

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

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME -----> **AFTA BLEND**

PRODUCT NUMBER(S)-----> 103200

TRADE NAMES AND SYNONYMS--> Blend

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST

RECOMMENDED USE: Chemical blend used as a thinner and cleaner.

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 3), H225

Eye irritation (Category 2A), H319

Skin corrosion/irritation (Category 2), H315

Skin sensitization (Category 1), H317

Specific target organ toxicity - single exposure (Category 3), Narcotic effects,
Central nervous system, H332, H335, H336

Carcinogenicity (Category 2), H351

Aspiration Hazard (Category 1). H304

Acute aquatic toxicity (Category 2), H401

Chronic aquatic toxicity (Category 2), H411

2.2 GHS Label elements, including precautionary statements



Pictogram

GHS02

GHS07

GHS08

GHS09

Signal word: **DANGER**

Hazard statement(s)

H225 Highly Flammable liquid and vapor
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H401 Toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

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.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 Use only non-sparking tools.
P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves.
P281 Use personal protective equipment as required.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P321 Specific treatment (see supplemental first aid instructions on this label).

P331: Do not induce vomiting.

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

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

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:

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor may cause flash fire or explosion. Prolonged or repeated contact may dry skin and cause irritation.

3.2 MIXTURE:

Ingredient	CAS No.	% by WT. Range	CLASSIFICATION
Tetrachloroethylene EC-No.204-825-9 Index-No.602-028-00-4 Reg.-No. 01-2119475329-28-XXXX	127-18-4	68	Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Skin sensitization (Category 1), H317 Carcinogenicity (Category 2), H351 STOT-SE (Category 3), Central Nervous System, H336 Acute aquatic toxicity (Category 2), H401 Chronic aquatic toxicity (Category 2), H411
Mineral Spirits R66/3 EC-No.265-149-8 Reg.-No.01-2119484819-18-XXXX	64742-47-8	31-33	Flammable liquids (Category 3), H225 Skin corrosion/irritation (Category 2), H315 STOT-SE (Category 3), Narcotic effects, H332, H335 Aspiration Hazard (Category 1), H304 Acute aquatic toxicity (Category 3), H402 Chronic aquatic toxicity (Category 3), H412

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

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

INHALATION: AFTA BLEND

****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: AFTA BLEND

****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 if irritation persists.**

EYE CONTACT: AFTA BLEND

****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). Remove contact lenses, if worn, after initial flush. Get medical attention immediately.**

INGESTION: AFTA BLEND

****FIRST AID- Do not induce vomiting. Do not give fluids. Prevent aspiration by keeping the victims head below the knees. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing. Never give anything by mouth to an unconscious person. Immediately get to a physician or poison control center, treat symptomatically. Gastric lavage may be effective when performed by a physician within 4 hours of ingestion.**

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

Eye: Severe irritation, possible eye burns causing pain, inflammation and temporal eye damage;

Skin: May cause severe irritation and possible burns; May be harmful if absorbed through skin

Inhalation: Irritation of the respiratory tract or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsciousness or coma. Irritation of respiratory tract. Causes formation of carbon monoxide in blood which affects cardiovascular system and the central nervous system.

Ingestion: May cause Irritation of gastrointestinal tract. If vomiting results in aspiration, chemical pneumonia could follow. Absorption through gastrointestinal tract may produce kidney and liver damage and symptoms of central nervous system depression.

Chronic: Possible cancer hazard based on tests with laboratory animals. Prolonged or repeated skin contact may cause de-fatting and dermatitis. May cause respiratory tract cancer. May cause adverse nervous system effects including muscle tremors and in-coordination. May cause liver and kidney damage. May cause reproductive and fetal effects.

Medical Conditions Aggravated by Exposure: Persons with angina or other cardiovascular diseases should not be exposed to this product.

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: 42.23°C (108°F) TCC

LEL %: 0.9% (V)

Auto-ignition Temp.: NA

UEL %: 7.0% (V)

5.1 SUITABLE EXTINGUISHING MEDIA: Foam--> x CO2--> x Dry Chemical--> x Water-fog--> x Other-->

Unsuitable extinguishing media: Do not use waterjet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

At high temperatures TETRACHLOROETHYLENE decomposes to give off hydrogen chloride gas plus other toxic and irritating vapors such as phosgene, chlorine. Vapor may form flammable mixture in atmosphere that contains a high percentage of oxygen. This mixture is a Flammable Liquid. If storage containers are exposed to excessive heat, over pressurization of the containers can result. If storage containers are exposed to excessive heat, over pressurization of the containers can result. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

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

HAZARDOUS COMBUSTION PRODUCTS: Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides, hydrogen chloride, chlorine and phosgene evolve when this material undergoes combustion.

5.3 ADVICE FOR FIREFIGHTERS: Shut off source. 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 approved self-contained breathing apparatus 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; Water fog may be used to cool closed containers to prevent pressure build. Extinguish only if fire can be stopped. Use flooding amounts of water as a fog; solid streams may be ineffective. Wear pressure demand self-contained breathing apparatus for buildings and confined spaces where this product is stored. Structural firefighters clothing provides limited protection to the combustion products of this material.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES: Flammable liquid; 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.

6.2 ENVIRONMENTAL PRECAUTIONS:

Keep out of water sources, drains 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.

REPORTABLE QUANTITY (RQ): 100lbs. – Component: Tetrachloroethylene; Blend 147lbs.

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. 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.

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. High Vapor Pressure presents a hazard when opening packages. 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.

CONTAINER WARNINGS: 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:

Ingredient	CAS No.	% by WT. Range	Exposure Limits
Tetrachloroethylene	127-18-4 EC-No.204-825-9 Index-No.602-028-00-4 Reg.-No. 01-2119475329-28-XXXX	68	25ppm TWA (ACGIH) 100ppm STEL (ACGIH) 100ppm TWA (OSHA) 200ppm Ceiling (OSHA) 300ppm Peak (OSHA)
Mineral Spirits R66/3	64742-47-8 EC-No.265-149-8 Reg.-No.01-2119484819-18-XXXX	31-33	212ppm TWA (ACGIH) (Reciprocal Calculations Method for Certain Refined Hydrocarbon Vapors)

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

EXPOSURE GUIDELINES: Consider the potential hazards of this material (Section 3), 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.

ENGINEERING CONTROLS: 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.

RESPIRATORY PROTECTION: 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):

For vapor concentrations 1 to 10 times ACGIH TWA use an air purifying NIOSH/MSHA Approved respirator with full face-piece and organic vapor cartridges. For concentrations over 10 times ACGIH TWA, in confined areas, and/or where vapor concentrations are unknown use an approved positive pressure full face-piece supplied air respirator.

BODY CLOTHING: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance. Use chemical resistant apron or other impervious clothing. Remove, wash and dry contaminated clothing before reuse.

SKIN PROTECTION: 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: Nitrile rubber

Minimum layer thickness: 0.2 mm

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

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

EYE/FACE PROTECTION: Use chemical safety goggles plus full face shield. Emergency shower and eyewash should be in close proximity.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

AFTA Blend

APPEARANCE:

Clear mobile liquid

COLOR:

Colorless

ODOR:	Sweetish odor.
ODOR THRESHOLD:	No data available
pH:	No data available
MOLECULAR WEIGHT:	No data available
MELTING POINT:	No data available
BOILING POINT:	250-396 °F
SPECIFIC GRAVITY:	1.204@25°C
VAPOR PRESSURE:	9.8 mm Hg @ 20°C (68.0°F)
VAPOR DENSITY:	5.4
WATER SOLUBILITY:	0.05%
PARTITION COEFFICIENT N-OCTANOL/WATER	No data available
FLASH POINT:	108°F
EVAPORATION RATE (BUTYL ACETATE=1):	1.4
UPPER FLAMMABILITY LIMIT:	7% (V) Mineral Spirits R66/3
LOWER FLAMMABILITY LIMIT:	0.9% (V) Mineral Spirits R66/3
AUTO IGNITION TEMPERATURE:	No data available
DECOMPOSITION TEMPERATURE:	No data available
VISCOSITY:	No data available
EXPLOSIVE PROPERTIES:	No data available
OXIDIZING PROPERTIES:	No data available
9.2 OTHER INFORMATION:	No data available

10. STABILITY AND REACTIVITY INFORMATION

10.1 REACTIVITY: No data available.

10.2 CHEMICAL STABILITY: Unstable () Stable (X)

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: Vapors may form flammable mixtures with air.

HAZARDOUS POLYMERIZATION: May occur () Will not occur (X)

10.4 CONDITIONS TO AVOID: --> Heat, Sparks, Pilot Lights, Static Electricity, and other high temperature sources which induce thermal decomposition to irritating and corrosive HCL from solvent vapor. Strong UV light can cause significant phosgene to be generated.

10.5 INCOMPATIBLE MATERIALS --> Strong oxidants such as liquid chlorine, oxygen, sodium hypochlorite, inorganic acids e.g. hydrochloric acid, hydrogen peroxide, dinitrogen tetroxide, alkali metals, aluminum or zinc.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS --> Toxic fumes of phosgene, Hydrochloric Acid can be produced at high temperatures in the presence of alkali metals.

11. TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:

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

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Eye> Severe irritation, possible eye burns causing pain, inflammation and temporal eye damage;

Skin> May cause severe irritation and possible burns; May be harmful if absorbed through skin

Inhalation> Irritation of the respiratory tract or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsciousness or coma. Irritation of respiratory tract. Causes formation of carbon monoxide in blood which affects cardiovascular system and the central nervous system.

Ingestion> May cause Irritation of gastrointestinal tract. If vomiting results in aspiration, chemical pneumonia could follow. Absorption through gastrointestinal tract may produce kidney and liver damage and symptoms of central nervous system depression.

Chronic: Possible cancer hazard based on tests with laboratory animals. Prolonged or repeated skin contact may cause de-fatting and dermatitis. May cause respiratory tract cancer. May cause adverse nervous system effects including muscle tremors and in-coordination. May cause liver and kidney damage. May cause reproductive and fetal effects.

Medical Conditions Aggravated by Exposure> Persons with angina or other cardiovascular diseases should not be exposed to this product.

ACUTE TOXICITY:

The effects of overexposure shown in Section II are based on acute toxicity profiles. Typical values are:

Ingredient	 Oral LD50 (Rat)	 Skin LD50 (Rabbit)	 Inhalation LC50
Tetrachloroethylene	 3385mg/kg	 5000mg/kg	 5040ppm/8hr

	(OECD Test 401		34200mg/L/8hr
Ditillates(Petroleum)	N.D.	N.D.	N.D.
Hydrotreated Light			

Tetrachloroethylene

SKIN CORROSION/IRRITATION: Skin - Rabbit Result: Skin irritation - 4 h (OECD Test Guideline 404)

SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: Mild eye irritation - 24 h

RESPIRATORY OR SKIN SENSITIZATION: Mouse Result: May cause sensitization by skin contact. (OECD Test Guideline 429)

MUTAGENIC EFFECTS: No mutagenic effects were seen in rat liver after exposure at 200ppm for 10 weeks.

Hamster ovary Result: negative (OECD Test Guideline 474)

Mouse - male Result: negative

CARCINOGEN STATUS: Limited evidence of carcinogenicity in animal studies:

IARC: 2A - Group 2A: Probably carcinogenic to humans (Tetrachloroethylene)

NTP: RAHC - Reasonably anticipated to be a human carcinogen

(Tetrachloroethylene). "Reasonably anticipated to be carcinogens" defines carcinogens for which there is limited evidence of carcinogenicity in humans and/or sufficient evidence of carcinogenicity in experimental animals.

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.

NCI (DHEW-NIH Pub. 77-813) stated that laboratory animals exposed to Perchloroethylene at 80 to 150ppm developed liver cancer in one study with no evidence of liver cancer in another study.

REPRODUCTIVE TOXICITY: Has caused behavioral biochemical, and metabolic effects on newborn rats where the mother was exposed to 900ppm/7hours at 7-13 days after conception.

Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): May cause drowsiness or dizziness.

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

ASPIRATION HAZARD: No information available.

11.2 ADDITIONAL DATA: Repeated dose toxicity: narcosis, Liver injury may occur, Kidney injury may occur.

DISTILLATES (PETROLEUM) HYDROTREATED LIGHT

SKIN CORROSION/IRRITATION: C9-C15 Alkanes: Primary dermal irritation studies (four hour exposure) in rabbits utilizing mineral spirits containing less than 2% aromatics resulted in slight to moderate skin irritation. In humans, mineral spirits have produced slight to moderate skin irritation particularly with evaporation from the skin is prevented.

SERIOUS EYE DAMAGE/EYE IRRITATION: No additional information

RESPIRATORY OR SKIN SENSITIZATION: C9-C15 Alkanes: In animal studies utilizing mineral spirits containing up to 18%, aromatics skin sensitization is not evident.

MUTAGENIC EFFECTS: C9-C15 Alkanes: In vivo and in vitro studies on mineral spirits containing up to 22 % aromatics indicate that these products are not genotoxic.

CARCINOGENICITY – C9-C15 Alkanes: The National Toxicology Program (NTP) conducted two-year carcinogenicity studies in rats and mice with Stoddard Solvent IIC (less than 2% aromatics). The studies indicated that there was some evidence of carcinogenic activity in male rats (adrenal medulla neoplasms and renal tubule adenoma) but no evidence of carcinogenic activity in female rats. Further, there was equivocal evidence of carcinogenic activity in female mice (hepatocellular adenoma) but no evidence of carcinogenic activity in male mice. A low carcinogenic potential is suggested.

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: C9-C15 Alkanes: There were no treatment-related effects on pregnancy rate, mortality or gross post mortem observations in animal studies utilizing mineral spirits containing less than 2% aromatics.

TERATOGENICITY: C9-C15 Alkanes: There were no treatment-related effects on pregnancy rate, mortality or gross post mortem observations in animal studies utilizing mineral spirits containing less than 2% aromatics.

Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System): Narcotic Effects.

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

ASPIRATION HAZARD: C9-C15 Cycloalkanes and C9-C15 Alkanes may be fatal if swallowed and enters airways.

11.2 ADDITIONAL DATA: No data available

12. ECOLOGICAL INFORMATION

DANGEROUS TO AQUATIC LIFE IN HIGH CONCENTRATIONS:

May be dangerous if it enters water intakes.

Notify local health and pollution control officials.

Notify operators of nearby water intakes.

TETRACHLOROETHYLENE

12.1 AQUATIC TOXICITY:

Toxicity to fish:

LC50 - *Oncorhynchus mykiss* (rainbow trout) - 4.9 mg/l - 96.0 h flow through test

Toxicity to daphnia and other aquatic invertebrates:

EC50 - *Daphnia magna* (Water flea) - 7.50 mg/l - 48 h

Toxicity to algae:

EC50 - *Skeletonema costatum* - > 16 mg/l - 7 h static test

12.2 PERSISTANCE AND DEGRADABILITY: aerobic - Exposure time 28 d Result: 11 % - Not readily biodegradable. (OECD Test Guideline 301C)

12.3 BIOACCUMULATIVE POTENTIAL: *Lepomis macrochirus* (Bluegill) - 21 d - 0.00343 mg/l

octanol/water partition coefficient: log Pow 2.53

Bio-concentration Factor (BCF): 49

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: Toxic to aquatic life with long lasting effects.

DISTILLATES (PETROLEUM) HYDROTREATED LIGHT

12.1 AQUATIC TOXICITY:

Toxicity to fish:

LC50 Oncorhynchus mykiss (rainbow trout) - 2.9 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates:

EC50 - Daphnia magna (Water flea) - 1.4 mg/l - 48 h

(OECD Test Guideline 202)

12.2 PERSISTENCE AND DEGRADABILITY: No data available

12.3 BIOACCUMULATIVE POTENTIAL: No data available

Bio-concentration Factor (BCF): No data available

Biological Oxygen Demand (BOD): No data available

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: Harmful to aquatic life with long lasting effects.

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. Recovery and reuse of spilled product, rather than disposal, should be the ultimate goal of a clean up.

When necessary dispose of in accordance with all applicable federal, state and local disposal regulations. RCRA hazardous waste codes: Component:

Tetrachloroethylene D039, U210. Component: Distillates Petroleum Hydrotreated Light D001, D018

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.

14. TRANSPORT INFORMATION

Land Transport (DOT)

14.1 USDOT ID Number-----> UN1992

14.2 USDOT Shipping Name-----> Flammable Liquid, toxic, n.o.s.

14.3 USDOT Hazard Classification-----> 3, 6.1 (Flammable Liquid)

USDOT Label Codes-----> 3, 6.1

14.4 USDOT Package Code-----> II
14.5 Marine pollutant-----> Yes
14.6 Special precautions for user-----> No
 Emergency Response Guide-----> 131
 Reportable quantity-----> 147lbs. - Blend

Sea Transport (IMDG)

14.1 ID Number-----> UN1992
14.2 Proper shipping name-----> FLAMMABLE LIQUID, TOXIC, N.O.S.
14.3 Hazard Classification-----> 3, 6.1
 Label Codes-----> 3, 6.1
14.4 Package Code-----> II
14.5 Marine Pollutant-----> Yes
14.6 Special precautions for user-----> Yes
 EMS-Number-----> F-A, S-A

Air Transport (IATA)

14.1 ID Number-----> UN1992
14.2 Proper shipping name-----> Flammable liquid, toxic, n.o.s.
14.3 Hazard Classification-----> 3, 6.1
 Label Codes-----> 3, 6.1
14.4 Package Code-----> II
14.5 Environmental hazard-----> None
14.6 Special precautions for user-----> Yes

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) - Listed component: Tetrachloroethylene CAS127-18-4

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

CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act)

SECTION 102(A) Hazardous Substances (40 CFR 302.4) – Listed component: Tetrachloroethylene CAS127-18-4 Reportable Quantity – 100lbs. Component: Tetrachloroethylene; Blend - 147lbs.

SECTION 101(14) Reportable Quantity: 100lbs. Component: Tetrachloroethylene; Blend - 147lbs.

Massachusetts Right to Know Components
Tetrachloroethylene CAS-No.127-18-4
Distillates (Petroleum), Hydrotreated Light CAS-64742-47-8

Pennsylvania Right to Know Components
Tetrachloroethylene CAS-No.127-18-4
Distillates (Petroleum), Hydrotreated Light CAS-64742-47-8

New Jersey Right to Know Components
Tetrachloroethylene CAS-No.127-18-4
Distillates (Petroleum), Hydrotreated Light CAS-64742-47-8

California Prop. 65 Components
WARNING! This material may contain the following components which are known to the State of California to cause cancer, birth defects or other reproductive harm, and may be subject to the requirements of California Proposition 65 (CA Health & Safety Code Section 25249.5):
Tetrachloroethylene CAS-No.127-18-4
Ethylbenzene: <0.2%
Naphthalene: <0.05%
Toluene: <0.01%
Benzene: <0.0005%

TSCA (Toxic Substance Control Act)
Tetrachloroethylene CAS-No.127-18-4, Distillate (Petroleum) Hydrotreated Light CAS 64742-47-8 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=2	Reactivity=0
HMIS RATINGS (SCALE 0-4):	Health=2	Fire=2	Reactivity=0 PPE=H

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
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.

H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H401 Toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

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Revision Content-----> Updated Sections 2, 3, 6, 8, 10, 11, 12, 15 & 16

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Prepared by-----> T.G. Fenstermaker Jr.

Acronyms:

ACGIH - American Conference of Governmental Industrial Hygienists
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

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