# G.J. CHEMICAL COMPANY, INC. SAFETY DATA SHEET

# 1. PRODUCT IDENTIFIER

#### 1.1 PRODUCT NAME:-> PERFORMANCE PLUS DIESEL FUEL ADDITIVE

PRODUCT NUMBER(S)-----> 220900

TRADE NAMES/SYNONYMS---> Blend

### 1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES

**ADVISED AGAINST:** 

**RECOMMENDED USE: Fuel Additive** 

**USES ADVISED AGAINST:** No information available

#### 1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

Company: G.J. CHEMICAL CO., INC.

Address: 40 VERONICA AVENUE

SOMERSET, NJ 08873

Telephone: 1-973-589-1450 Fax: 1-973-589-3072

#### 1.4 Emergency Telephone Number

Emergency Phone: 1-800-424-9300 (CHEMTREC)

# 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910 (OSHA HCS)

Flammable liquids (Category 2), H225

Acute toxicity inhalation, (Category 4), H332

Eye irritation (Category 2A), H319

Skin corrosion/irritation (Category 2), H315

Reproductive toxicity (Category 2), H361

Carcinogenicity (Category 2), H351

Specific target organ toxicity – single exposure (Category 2), Central Nervous

System, Respiratory system, H335, H336

Specific target organ toxicity - repeated exposure (Category 2), Central Nervous

System, H373

Aspiration Hazard (Category 1), H304

#### Acute Aquatic Toxicity (Category 1), H401

#### 2.2 GHS Label elements, including precautionary statements



Signal word DANGER

**Hazard statement(s)** 

**Pictogram** 

H225 Highly Flammable liquid and vapor.

H304 May be fatal if swallowed and enters airways.

**H315 Causes Skin irritation** 

H319 Causes serious eye irritation

H332 Harmful if Inhaled

H335 May cause respiratory irritation.

H336 May cause drowsiness and dizziness.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

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

central nervous system (CNS)

H401 Toxic to aquatic life.

### Precautionary statement(s)

Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathing dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face protection.

Reponse:

P301 + P310+ 331 IF SWALLOWED: Immediately call a POISON CENTER or doctor/Physician. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P332 + P313 If skin irritation occurs: Get medical advice/ attention.

P337 + 313 If eye irritation persists: Get medical attention.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use CO2, dry chemical or alcohol-resistant foam to extinguish.

P391 Collect spillage.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS – May form explosive peroxides. Product can accumulate electrostatic charges that may cause fire by electrical discharges. Repeated exposure may cause skin dryness or cracking.

# 3. INGREDIENTS

3.1 SUBSTANCE: Not applicable

3.2 MIXTURE:

Ingredient	CAS No.	% by Rang	
	67-63-0 -No.200-661-7 0.603-117-00-0 7558-25-XXXX	78-80	Flammable liquids (Category 2), H225 Eye irritation (Category 2A), H319 STOT-SE (Category 3), Central nervous system, H336
	108-88-3 No. 203-625-9 0.601-021-00-3 1310-51-XXXX	14-16	Flammable liquids (Category 2), H225 Skin irritation (Category 2). H315 Reproductive toxicity (Category 2), H361 STOT-RE (Category 2), H373 STOT-SE (Category 3) - Central nervous System, H336 Aspiration hazard (Category 1), H304 Acute aquatic toxicity (Category 2), H401

Lt. Aromatic 64742-95-6 Naphtha EC-No.265-199-0 Index-No. 649-356-00-4 Reg.-No. 01-2119486773-24-XXXX 3-5 Flammable liquids (Category 3), H226
Skin corrosion/irritation (Category 2), H316
Carcinogenicity (Category 2), H351
STOT-SE (Category 3), Narcotic effects, H336
STOT-SE (Category 3), Respiratory system, H335
Aspiration hazard (Category 1), H304
Acute aquatic toxicity (Category 1), H401

Ethylene Glycol 111-76-2 Monobutyl Ether EC-No. 203-905-0 Index-No. 603-014-00-0 Reg-No. 01-2119475108-36-XXXX 0.9-1.4 Flammable liquids (Category 4), H227
Acute toxicity, Oral (Category 4), H302
Acute toxicity, Inhalation (Category 4), H332
Acute toxicity, Dermal (Category 4), H312
Skin irritation (Category 2), H315
Eye irritation (Category 2A), H319

\_\_\_\_\_

# 4. FIRST-AID MEASURES

#### 4.1 DESCRIPTION OF FIRST AID MEASURES:

**INHALATION: PERFORMANCE PLUS DIESEL FUEL ADDITIVE** 

\*\*FIRST AID- Remove from exposure area to fresh air immediately. If breathing has stopped, perform artificial respiration. Keep person warm and at rest. Treat symptomatically and supportively. Get medical attention immediately.

SKIN CONTACT: PERFORMANCE PLUS DIESEL FUEL ADDITIVE

\*\*FIRST AID- Remove contaminated clothing and shoes immediately. Wash affected area with soap or mild detergent and large amounts of water until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.

EYE CONTACT: PERFORMANCE PLUS DIESEL FUEL ADDITIVE

\*\*FIRST AID- Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains (approximately 15-20 minutes). Get medical attention immediately.

INGESTION: PERFORMANCE PLUS DIESEL FUEL ADDITIVE

\*\*FIRST AID- In respiratory depression, give oxygen by

artificial respiration. Extreme care must be used to prevent aspiration. Gastric lavage with a cuffed endotracheal tube in place to prevent further aspiration should be done within 15 minutes. In the absence of depression or convulsions or impaired gag reflex, emesis can also be induced using syrup of ipecac without increasing the hazard of aspiration (Dreisbach, Handbook of Poisoning, 12th ed.). Treat symptomatically and supportively. Gastric lavage should be performed by qualified medical personnel. Get medical attention immediately.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED: Inhalation: Fatigue, confusion, headache, dizziness, drowsiness, peculiar skin sensations (pins and needles) or numbness may be produced. Very high concentrations via inhalation can cause unconsciousness and death. Aftereffects of acute inhalation include muscular fatigue, insomnia, and possible hepatic and renal damage which is reversible.

<u>Skin</u>: Contact with skin has a de-fatting action that can cause irritation. May cause irritation with a stinging effect and burning sensation. Contact dermatitis has been reported in a few sensitive individuals. Substance may be dermally absorbed resulting in systemic toxicity as detailed in acute ingestion. Toxic effects may become more marked if absorption and inhalation occur concurrently.

**Eye**: Causes irritation and corneal burns, if not promptly removed.

<u>Ingestion</u>: May cause a burning sensation in the epigastrium and abdominal spasms. Systemic effects may occur as described in acute inhalation. Aspiration of the liquid into the lungs may cause coughing, gagging, distress, acute hemorrhagic pneumonitis, and rapidly developing pulmonary edema.

#### **Chronic Effects:**

Inhalation: Prolonged or repeated exposure via inhalation may cause mucous membrane irritation, vomiting, insomnia, nosebleeds, chest pains, and various motor difficulties. Bone marrow hypoplasia and leukopenia have been reported. Neuropsychiatric effects are varied. Muscle weakness leading to limb paralysis and abdominal pain is noted. Chromosome changes were observed in some workers. Skin: Prolonged or repeated exposure to the skin may cause de-fatting and dry fissure dermatitis.

<u>Eye</u>: Repeated or prolonged contact with the eye may cause conjunctivitis. Ingestion: Repeated ingestion may cause damage to kidney, liver, central nervous system, and lead to cancer.

# 4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

Specific details on antidote: No recommendation given.

# **5. FIRE FIGHTING MEASURES**

FLASH POINT: 8.9°C (48°F) CC UPPER EXPLOSIVE LIMIT: 10.8% (V) AUTOIGNITION TEMP: N.D. LOWER EXPLOSIVE LIMIT: 1.8% (V)

**UNIFORM FIRE CODE: Flammable Liquid IB** 

5.1 <u>SUITABLE EXTINGUISHING MEDIA</u>: DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR ALCOHOL-RESISTANT FOAM; FOR LARGER FIRES, USE WATER SPRAY, FOG, ALCOHOL-RESISTANT FOAM or REGULAR FOAM

Unsuitable extinguishing media: Do not use waterjet.

# 5.2 <u>SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR</u> <u>MIXTURE</u>: FIRE AND EXPLOSION HAZARD: DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. VAPORS ARE HEAVIER THAN AIR AND MAY

EXPOSED TO HEAT OR FLAME. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK. VAPOR-AIR MIXTURES ARE EXPLOSIVE.

Extremely Flammable; Releases Flammable Vapors below normal ambient temperatures when mixed with air and exposed to an ignition source, vapors can burn in the open or explode if confined. Diluting with water may not suffice to raise Flash Point above ambient temperatures. Keep containers tightly closed. Isolate from all sources of ignition.

<u>CONDITIONS OF FLAMMABILITY:</u> Flammable in the presence of a source of ignition when the temperature is above the flash point.

<u>HAZARDOUS COMBUSTION PRODUCTS:</u> Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.

# **5.3 ADVICE FOR FIREFIGHTERS:**

Keep unnecessary people away; isolate hazard area and deny entry. Avoid breathing vapors, stay upwind. Do not enter fire area without structural fire fighter's protective equipment including NIOSH/MSHA approved self-contained breathing apparatus (SCBA) in positive pressure mode. Use water spray to knock down vapors. Use halon, carbon dioxide extinguisher or dry powder for small fires. Large fires are best controlled by alcohol foam, fog, and water spray. Move container from fire area if you can do it without risk. Apply cooling water to sides of containers that are exposed to flames until well after fire is out. Stay away from ends of tanks. For massive fire in cargo area, use unmanned hose holder or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tank due to fire. Isolate for 1/2 mile in all directions if tank, rail car or tank truck is involved in fire. Extinguish only if fire can be stopped. Use flooding amounts of water as a fog; solid streams may be ineffective. Cool containers with flooding amounts of water from as

far a distance as possible. Avoid breathing vapors; keep upwind. If fire is uncontrollable or containers are exposed to direct flame, water may be ineffective. Fire fighters should wear full protective clothing and NIOSH/MSHA approved self-contained breathing

# **6. ACCIDENTAL RELEASE MEASURES**

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Extremely Flammable; Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations. Vapors can accumulate in low areas.

#### **6.2 ENVIRONMENTAL PRECAUTIONS:**

Keep out of water sources and sewers. Do not flush into surface water or sanitary sewer system

#### 6.3 METHODS AND MATERIAL FOR CONTAINMENT AND CLEANING UP:

Methods for cleanup and containment:

Use explosion proof equipment. Shut off valves, contain spill, for small spills add non-flammable absorbent in spill area. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent. Methods for disposal:

Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations. Dispose of via a licensed waste disposal contractor.

#### **SOIL SPILL**:

Dig holding area such as lagoon, pond or pit for containment. Dike flow of spilled material using soil or sandbags or foamed barriers such as polyurethane or concrete. Use cement powder or fly ash to absorb liquid mass. Immobilize spill with universal gelling agent. Reduce vapor and fire hazard with appropriate foam. AIR SPILL:

Knock down vapors with water spray. Keep upwind.

#### **WATER SPILL:**

If material dissolved, apply activated carbon. Use dredges or lifts to extract masses of pollution and precipitates. Apply universal gelling agent to immobilize trapped spill and increase efficiency of removal. Limit spill motion and dispersion with natural barriers or oil spill control booms. Use soaps, detergents, alcohols or other surface active agent to thicken spilled material. Use suction hoses to remove trapped spill material.

OCCUPATIONAL SPILL: Shut off ignition sources. Stop leak if you can do it without risk. Use water spray to reduce vapors. For small spills, take up with sand or other absorbent material and place into containers for later disposal. For larger spills, dike far ahead of spill for later disposal. No smoking, flames or flares in hazard area. Keep unnecessary people away; isolate hazard area and restrict entry.

<u>REPORTABLE QUANTITY (RQ)</u>: Isopropyl alcohol - 5000lbs, Toluene - 1000lbs, Blend - 6250lbs.

The Superfund Amendments and Reauthorization Act (SARA) Section 304 requires that a release equal to or greater than the reportable quantity for this substance be immediately reported to the local emergency planning committee and the state emergency response commission (40 CFR 355.40). If the release of this substance is reportable under CERCLA Section 103, the national response center must be notified immediately at (800) 424-8882 or (202) 426-2675 in the metropolitan Washington, D. C. area (40 CFR 302.6).

6.4 REFERENCE TO OTHER SECTIONS: See Sections 8 and 13.

# **7. HANDLING AND STORAGE**

7.1 PRECAUTIONS FOR SAFE HANDLING: This material presents a fire hazard. Performance Plus Diesel Fuel Additive is a class IB flammable liquid (NFPA). Liquid quickly evaporates and forms vapor (fumes), which can catch fire and burn with explosive violence. Invisible vapor spreads easily and can be set on fire by many sources, such as pilot lights, welding equipment, and electrical motors and switches. Vapor is heavier than air and can travel considerable distance to a source of ignition and flash back. Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid contact with eyes, skin and clothing. Avoid work practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers.

Advice on general occupational hygiene:

Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs. When using do not smoke.

STATIC HAZARD: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient. For more information refer to OSHA Standard 29CFR 1910.106 "Flammable and Combustible Liquids" and National Fire Protection Association (NFPA 77) "Recommended Practice on Static Electricity".

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES: Follow maximum allowed pile heights specified in the BOCA codes or the NFPA manual. Local fire authorities should be notified for storage of this material in any quantity. Local permits are required for storage in warehouse quantities. Recommended storage temperature: 15 - 25°C. Store large quantities only in cool, dry areas in buildings designed to comply with OSHA 1910.106. Keep containers tight and upright to prevent leakage. Do not contact with oxidizing materials. Keep containers closed when not in use. Do not take internally. Handle and store under inert gas. Hygroscopic.

<u>CONTAINER WARNINGS</u>: Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-

conditioner.

7.3 SPECIFIC END USES: Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

# **8. EXPOSURE CONTROL (PERSONAL PROTECTION)**

#### **8.1 CONTROL PARAMETERS:**

COMPONENT	CAS NO.	% BY WT.	EXPOSURE LIMITS
	67-63-0 EC-No.200-661-7 ex-No.603-117-00-0 119457558-25-XXXX	70-80	200ppm TLV (ACGIH) 400ppm STEL (ACGIH) 400ppm TWA (OSHA) 500ppm STEL (OSHA) 400ppm TWA (NIOSH) 500ppm STEL (NIOSH)
	108-88-3 EC-No. 203-625-9 ex-No.601-021-00-3 19471310-51-XXXX	14-16	20PPM TWA (ACGIH) 150PPM STEL (ACGIH) 100PPM TWA (NIOSH) 150PPM STEL (NIOSH) 100PPM TWA (OSHA) 150PPM STEL (OSHA)
	64742-95-6 EC-No.265-199-0 ex-No. 649-356-00-4 19486773-24-XXXX	3-5	19ppm TWA (ExxonMobil) Vapor
	111-76-2 EC-No. 203-905-0 ex-No. 603-014-00-0 19475108-36-XXXX	0.9-1.4	20ppm TWA (ACGIH) 5ppm TWA (NIOSH) 25ppm TWA (OSHA)

**Key:** (PEL) = Permissible Exposure Limit OSHA

(TLV) = Threshold Limit Value OSHA & ACGIH (STEL) = Short Term Exposure Limit ACGIH

(WEEL) = USA. Workplace Environmental Exposure Levels

(TWA) = Time Weighted Average

CAS = Chemical Abstracts Registry Number IDLH = Immediate Danger to Life and Health

N.E. =None Established

#### 8.2 EXPOSURE CONTROLS

<u>EXPOSURE GUIDELINES</u>> Consider the potential hazards of this material (Section 2), applicable exposure limits, job activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended.

<u>ENGINEERING CONTROLS</u>> Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits.

All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910. Explosion proof motors should be used in mechanical ventilation.

<u>RESPIRATOR</u>: The following respirators and maximum use concentrations are recommendations by the U.S. Department of Health and Human Services, NIOSH Pocket Guide to Chemical Hazards; NIOSH criteria documents or by the U.S. Department of Labor, 29 CFR 1910 Subpart Z.

The specific respirator selected must be based on contamination levels found in the work place, must not exceed the working limits of the respirator and be jointly approved by the National Institute for Occupational Safety and Health and the Mine Safety and Health Administration (NIOSH-MSHA):

1000 PPM- Any chemical cartridge respirator with organic vapor cartridge(s).

Any supplied-air respirator.

Any powered air-purifying respirator with organic vapor cartridge(s).

Any self-contained breathing apparatus.

2000 PPM- Any supplied-air respirator operated in a continuous flow mode.

Any self-contained breathing apparatus with a full face-piece.

Any supplied-air respirator with a full face-piece.

Any air-purifying full face-piece respirator (gas mask) with a chin-style,

front- or back-mounted organic vapor canister.

ESCAPE- Any air-purifying, full face-piece respirator (gas mask) with a chin-style, front- or back-mounted organic vapor canister.

Any appropriate escape-type, self-contained breathing apparatus.

<u>HYGIENE METHODS:</u> Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

<u>BODYCLOTHING</u>: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.

<u>SKIN PROTECTION</u>: Employee must wear appropriate protective gloves to prevent contact with this substance.

Full contact Material: Fluorinated rubber

Minimum layer thickness: 0.7 mm

Break through time: 480 min

Splash contact Material: Fluorinated rubber

Minimum layer thickness: 0.7 mm Break through time: 480 min

<u>HYGIENE</u>: Use good personal hygiene practices, wash hands before eating, drinking, smoking or using toilet facilities.

**EYE/FACE PROTECTION**: Employee must wear splash-proof or dust-resistant safety

goggles to prevent eye contact with this substance.

EMERGENCY EYE WASH: Where there is any possibility that an employee's eyes maybe exposed to this substance, the employer should provide an eye wash fountain within the immediate work area for emergency use.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Isopropyl Alcohol 67-63-0

APPEARANCE: Watery liquid COLOR: Colorless

ODOR: Aromatic –Alcohol odor

ODOR THRESHOLD: No data available

pH: 40-45ppm

MOLECULAR WEIGHT: No data available MELTING POINT: No data available

BOILING RANGE: 82.4 -171.1°C (180 -340°F) SPECIFIC GRAVITY: 0.8053@20°C (68°F)

DENSITY (25°C): No data available

VAPOR PRESSURE: 30.3mm Hg @ 24°C (75.2°F)

VAPOR DENSITY: 2.3 WATER SOLUBILITY: 82%

PARTITION COEFFICIENT N- No data available

OCTANOL/WATER

FLASH POINT: 8.9°C (48°F) EVAPORATION RATE (BUTYL ACETATE=1): 1.67 UPPER FLAMMABILITY LIMIT: 10.8% (V) LOWER FLAMMABILITY LIMIT: 1.8% (V)

AUTO INGNITION TEMPERATURE: No data available
DECOMPOSITION TEMPERATURE: No data available
VISCOSITY: 2.1cps@25°C (77°F)
EXPLOSIVE PROPERTIES: No data available
OXIDIZING PROPERTIES: No data available

9.2 OTHER INFORMATION:

SURFACE TENSION: No data available

SOLVENT SOLUBILITY: Soluble in alcohol, ether, chloroform, acetone, benzene;

insoluble in salt solutions.

# 10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: No data available.

- 10.2 CHEMICAL STABILITY: Stable under normal temperatures and pressures.
- 10.3 <u>POSSIBILITY OF HAZARDOUS REACTIONS:</u> May slowly peroxidize on exposure to air under normal storage conditions. Vapors may form flammable mixtures with air.

<u>POLYMERIZATION:</u> Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

- 10.4 <u>CONDITIONS TO AVOID:</u> Heat, flames and sparks. Extremes of temperature and direct sunlight.
- 10.5 <u>INCOMPATIBILE MATERIALS:</u> ISOPROPYL ALCOHOL (ISOPROPANOL); 2-PROPANOL):

ACIDS: Incompatible.

ACIDS ANHYDRIDES: Incompatible.

**ALUMINUM: Dissolution is exothermic.** 

**BARIUM PERCHLORATE: Formation of explosive compound.** 

2-BUTANONE (METHYL ETHYL KETONE): Accelerates the peroxidation of the alcohol.

**CHROMIUM TRIOXIDE (GRANULAR): Ignition.** 

**COATINGS:** May be attacked.

DIOXYGENYL TETRAFLUOROBORATE: Ignition at ambient temperatures.

HALOGENS: Incompatible.

HYDROGEN + PALLADIUM (PARTICLES): Ignition on exposure to air.

**HYDROGEN PEROXIDE:** Formation of explosive compound.

**KETONES:** Markedly increases the possibility of peroxidation.

NITROFORM (TRINITROMETHANE): Dissolves liberating heat and possibly exploding.

**OLEUM:** Temperature and pressure increase in closed container.

OXIDIZERS (STRONG): Fire and explosion hazard.

OXYGEN (GAS): Autoxidation, on exposure to light, results in formation of ketones and potentially explosive hydrogen peroxide.

PHOSGENE: In the presence of iron salts, may explode.

PLASTICS: May be attacked.

POTASSIUM TERT-BUTOXIDE: Ignition.

RUBBER: May be attacked.

**SODIUM DICHROMATE + SULFURIC ACID: Exothermic reaction with possible** 

incandescence. See also alcohols.

#### 10.5 INCOMPATIBILITIES: ALCOHOLS:

ACETALDEHYDE: Violent condensation reaction.

BARIUM PERCHLORATE: Formation of highly explosive perchloric ester on refluxing.

CHLORINE: Formation of highly explosive alkyl hypochlorites.

**DIETHYL ALUMINUM BROMIDE: Spontaneous ignition.** 

**ETHYLENE OXIDE: Possible explosion.** 

**HEXAMETHYLENE DISOCYANATE:** Possible explosion in absence of solvent.

**HYDROGEN PEROXIDE + SULFURIC ACID: Possible explosion.** 

HYPOCHLOROUS ACID: Formation of highly explosive alkyl hypochlorites.

ISOCYANATES: Possible explosion in absence of solvent.

LITHIUM ALUMINUM HYDRIDE: Vigorous reaction.

NITROGEN TETROXIDE: Possible explosion.

PERCHLORIC ACID (HOT): Dangerous interaction.

PERMONOSULFURIC ACID: Possible explosion on contact with primary or

secondary alcohols.

TRI-ISO-BUTYL ALUMINUM: Violent reaction.

#### 10.5 INCOMPATIBLE MATERIALS --> TOLUENE

ALLYL CHLORIDE + DICHLOROETHYL ALUMINUM OR ETHYLALUMINUM

**SESQUICHLORIDE**: Possible explosion.

BROMINE TRIFLUORIDE (SOLID): Violent reaction.

1,3-DICHLORO-5,5-DIMETHYL-2,4-IMIDAZOLIDIDIONE: Explosive reaction.

**DINITROGEN TETROFLUORIDE: Forms explosive mixture.** 

NITRIC ACID: Vigorous reaction.

NITRIC ACID + SULFURIC ACID: Violent decomposition possible.

**NITROGEN TETROXIDE:** Explosive reaction.

OXIDIZERS (STRONG): Fire and explosion hazard.

PLASTICS, RUBBER, AND COATINGS: May be attacked.

SILVER PERCHLORATE: Forms shock-sensitive mixture.

SULFUR DICHLORIDE: Violent reaction, greatly accelerated in the presence of

iron or ferric chloride.

**SULFURIC ACID: Exothermic reaction.** 

**TETRANITROMETHANE:** Forms explosive mixture.

**URANIUM HEXAFLUORIDE: Violent reaction.** 

# 10.6 <u>HAZARDOUS DECOMPOSITION PRODUCTS</u>: Thermal decomposition products may include: Fumes, Smoke, Carbon Monoxide, Aldehydes and other decomposition products where combustion is not complete.

# 11. TOXICOLOGICAL INFORMATION

#### 11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

Routes of Entry: Inhalation--> x Skin--> x Ingestion--> x

**ACUTE HEALTH EFFECTS:** 

**Effects of overexposure:** 

Inhalation: Fatigue, confusion, headache, dizziness, drowsiness, peculiar skin sensations (pins and needles) or numbness may be produced. Very high concentrations via inhalation can cause unconsciousness and death. Aftereffects of acute inhalation include muscular fatigue, insomnia, and possible hepatic and renal damage which is reversible.

Skin: Causes irritation and drying. Abortion through the skin is possible but it is generally too slow to produce signs of acute systemic toxicity.

Eye: Causes irritation and corneal burns, if not promptly removed.

Ingestion: May cause a burning sensation in the epigastrium and abdominal spasms. Systemic effects may occur as described in acute inhalation. Aspiration of the liquid into the lungs may cause coughing, gagging, distress, acute hemorrhagic pneumonitis, and rapidly developing pulmonary edema.

#### **Chronic Effects:**

Inhalation: Prolonged or repeated exposure via inhalation may cause mucous membrane irritation, vomiting, insomnia, nosebleeds, chest pains, and various motor difficulties. Bone marrow hypoplasia and leukopenia have been reported. Neuropsychiatric effects are varied. Muscle weakness leading to limb paralysis and abdominal pain is noted. Chromosome changes were observed in some workers.

Skin: Prolonged or repeated exposure to the skin may cause de-fatting and dry fissure dermatitis.

Eye: Repeated or prolonged contact with the eye may cause conjunctivitis.

Ingestion: Repeated ingestion may cause damage to kidney, liver, central nervous system, and lead to cancer.

#### **TOXICITY DATA:**

Ingredient	Oral LD50 (Rat)	Skin LD50 (Rabbit)  Inhalation LC50		
Isopropanol	5045mg/kg	12800mg/kg	16000ppm/4hr	
Toluene	   5580mg/kg	   12.196g/kg	   28800ppm/4hr	
Lt.Aromatic Solvent Naphtha	   3492mg/kg.   (OECD Test 401)	>3160mg/kg   (OECD Test 402)	>6193mg/m3/4hr     (OECD Test 403)	
2-Butoxyethanol	   470mg/kg 	   220mg/kg 		
	İ	İ	i i	

ISOPROPYL ALCOHOL (ISOPROPANOL, 2-PROPANOL):

SKIN CORROSION/IRRITATION: Skin - Rabbit Result: Mild skin irritation - 24 h SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: Eye irritation 24 h RESPIRATORY OR SKIN SENSITIZATION: No data available.

**MUTAGENIC EFFECTS:** No data available.

#### **CARCINOGEN STATUS:**

(IARC Group-3). Strong acid manufacturing process: human sufficient evidence (IARC Group-1). Workers involved in the manufacture of isopropyl alcohol by the strong-acid process, involving the formation of isopropyl oils, showed an increase in para-nasal and laryngeal cancer.

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

REPRODUCTIVE TOXICITY: No information available.

SPECIFIC TARGET ORGAN TOXICITY (STOT-SE) - single exposure GHS May cause drowsiness or dizziness.

SPECIFIC TARGET ORGAN TOXICITY (STOT-RE) - repeated exposure GHS no data available

AT INCREASED RISK FROM EXPOSURE: Persons with pre-existing skin disorders; impaired liver, renal and/or pulmonary function.

11.2 ADDITIONAL DATA: Central nervous system depression, prolonged or repeated exposure can cause: Nausea, Headache, Vomiting, narcosis, Drowsiness, Overexposure may cause mild, reversible liver effects. Aspiration may lead to:, Lung edema, Pneumonia

Potentiates the effects of carbon tetrachloride and other hepatotoxic chlorinated aliphatic hydrocarbons.

#### **TOLUENE:**

SKIN CORROSION/IRRITATION: Skin - Rabbit Result: Skin irritation - 24 h SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: No eye irritation (OECD Test Guideline 405)

RESPIRATORY OR SKIN SENSITIZATION: No data available.

MUTAGENIC EFFECTS: Germ cell mutagenicity Rat Liver DNA damage CARCINOGEN STATUS:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

REPRODUCTIVE STATUS: Damage to fetus possible Suspected human reproductive toxicant Reproductive toxicity - Rat - Inhalation Paternal Effects: Spermatogenesis (including genetic material, sperm morphology, motility, and

count). Experiments have shown reproductive toxicity effects in male and female laboratory animals. Developmental Toxicity -Rat - Oral Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

SPECIFIC TARGET ORGAN TOXICITY (STOT-SE) - single exposure (Globally Harmonized System): no data available

SPECIFIC TARGET ORGAN TOXICITY (STOT-RE)- repeated exposure (Globally Harmonized System): no data available

**ASPIRATION HAZARD: No data available** 

11.2 ADDITIONAL DATA: Stimulants such as epinephrine may induce ventricular fibrillation. Alcohol may enhance the toxic effects. The metabolism of other solvents may be inhibited resulting in a potentiation of toxic effects of those chemicals. Uptake is directly proportional to the amount of body fat. Blood levels may be cumulative when exposure is extended.

#### LT. AROMATIC SOLVENT NAPHTHA:

SKIN CORROSION/IRRITATION: Mildly irritating to skin with prolonged exposure. Based on test data for the material. (OECD Test Guideline 404)

SERIOUS EYE DAMAGE/EYE IRRITATION: May cause mild, short-lasting discomfort to eyes. Based on test data for the material. (OECD Test Guideline 405)

RESPIRATORY SENSITIZATION: Not a sensitizer in humans or animals. Based on test data for the material. (OECD Test Guideline 406)

SKIN SENSITIZATION: Not expected to be a skin sensitizer.

MUTAGENIC EFFECTS: Not expected to be a germ cell mutagen, Based on test data for the material. (OECD Test Guidelines 471, 475, 476, and 479))

CARCINOGEN STATUS – IARC: Group 1, 2 and 2B: Possibly carcinogenic to humans

ACGIH: Not classifiable as a human carcinogen.

NTP: Reasonably anticipated to be a human carcinogen

**OSHA: Suspected Carcinogen** 

REPRODUCTIVE TOXICITY: Not expected to be a reproductive toxicant. Based on test data for the material. (OECD Test Guidelines 414 and 416)

**TERATOGENICITY: No data available** 

Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): May cause drowsiness and dizziness. May be irritating to the respiratory system.

Specific target organ toxicity (STOT-RE) - repeated exposure (Globally Harmonized System): No expected to cause organ damage from prolonged and repeated exposure. Based on test data of structurally similar materials ASPIRATION HAZARD: All components may be fatal if swallowed and enters airways.

11.2 ADDITIONAL INFORMATION: No data available

#### 2-BUTOXYETHANOL:

SKIN CORROSION/IRRITATION: Skin - Rabbit Result: Skin irritation - 20 h

SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: Eye irritation - 24 h (OECD Test Guideline 405)

**RESPIRATORY OR SKIN SENSITIZATION: Maximization Test - Guinea pig Result:** Does not cause skin sensitization. (OECD Test Guideline 406)

MUTAGENIC EFFECTS: Hamster ovary Result: negative OECD Test Guideline 474 **CARCINOGEN STATUS:** 

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

REPRODUCTIVE TOXICITY: Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

Specific target organ toxicity (STOT-SE)- single exposure (Globally Harmonized System): no data available

Specific target organ toxicity (STOT-RE)- repeated exposure (Globally

Harmonized System): no data available

ASPIRATION HAZARD: No data available

11.2 ADDITIONAL DATA: Human exposure above 200 ppm can be expected to cause narcosis, damage to the kidney and liver and present an abnormal blood picture showing erythropenia, reticulocytosis, granulocytosis, leukocytosis, and would be likely to cause fragility of erythrocytes and hematuria. Swallowing of 2butoxyethanol results in a sour taste that turns to a burning sensation and is followed by numbness of the tongue which indicates paralysis of the sensory nerve endings., Central nervous system depression, Headache, narcosis

# 12. **ECOLOGICAL INFORMATION**

#### DANGEROUS TO AQUATIC LIFE IN HIGH CONCENTRATIONS

May be dangerous if it enters water intakes.

Notify local health and wildlife officials.

Notify operators of nearby water intakes.

#### **ISOPROPYL ALCOHOL ISOPROPANOL 2-PROPANOL:**

#### 12.1 AQUATIC TOXICITY (Acute):

Toxicity to fish:

LC50 - Pimephales promelas (fathead minnow) - 9,640.00 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates:

EC50 - Daphnia magna (Water flea) - 5,102.00 mg/l - 24 h

Immobilization EC50 - Daphnia magna (Water flea) - 6,851 mg/l - 24 h Toxicity to algae:

EC50 - Desmodesmus subspicatus (green algae) - > 2,000.00 mg/l - 72 h

EC50 - Algae - > 1,000.00 mg/l - 24 h

#### 12.2 PERSISTANCE AND DEGRADABILITY: Data not available.

#### 12.3 BIOACCUMULATIVE POTENTIAL:

log Pow <=4 No bioaccumulation is expected

12.4 MOBILITY IN SOIL: No data available.

12.5 RESULTS OF PBT AND vPvB:

PBT assessment results: This substance is not classified as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: No data available.

#### **TOLUENE:**

#### 12.1 AQUATIC TOXICITY (Acute):

Toxicity in fish:

LC50 - Oncorhynchus mykiss (rainbow trout) - 7.63 mg/l - 96 h

NOEC - Pimephales promelas (fathead minnow) - 5.44 mg/l - 7 d

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 8.00 mg/l - 24 h

Immobilization EC50 - Daphnia magna (Water flea) - 6 mg/l - 48 h

Toxicity to algae EC50 - Chlorella vulgaris (Fresh water algae) - 245.00 mg/l - 24 h

EC50 - Pseudokirchneriella subcapitata (green algae) - 10.00 mg/l - 24 h

12.2 PERSISTANCE AND DEGRADABILITY: Readily Biodegradable

Biological Oxygen Demand (BOD): 0% 5 days, 38% (theoretical.) 8 days

## 12.3 BIOACCUMULATIVE POTENTIAL:

Bioaccumulation Leuciscus idus (Golden orfe) - 3 d - 0.05 mg/l

**Bioconcentration factor (BCF): 90** 

12.4 MOBILITY IN SOIL: No data available

#### 12.5 RESULTS OF PBT AND vPvB:

PBT assessment results: This substance is not classified as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life.

#### LT. AROMATIC SOLVENT NAPHTHA:

#### 12.1 AQUATIC TOXICITY (Acute):

**Toxicity to Fish:** 

LC50 Onchorhynus mykiss (Rainbow trout) – 9.2mg/L – 96 h

Toxicity to daphnia and other aquatic crustaceans:

EC50 Daphnia magna (water flea)- 3.2mg/L - 48 h

**Toxicity to Algae:** 

EC50 Skeletonema costatum - <1mg/L

# 12.2 PERSISTANCE AND DEGRADABILITY:

Expected to be readily bio-degradable.

12.3 <u>BIOACCUMULATIVE POTENTIAL</u>: Light Aromatic Naphtha has the potential to bio-accumulate. Percent degraded in 28 days: 78%

1, 2, 4-Trimethylbenzene Log Pow 3.63 low potential

Xylenes, mixed isomers Log Pow 3.12 low potential

**Cumene Log Pow 3.55 low potential** 

#### **Bioconcentration Factor:**

1, 2, 4-Trimethylbenzene 243

Xylenes, mixed isomers 8.1-25.9

**Cumene 94.69** 

12.4 MOBILITY IN SOIL: This material is highly volatile and will rapidly partition to air. It is not expected to partition to soil or wastewater solids.

12.5 <u>RESULTS OF PBT AND vPvB</u>: PBT assessment results: This substance is not classified as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: Expected to be toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment. Do not allow this material to run into surface waters, wastewater or soil.

#### 2-BUTOXYETHANOL:

#### 12.1 AQUATIC TOXICITY (Acute):

Toxicity to fish:

LC50 - Oncorhynchus mykiss (rainbow trout) - 1,474 mg/l - 96 h, Static Test (OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 1,550 mg/l - 48 h, Immobilization Test (OECD Test Guideline 202)

Toxicity to algae:

EC50 - Pseudokirchneriella subcapitata (green algae) - 1,840 mg/l - 72 h (OECD Test Guideline 201)

12.2 PERSISTANCE AND DEGRADABILITY: Aerobic - Exposure time 28 d Result:

90.4 % - Readily biodegradable. (OECD Test Guideline 301B)

12.3 <u>BIOACCUMULATIVE POTENTIAL</u>: This material is highly soluble in water and should not bio-accumulate in aquatic or terrestrial organisms. The measured octanol/water(log Pow) partition coefficient 0.83

12.4 MOBILITY IN SOIL: No data available.

12.5 RESULTS OF PBT AND vPvB:

PBT assessment results: This substance is not classified as PBT or vPvB.

12.6 OTHER ADVERSE EFFECTS: No data available.

# 13. **DISPOSAL CONSIDERATIONS**

13.1 WASTE TREATMENT METHODS> Hazard characteristic and regulatory waste stream classification can change with product use. Accordingly it is the responsibility of the user to determine the proper storage, transportation, treatment and or disposal methodologies for spent materials and residues at time of disposition. Dispose in accordance with all applicable disposal regulations. Burn concentrate liquids in systems compatible with water-soluble wastes in a permitted facility. Dilute aqueous waste may biodegrade.

**CONTAMINATED PACKAGING:** Dispose of as unused product.

The information offered here is for the product as shipped. Use and/or alterations to the product such as mixing with other materials may significantly change the characteristics of the material and alter the RCRA classification and the proper disposal method.

RCRA Hazardous waste numbers: Toluene – U220, Spent Flammable/Combustible Waste - D001, Components: Xylene U239, Cumene U055 DISPOSAL MUST BE IN ACCORDANCE WITH STANDARDS APPLICABLE TO GENERATORS OF HAZARDOUS WASTE, 48 CFR 262

# 14. TRANSPORT INFORMATION

Land Transport (DOT)

14.1 USDOT ID Number> UN1993
14.2 USDOT Shipping Name> Flammable Liquid n.o.s.
(Performance Plus Diesel Fuel Additive)
14.3 USDOT Hazard Classification> 3 (Flammable Liquid)
USDOT Label Codes> 3
14.4 USDOT Package Code> II
14.5 Marine Pollutant> No
14.6 Special precautions for user> No
Emergency Response Guide> 128
Reportable quantity> 6250lbs. – Blend (calculated)
Sea Transport (IMDG)
14.1 ID Number> UN1993
14.2 Proper shipping name> FLAMMABLE LIQUIDS, N.O.S.
(Performance Plus Diesel Fuel Additive)
14.3 Hazard Classification> 3 (Flammable Liquid)
Label Codes> 3
14.4 Package Code> II
14.5 Marine Pollutant> No
14.6 Special precautions for user> No
EMS-Number> F-E, S-D
Air Transport (IATA)
14.1 ID Number> UN1993
14.2 Proper Shipping Name> Flammable Liquid n.o.s.
(Performance Plus Diesel Fuel Additive)
14.3 Hazard Classification> 3 (Flammable Liquid)
Label Codes> 3
14.4 Package Code> II
14.5 Environmental hazard> No
14.6 Special precautions for user> No

# 15. **REGULATORY INFORMATION**

# 15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

# **SARA TITLE III (Superfund Amendment and Reauthorization Act)**

SECTION 302 AND 304: Extremely Hazardous Substance List (40 CFR 355) - Not Listed

SECTION 313: Toxic Chemicals Listing (40 CFR 372.65) -Toluene CAS 108-88-3 - 15%, 2-Butoxyethanol CAS111-76-2–1.1%, Components <2%: 1, 2, 4-Trimethylbenzene 95–63–6, Xylene 1330–20–7, Cumene 98–82–8.

SECTION 311/312: Hazard Categorization (40 CFR 370) - Acute Health Hazard, Chronic Health Hazard, and Fire Hazard.

# <u>CERCLA</u> (Comprehensive Environmental Response, Compensation, and Liability Act)

SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Listed Reportable Quantity - Isopropyl alcohol - 5000lbs, Toluene – 1000lbs, Blend – 6250lbs.

SECTION 101(14) Reportable Quantity: Isopropyl alcohol - 5000lbs, Toluene – 1000lbs, Blend – 6250lbs.

#### RCRA (Resource Conservation and Recovery Act.)

40 CFR 261.33 Hazardous Waste Number: U220 and D001

Massachusetts Right to Know Components Toluene CAS-No.108-88-3 2-Propanol CAS-No.67-63-0 Lt. Aromatic Solvent Naphtha CAS-No.64742-95-6 2-Butoxyethanol CAS-No.111-76-2

Pennsylvania Right to Know Components Toluene CAS-No.108-88-3 2-Propanol CAS-No.67-63-0 Lt. Aromatic Solvent Naphtha CAS-No.64742-95-6 2-Butoxyethanol CAS-No.111-76-2

New Jersey Right to Know Components Toluene CAS-No.108-88-3; 2-Propanol CAS-No.67-63-0 Lt. Aromatic Solvent Naphtha CAS-No.64742-95-6 2-Butoxyethanol CAS-No.111-76-2

#### California Prop. 65 Components

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Toluene CAS-No.108-88-3 15%, Cumene CAS-No. 98-82-8 < 0.055%

#### TSCA (Toxic Substance Control Act)

2-Propanol CAS-No.67-63-0, Toluene CAS-No.108-88-3, 2-Butoxyethanol CAS-No.111-76-2, 1, 2, 4-Trimethylbenzene 95-63-6, Xylene 1330-20-7, Cumene 98-82-8 are listed on the TSCA Inventory.

15.2 CHEMICAL SAFETY ASSESSMENT: A chemical safety assessment has not

been carried out for this mixture.

# **16. OTHER INFORMATION:**

**Hazard Rating:** 

4-Extreme 3-High 2-Moderate

1-Slight

0-Insignificant

NFPA RATINGS (SCALE 0-4): Health=2 Fire=3 Reactivity=0

HMIS RATINGS (SCALE 0-4) Health=2 Fire=3 Reactivity=0 PPE=G

Hazard statement(s) from Section 2 and 3:

H225 Highly Flammable liquid and vapor.

H304 May be fatal if swallowed and enters airways.

**H315 Causes Skin irritation** 

H319 Causes serious eye irritation

H332 Harmful if Inhaled

H335 May cause respiratory irritation.

H336 May cause drowsiness and dizziness.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

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

central nervous system (CNS)

H401 Toxic to aquatic life.

Date of Preparation: April 10, 2001

**Revision Number: 1.7** 

**Revision Content: General update all sections** 

Revision Date: January 17, 2019

#### Acronyms:

ACGIH - American Conference of Governmental Industrial Hygenists

AIHA - American Industrial Hygiene Association
ANSI - American Nation Standards Institute

API - American Petroleum Institute

CERCLA - Comprehensive Emergency Response, Compensation, and Liability Act

DOT - U.S. Department of Transportation

EPA - U.S. Environmental Protection Agency

HMIS - Hazardous Materials Information System

IARC - International Agency For Research On Cancer

MSHA - Mine Safety and Health Administration NFPA - National Fire Protection Association

NIOSH - National Institute of Occupational Safety and Health

NOIC - Notice of Intended Change (Proposed change to ACGIH TLV)

NTP - National Toxicology Program
OPA - Oil Pollution Act of 1990

OSHA - U.S. Occupational Safety & Health Administration

PEL - Permissible Exposure Limit (OSHA)
RCRA - Resource Conservation and Recovery Act
REL - Recommended Exposure Limit (NIOSH)

SARA - Superfund Amendments and Reauthorization Act of 1986 Title III

SCBA - Self-Contained Breathing Apparatus

STEL - Short-Term Exposure Limit (generally 15 minutes)

TLV - Threshold Limit Value

TSCA - Toxic Substances Control Act
TWA - Time Weighted Average (8hr.)

WHMIS - Canadian Workplace Hazardous Materials Information System

This information is furnished without warranty, representation, inducement of license of any kind, except that it is accurate to the best of G.J. Chemical Co's knowledge, or obtained from sources believed by G.J. Chemical Co., Inc. to be accurate, and G.J. Chemical Co., Inc. does not assume any legal responsibility for use or reliance upon same. Users are encouraged to conduct their own tests. Before using any product, read its label. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.