3554
Email: info@lubricationspecialties.com

Emergency Telephone number:

Within USA and Canada: ChemTel, 24 hrs. +1 (800) 255-3924

Outside USA and Canada:* +1 (703) 741-5970

*Collect calls accepted 24/7

SECTION 2: Hazards Identification

Classification of the Substance or Mixture

GHS Classification in Accordance with OSHA HCS:

Physical, Flammable Liquids, 4
Health, Skin corrosion/irritation, 1
Health, Serious Eye Damage/Eye Irritation, 1
Health, Specific target organ toxicity - Single exposure, 3
Health, Acute toxicity, 3 Dermal
Health, Acute toxicity, 4 Inhalation
Health, Acute toxicity, 4 Oral
Health, Carcinogenicity, 2
Health, Aspiration hazard, 1
Environmental, Hazards to the aquatic environment, 2

GHS Label Elements, Including Precautionary Statements

GHS Signal Word: **DANGER**

GHS Hazard Pictograms:

GHS Hazard Statements:

H227 - Combustible Liquid and Vapor
H314 - Causes severe skin burns and serious eye damage
H336 - May cause drowsiness or dizziness
H335 - May cause respiratory irritation
H311 - Toxic in contact with skin
H332 - Harmful if inhaled
H302 - Harmful if swallowed
H351 - Suspected of causing cancer
H304 - May be fatal if swallowed and enters airways
H411 - Toxic to aquatic life with long lasting effects

GHS Precautionary Statements:

P102 - Keep out of reach of children
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from flames and hot surfaces. No smoking
P261 - Avoid breathing fume/gas/vapors/spray.
P271 - Use only outdoors or in a well-ventilated area.
P264 - Wash hands thoroughly after handling.
P270 - Do NOT eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 Wear protective gloves/clothing/eye/face protection.
P320 - Specific treatment: See below.
P301+312 +P330 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting.
P303+361+353+364 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with soap and plenty of water/shower. Wash contaminated clothing before reuse.
P304+P340 - IF INHALED: Remove victim to fresh air and keep comfortable for breathing.
P305+P351+P338+P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a physician.
P312 - Call a poison control center if you feel unwell
P308+313 - IF exposed or concerned: Get medical advice/attention.
P403+P235 - Store in a well-ventilated place. Keep cool.
P405+P233 - Store locked up in a tightly closed container.
P370 + P378 - In case of fire: Use dry chemical to extinguish.
P501 - Dispose of contents/container in accordance with regional/national regulations.

Hazards not Otherwise Classified or not Covered by GHS

VAPOR MAY CAUSE FLASH FIRE

SECTION 3: Composition/Information on Ingredients

Ingredient Name	% (Avg)	CAS Number
2-butoxyethanol	20-23 %	111-76-2
TRADE SECRET	15-20 %	TRADE SECRET
TRADE SECRET	14-18 %	TRADE SECRET
Solvent naphtha, petroleum, light aromatic	10 – 20 %	64742-95-6
1,2,4-Trimethylbenzene	3.5 – 7 %	95-63-6
Solvent naphtha petroleum, heavy aromatic	3 – 4 %	64742-94-5
1,3,5-Trimethylbenzene	1.5 – 3.5 %	108-67-8
n-Propyl benzene	1.5 - 3.5 %	103-65-1
Xylene	< 3 %	1330-20-7
Cumene	< 2 %	98-82-8
1,2,3-Trimethylbenzene	< 2 %	526-73-8
TRADE SECRET	< 1 %	TRADE SECRET
Naphthalene	< 1 %	91-20-3

Ethyl benzene	< 1 %	100-41-4

ANY CONCENTRATION SHOWN AS A RANGE IS TO PROTECT CONFIDENTIALITY OR IS DUE TO BATCH VARIATION

SECTION 4: First Aid Measures

Eyes: Immediately flush with gentle but large stream of water for AT LEAST 20-60 minutes, lifting upper and lower eyelids occasionally. Check for and remove contact lenses. Chemical burns must be treated promptly by a physician.

Skin: Get medical attention immediately. Call poison center or physician. Wash affected area with soap and mild detergent for at least 20-60 minutes. Contaminated clothing should be removed immediately and washed before reuse. Contaminated shoes should be discarded. Chemical burns must be treated promptly by a physician.

Inhalation: Get medical attention immediately. Call poison center or physician Move the person to fresh air. If breathing becomes difficult, contact a physician.

Ingestion: Get medical attention immediately. Call poison center or physician. Do not induce vomiting. If large amounts were swallowed, give water to rinse mouth, give water to drink. Chemical burns must be treated promptly by a physician.

Most important symptoms/effects, Acute and delayed:

Eye Contact: Causes Serious eye damage.

Inhalation: Danger of serious damage to health by prolonged exposure through inhalation. Can cause central nervous system (CNS) depression. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.

Skin contact: Causes severe burns. Defatting to the skin. Repeated exposure to this material can result in absorption through skin causing significant health hazard. Toxic in contract with skin.

Ingestion: Can cause central nervous system (CNS) depression. May cause burns to mouth, throat and/or stomach. Swallowing a small quantity of this material will result in serious health hazard. May be fatal if swallowed and enters airways.

Overexposure signs/symptoms:

Eye Contact: Pain, irritation, watering and/or redness.

Inhalation: Adverse symptoms may include irritation, coughing, nausea or vomiting, headache, drowsiness/fatigue, dizziness/vertigo, and/or unconsciousness.

Skin contact: Pain or irritation, redness, dryness, cracking, blistering may occur.

Ingestion: Stomach pains, nausea, and/or vomiting

SECTION 5: Firefighting Measures

Flash Point: >178°F (81°C)

Extinguishing Media: Water spray, dry chemical, alcohol foam, or carbon dioxide.

Unsuitable extinguishing media: Water jet.

Special Protective Equipment for firefighters: Self-contained breathing apparatus and protective clothing

when fighting any chemical fire.

Unusual Fire and Explosion Hazards: In case of fire, containers may explode from internal pressure. Cool with water. VAPOR MAY CAUSE FLASH FIRE. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Decomposition products may include NO_x, CO, and CO_2.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental Release Measures

Personal Precautions: Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep personnel removed and upwind of spill. Eliminate all ignition sources. Keep unnecessary and unprotected personnel from entering.

Environmental precautions: P273: Avoid release to the environment
Limit leakage with earth or sand. Do not discharge into the drains/surface water/groundwater. Dispose of absorbed material in accordance with local, state and federal regulations.

Methods for containment/ Cleaning up:

Initial Containment: Approach release from upwind. Eliminate all sources of ignition – heat, sparks, flame, electricity, and impact. Contain spilled material with dikes or absorbents. Do not allow material to enter soil, surface water, or sewer system. Stop the source of the leak, if safe to do so.

Large Spill: Contain spilled material. Vacuum or sweep up material and place in a disposal container. Absorb residue with inert material (e.g., dry sand or earth,) then place in a chemical waste container. Do not flush to sewer. Use explosion-proof equipment during clean-up.

Small Spill: Contain spilled material. Absorb with inert material and place in disposal container. Spills are extremely slippery. Clean up immediately.

Miscellaneous: Note that combustible vapors may form an ignitable mixture with air. Vapors may travel considerable distances from spill and flash back, if ignited. Report spills to local authorities and/or the U.S. coast Guard's National Response Center at (800) 424-8802 as appropriate or required.

SECTION 7: Handling and Storage

Handling:

P261: Avoid breathing vapors or spray mists.
P262: Do not get in eyes, on skin, or on clothing
P264: Wash thoroughly after handling
P280: Wear protective gloves/eye protection
Do not ingest.
Handle with care and avoid spillage on the floor (slippage).
Keep away from sources of ignition.

When heated above 100 C (212 F) may undergo a self-accelerating, exothermic reaction which causes a rapid rise in temperature and pressure. Rupture of storage vessels and fire should be anticipated in case of such temperature.

Storage: P402+404: Store in a dry place. Store in a closed container

P403+233: Store in a well-ventilated place. Keep container tightly closed Protect from moisture. Do not store together with acids.
Separate from oxidizing materials.
Keep out of direct sunlight
Keep away from sources of ignition.

General Hygiene Practices: Eating drinking and smoking should be prohibited in areas where this material is handled, stored and processed

Special Packaging Requirements: None

Incompatible Materials: Oxidizing material; Acids; Strong bases

SECTION 8: Exposure Controls/Personal Protection

Occupational exposure limits:

Under conditions which may generate mists, Observe exposure limits for Oil Mist (NOC):

ACGIH: TWA: 5 mg/m^3 Respirable; STEL 10mg/m^3 Respirable

OSHA: TWA: 5 mg/m^3 Respirable.

NIOSH REL: TWA 10mg/m^3 Respirable.

Ingredient	CAS#	Exposure limits
Light Aromatic Solvent Naphtha (Petroleum)	64742-95-6	OSHA TWA: 500ppm
1,2,4-Trimethylbenzene	95-63-6	ACGIH TWA: 25ppm
Xylene	1330-20-7	OSHA TWA: 100ppm; 435 mg/m^3
Naphthalene	91-20-3	OSHA TWA: 10 ppm, 50 mg/m^3
Trade Secret	-	OSHA PEL: 100 ppm, 600 mg/m^3
Cumene	98-82-8	OSHA PEL 50ppm
1,3,5-Trimethylbenzene	108-67-8	ACGIH TWA: 25ppm
1,2,3-Trimethylbenzene	526-73-8	ACGIH TWA: 25ppm
Ethylbenzene	100-41-4	OSHA PEL: 100ppm; 435mg/m m^3
2-butoxyethanol	111-76-2	OSHA PEL: 50ppm

Personal Protective Equipment

Avoid unnecessary exposure.

Hands: Wear long sleeves and chemical resistant apron to prevent repeated or prolonged skin contact. Use impervious gloves. Wash hands before breaks and at the end of work

Eyes: Wear safety glasses with side shields.

Skin: Wear protective clothing, wash hands thoroughly after handling.

Respiratory: Wear appropriate mask.

Appropriate Engineering Controls: Good ventilation sufficient to control worker exposure to airborne contaminants

Environmental exposure Controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation

Other measures:	Have access to an eye wash station. Launder contaminated clothing before reuse. Use good industrial hygiene practices in handling this material.

SECTION 9: Physical and Chemical Properties

Appearance	
Physical State:	Liquid
Color:	Amber
Odor:	Hydrocarbon-like or Amine-like?
Odor threshold:	Not available
pH:	Not available
Melting point:	Not determined
Boiling point:	Not available
Flash point:	>178°F (81°C)
Evaporation rate:	Not available
Flammability (solid, gas):	Not available
Lower and upper explosive (flammable) limits:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	.9109
Solubility:	Not available
Partition coefficient: n-Octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available
Volatility:	Not available
VOC (w/w):	Not available

SECTION 10: Stability and reactivity

Reactivity:	No specific test data available
Chemical Stability:	Combustible liquid. May form flammable/explosive vapor-air mixture.
Conditions to Avoid:	Direct sunlight, Extremely low temperatures, High temperatures above 50°C (122°F), sources of ignition.
Incompatible Materials:	Oxidizing material; Acids; Strong bases; Avoid agents (such as nitrates or nitrites) and conditions that could produce nitrosamines which are considered to be possible human carcinogens.
Hazardous Decomposition Products:	Products of combustion: NOx, CO_x

SECTION 11: Toxicological Information

Likely Routes of Exposure:	Dermal, eye, inhalation, ingestion

Acute Toxicity

Ingredient	Result	Species	Dose/ATE	Comments
Trade Secret	LD50 Dermal	Rat	>2000 mg/kg	
1,2,4-Trimethylbenzene	LD50 Inhalation	Rat	18000 mg/m^3/4h	vapor
	LD50 Oral	Rat	3400-6000 mg/kg	-
	LD50 Dermal	Rabbit	3160 mg/kg	-
Solvent naphtha petroleum, heavy aromatic	LD50 Oral	Rat	3200 mg/kg	-
	LC50 Inhalation	Rat	>11.4 mg/l/6hr	Vapor
Light aromatic solvent Naphtha (petroleum)	LD50 Dermal	Rabbit	>3160 mg/kg	
	LD50 Oral	Rat	3492 mg/kg	
	LC50 Inhalation	Rat	6193 mg/m^3/4h	Vapor
Xylene	LC50 Inhalation	Rat	5000 ppm/4h	Gas
	LD50 Dermal	Rabbit	>1700 mg/kg	
	LD50 Oral	Rat	4300 mg/kg	
Trade Secret	LD50 Dermal	Rabbit	>19000 mg/kg	-
	LD50 Oral	Rat	5135 mg/kg	-
Naphthalene	LD50 Dermal	Rat	>2500 mg/kg	-
	LD50 Oral	Rat	>2600 mg/kg	-
	LC50 Inhalation	Rat	>100ppm/8hrs	Gas
Cumene	LC50 Inhalation	Mouse	10000 mg/m^3/7h	Vapor
	LC50 Inhalation	Rat	39000 mg/m^3/4h	Vapor
	LD50 Dermal	Rabbit	10600 mg/kg	-
	LD50 Oral	Rat	2830 mg/kg	-
1,3,5 Trimethylbenzene	LC50 Inhalation	Rat	24000 mg/m^3/4h	Vapor
	LD50 Oral	Rat	5000mg/kg	-
2-butoxyethanol	LD50 Dermal	Guinea Pig	230uL/kg	-
	LD50 Oral	Mouse	1230 mg/kg	-
	LD50 Oral	Rabbit	320 mg/kg	-
	LC50 Inhalation	Mouse	700 ppm	-
	LC50 Inhalation	Rat	470 ppm	-
Ethylbenzene	LD50 Dermal	Rabbit	15400 mg/kg	
	LD50 Oral	Rat	3500 mg/kg	

Sensitization: None known.

Germ Cell Mutagenicity: None known.

Carcinogenicity: Cumene**,** Naphthalene, Ethylbenzene IARC 2B; Xylene IARC 3

Reproductive toxicity: Inhalation of Solvent Naphtha (petroleum light aromatic) as been observed to have slight fetotoxic effects in the offspring of rats.

Other: Adverse symptoms may include slight blood effects (trimethylbenzene), CNS, liver, kidney, and blood effects by inhalation and heartbeat irregularity (xylene).

Specific target organ systemic toxicity:

Ingredient	Category	Route of Exposure	Target Organs
Light aromatic solvent Naphtha (petroleum)	3	-	Respiratory tract irritation and Narcotic effects
Amine compound	3	-	Respiratory tract irritation
Heavy aromatic naphtha	3	-	Narcotic effects
Xylene	3	-	Respiratory tract irritation and Narcotic effects
Cumene	3	-	Respiratory tract irritation
1,2,3 trimethylbenzene	3	-	Respiratory tract irritation
1,2,4 trimethylbenzene	3	-	Respiratory tract irritation
1,3,5 trimethylbenzene	3	-	Respiratory tract irritation

SECTION 12: Ecological Information

Ecotoxicity

1,2,4-Trimethylbenzene

LC50 4910 ug/l Marine water Crustaceans-Elasmopus pectenicrus 48 hrs
LC50 22.4 mg/l Fresh water Fish – Tilapia zillii 96hrs

1,3,5-Trimethylbenzene

LC50 12520-15050 ug/l Fresh water fish-Carassius auratus 96 hrs
Chrinic NOEC 400 ug/l Fresh water Daphnia-Daphnia magna 21days

Xyle*ne*

LC50 8500 ug/l Marine water Crustaceans-Palaemonetes Pugio 48hrs
LC50 13400 ug/l Fresh water Fish-Pimephales promelas 96hr

Trade Secret*:*

LC50 Fathead minnow (Pimephales promelas): > 1000 mg/L Mortality 1hr
LC50 Fathead minnow (Pimephales promelas): > 285 mg/L Mortality 24hr
LC50 Fathead minnow (Pimephales promelas): > 252 mg/L Mortality 48hr
LC50 Fathead minnow (Pimephales promelas): > 205 mg/L Mortality 72hr
LC50 Fathead minnow (Pimephales promelas): > 205 mg/L Mortality 96hr

Cumene:

EC50 2600 ug/l Fresh water Algae-Pseudokirchneriella Subcapitata 72hr
LC50 7400-11290 ug/l Fresh water Crustaceans-Artemia sp. 48hr
LC50 2700 ug/l Fresh water Fish-Oncorhynchus mykiss 96hr
EC50 76 mg/l Algae 72hr

2-butoxyethanol:

LC50 Fish (cyprinodont variegatus): 116 ppm 96hr
EC50 Daphnia: 1700 mg/l/48hr
Threshold limit algae (Microcystis aeruginosa): 35 mg/l 192hr

Avoid exposing to the environment.
Toxic to aquatic organisms.
May cause long term adverse effects in the aquatic environment. Based on calculations.
This product contains components which may be persistent in the environment.

Chronic hazards to Aquatic Environment:	No specific data available
Persistence and Degradability:	No specific data available
Mobility in Soil:	No specific data available
PBT/VPvB Assessment:	No specific data available
Other Adverse Effects:	No specific data available
Additonal ecological information:	Information given is based on data on the ingredients and the ecotoxicology of similar products.

SECTION 13: Disposal Considerations

Disposal methods: Disposal of this product should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority. Waste should not be disposed of untreated into the sewer. Empty containers may retain some product residues.

SECTION 14: Transportation Information

NA1993, Combustible liquid, n.o.s., Combustible liquid, Corrosive, Marine Pollutant, PGIII, (Contains *e.g.* Petroleum Naphtha)

Not regulated by US DOT in containers less than 119 gallons.

IMDG & IATA: UN3082, Environmentally Hazardous Substance, liquid, nos, (Contains *e.g.* Petroleum Naphtha), 9, III. Marine pollutant.

SECTION 15: Regulatory Information

US federal regulations
CWA 307: Naphthalene; Ethylbenzene
CWA 311: Naphthalene; Xylene; Ethylbenzene; Potassium hydroxide

SARA 311/12 Hazardous chemical: Oleic Acid (TPQ=500lbs)

Use as animal feed is prohibited. This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All known components are on the U.S. EPA TSCA Inventory List.

WARNING This product can expose you to chemicals including Cumene, Toluene, Benzene, Furan, Propylene oxide, Acetaldehyde, Naphthalene and Ethylbenzene, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other Information

Date of Issue: 03/04/2020

Date of Previous Issue: N/A

Version: 2

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