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

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME -----> TYPE WASH 99

PRODUCT NUMBER(S)-----> 291300

TRADE NAMES AND SYNONYMS -----> Blend

RECOMMENDED USE: Cleaning solvent, **USES ADVISED AGAINST:** No information available.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEETCompany:G.J. CHEMICAL CO., INC.Address:40 VERONICA AVENUE
SOMERSET, NJ 08873Telephone:1-973-589-1450Fax: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), H226 Skin irritation (Category 2), H315 Acute toxicity, inhalation (Category 4), H332 Serious eye damage (Category 1), H319 Carcinogenicity (Category 2), H351 Specific target organ toxicity - single exposure (Category 3), Respiratory system, Central nervous system, H335 Specific target organ toxicity - repeated exposure, Oral (Category 2), Liver, Blood, H373 Specific target organ toxicity - repeated exposure, Inhalation (Category 2), Central nervous system, H373 Acute aquatic toxicity (Category 2), H401

2.2 GHS Label elements, including precautionary statements



Signal word: DANGER

Hazard statement(s)

H226 Flammable liquid and vapor.

H315 Causes skin irritation.

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.

H373 May cause damage to organs (Liver, Blood) through prolonged or repeated exposure if swallowed.

H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure if inhaled.

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.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P260 Do not breathe 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.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor

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

P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

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. P312 Call a POISON CENTER or doctor/ physician if you feel unwell.

P331 Do not induce vomiting.

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

P337 + P313 If eye irritation persists: Get medical advice/ attention.

P362 Take off contaminated clothing and wash before reuse.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

P391 Collect spillage.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed. 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 - none

3. INGREDIENTS

3.1 SUBSTANCE: Not applicable 3.2 MIXTURE:

Ingredient	CAS No.	% by WT. Range		CLASSIFICATION	
	75-09-2 lo.200-838-9 602-004-00-3 404-41-XXXX	 54-56 	Eye irritation Carcinogenic STOT-SE - (Ca system, Centi STOT-RE - Or STOT-RE - Inl	(Category 2), H315 (Category 2A), H319 ity (Category 2), H351 ategory 3), Respiratory ral nervous system. H335 ral (Category 2), Liver, Blood, H373 halation (Category 2), Central em, H336, H373	
	1330-20-7 No.215-535-7 501-022-00-9 216-32-XXXX	37-39 	Acute toxicity Skin irritation STOT-SE (Cat H335 STOT-RE (Cat Nervous syste Aspiration Ha	quids (Category 3), H226 y, Inhalation (Category4), H332 (Category 2), H315 (Category 2A), H319 tegory 3). Respiratory System, tegory 2), Inhalation, Central em, H373 Izard (Category 1), H304 : toxicity (Category 2), H401	

Ethyl Benzene 100-41-4 EC-No.202-849-4 Index-No.601-023-00-4 Reg.-No. 01-2119892111-44-XXXX 6.6- | Flammable Liquids (Category 2), H225
6.9 | Acute Toxicity (Category 4), Inhalation, H332
| Carcinogenicity (Category 2), H351
| STOT-RE (Category 2), H373
| Aspiration Hazard (Category 1), H304
| Acute aquatic toxicity (Category 2), H401

4. FIRST-AID PROCEDURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

INHALATION: TYPE WASH 99

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

SKIN CONTACT: TYPE WASH 99

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

EYE CONTACT: TYPE WASH 99

**<u>FIRST AID-</u> 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). <u>Remove contact lenses, if worn, after initial flush. Get medical</u> <u>attention immediately.</u>

INGESTION: TYPE WASH 99

**<u>FIRST AID- Do not induce vomiting.</u> Do not give fluids. Prevent aspiration by keeping the victims head below the knees. 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: <u>Eye</u>: Irritating, causing pain, inflammation and temporal eye damage; <u>Skin</u>: Mildly irritating; May produce burning sensation and redness. <u>Inhalation</u>: 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

carbon monoxide in blood, which affects cardiovascular system and the central nervous system.

<u>Ingestion</u>: May cause Irritation of gastrointestinal tract. If vomiting results in aspiration, chemical pneumonia could follow. Absorption through gastrointestinal tract may produce liver damage and symptoms of central nervous system depression. May cause a burning sensation in the mouth and stomach. With aspiration of even a small quantity into the lungs, severe coughing, distress, chemical pneumonitis, rapidly developing pulmonary edema may occur.

<u>Chronic</u>: Can cause headache, mental confusion, depression, fatigue, loss of appetite, nausea, vomiting cough, loss of sense of balance and visual; disturbances. Prolonged skin contact may cause dermatitis. Chronic inhalation or ingestion may cause liver damage.

<u>Medical Conditions Aggravated by Exposure</u>: 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: None 26°C (79°F) TCCLEL %: 6.9 (V)Auto-ignition Temp.: No data availableUEL %: 14.88 (V)UNIFORM FIRE CODE: Flammable Liquid Class 1C

5.1 <u>SUITABLE EXTINGUISHING MEDIA:</u> 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

<u>MIXTURE:</u> At high temperatures this product 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. Fire and explosion hazard. 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. If storage containers are exposed to excessive heat, over pressurization of the containers can result. Vapors mix readily with air, may explode if ignited in an enclosed area, flashback along vapor trail may occur. Flow, agitation etc., can cause build-up o electrostatic charge due to liquid's low conductivity. Reacts violently with strong oxidants.

<u>CONDITIONS OF FLAMMABILITY</u>: 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 <u>ADVICE FOR FIREFIGHTERS:</u> Shut off source. Keep unnecessary people away; isolate hazard area and deny entry. Avoid breathing vapors, stay upwind Do not spray pool fires directly. A solid stream of water or foam directed into hot burning liquid can cause frothing. 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. 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. Water fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. Cool containers with water-fog from as far a distance as possible. Wear NIOSH approved self-contained breathing apparatus for confined spaces. Use full fire-fighting protective clothing. If protective equipment is not available or not used, fight fire from a protected location or safe distance. Avoid breathing toxic vapors, keep upwind.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY

<u>PROCEDURES</u>: 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.

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, keep out of water sources and sewers, for smaller 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.

SOIL SPILL:

Dig a holding area such as a pit, pond or lagoon to contain spill and dike surface flow using barrier of soil, sandbags, foamed polyurethane or foamed concrete. Absorb liquid mass with fly ash or cement powder.

Immobilize spill with universal gelling agent. Reduce vapor and fire hazard with appropriate foam.

<u>AIR SPILL</u>:

Knock down vapors with water spray. Keep upwind.

<u>WATER SPILL</u>: Limit spill motion and dispersion with natural barriers or oil spill control booms. Apply detergents, soaps, alcohols or another surface-active agent. Apply universal gelling agent to immobilize trapped spill and increase efficiency of removal. If dissolved, at a concentration of 10 PPM or greater, apply activated carbon at ten times the amount that has been spilled. Use suction hoses to remove trapped spill material. Use mechanical dredges or lifts to extract immobilized masses of pollution and precipitates.

<u>OCCUPATIONAL SPILL</u>: 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.

REPORTABLE QUANTITY (RQ):

Methylene Chloride-1000LBS. and Xylenes - 1000 lbs.

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) 424-8802 or (202) 426-2675 in the metropolitan Washington, D.C. area (40 CFR 302.6).

6.4 <u>REFERENCE TO OTHER SECTIONS</u>: See Sections 8 and 13.

7. HANDLING AND STORAGE

7.1 <u>PRECAUTIONS FOR SAFE HANDLING</u>: 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. Do not breathe vapor. 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.

<u>STATIC HAZARD:</u> 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.

<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 reconditioner.

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
Dichloromethane EC-No Index-No.60 RegNo. 01-211948040		54-56 	 25ppm PEL (OSHA) 50ppm TWA (ACGIH) 125ppm STEL (OSHA)
Xylenes EC-No Index-No.60 RegNo. 01-211948821		37-39	I 100PPM TWA (ACGIH) 150PPMSTEL (ACGIH) 100PPM TWA (NIOSH) 150PPM STEL (NIOSH) 100PPM TWA (OSHA)
Ethyl Benzene EC-No Index-No.60 RegNo. 01-211989211		6.6-6.9	 100PPM TWA (ACGIH) 125PPM STEL (ACGIH) 100PPM TWA (NIOSH) 125PPM STEL (NIOSH) 100PPM TWA (OSHA) 125PPM STEL (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

EXPOSURE GUIDELINES: 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.

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.

<u>RESPIRATORY PROTECTION</u>: 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 a NIOSH/MSHA approved positive pressure full face-piece supplied air respirator (SCBA).

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: Fluorinated rubber Minimum layer thickness: 0.7 mm Break through time: 148 min

<u>HYGIENE</u>: 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:

Type Wash 99 Blend APPEARANCE: COLOR: ODOR: ODOR THRESHOLD: pH: MOLECULAR WEIGHT: MELTING POINT: BOILING POINT: SPECIFIC GRAVITY: DENSITY (25°C): VAPOR PRESSURE: VAPOR DENSITY: WATER SOLUBILITY: PARTITION COEFFICIENT N-

Clear mobile liquid Colorless Ether-like odor 205-307ppm No Data Available No data available 103.6 - 290°F 1.08@25°C (77°F) 1.08@25°C (77°F) 193 mm Hg @ 20°C (68.0°F) 3.35 1.0% No data available OCTANOL/WATER FLASH POINT: 26°C (79°F) **EVAPORATION RATE (BUTYL ACETATE=1): 6.9** UPPER FLAMMABILITY LIMIT: 14.88% (V) LOWER FLAMMABILITY LIMIT: 6.9% (V) AUTO INGNITION 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 <u>REACTIVITY</u>: No data available.

- 10.2 <u>CHEMICAL STABILITY</u>: Unstable () Stable (X) Stable under normal temperatures and pressures. Contains the following stabilizer(s): 2-Methyl-2-butene (0.005 %)
- 10.3 <u>POSSIBILITY OF HAZARDOUS REACTIONS:</u> Vapors may form explosive mixtures with air. Exposure to combination of carbon monoxide and methylene chloride must be limited.

<u>HAZARDOUS POLYMERIZATION</u>: May occur () Will not occur (X) Hazardous polymerization has not been reported to occur under normal temperatures and pressures.

10.4 <u>CONDITIONS TO AVOID</u>: --> 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 INCOMPATIBILE MATERIALS:

Strong oxidants such as liquid chlorine, oxygen, sodium hypochlorite, inorganic acids e.g. hydrochloric acid hydrogen peroxide, alkali metals, aluminum or zinc.

Synergistic Materials: Exposure to combination of carbon monoxide and methylene chloride must be limited. Where carbon monoxide concentration equals its exposure limit, there should be no exposure to methylene chloride. NITRIC ACID: Exothermic reaction OXIDIZERS (STRONG): Fire and explosion hazard. PLASTICS, RUBBER, COATINGS: May be attacked. SULFURIC ACID: Exothermic reaction.

10.6 <u>HAZARDOUS DECOMPOSITION PRODUCTS</u>: Toxic fumes of Phosgene, Hydrochloric Acid can be produced at high temperatures in the presence of alkali metals. Thermal decomposition products may include toxic oxides of carbon.

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> Irritating, causing pain, inflammation and temporal eye damage;

Skin> Mildly irritating; May produce burning sensation and redness.

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 liver damage and symptoms of central nervous system depression. May cause a burning sensation in the mouth and stomach. With aspiration of even a small quantity into the lungs, severe coughing, distress, chemical pneumonitis, rapidly developing pulmonary edema may occur.

Chronic: Can cause headache, mental confusion, depression, fatigue, loss of appetite, nausea, vomiting cough, loss of sense of balance and visual; disturbances. Prolonged skin contact may cause dermatitis. Chronic inhalation or ingestion may cause liver damage.

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 III are based on acute toxicity profiles. Typical values are:

Ingredient	Oral D50 (Pat)	Skin LD50 (Rabbit) Inhalation LC50	ı.
ingreulent	O a = D30 (Rat)	SKIII LDSU (Rabbit) IIIIIalation LCSU	L

Dichloromethane Component: 2-methyl-2-butene (Amylene)	 2000mg/kg 750-2600mg/kg 	 2000mg/kg >2000mg/kg 	 52000mg/kg 175000mg/m3/4h
Xylenes Component: Ethyl benzene	 3523mg/kg 3500mg/kg	 12126mg/kg 15433mg/kg	 5000ppm/4hr N.D.

Dichloromethane (Methylene Chloride) -

SKIN CORROSION/IRRITATION: Skin - Rabbit Result: Irritating to skin. - 4 h (OECD Test Guideline 404)

SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: Irritating to eyes. RESPIRATORY OR SKIN SENSITIZATION:

Respiratory: - Mouse Did not cause sensitization on laboratory animals. (OECD Test Guideline 429)

Skin: No data available.

MUTAGENIC EFFECTS: Chromosome aberration test in vitro Result: positive Ames test Salmonella typhimurium Result: positive OECD Test Guideline 474 Mouse - male and female - Bone marrow

CARCINOGEN STATUS: IARC: 2B - Group 2B: Possibly carcinogenic to humans (Methylene chloride)

NTP: Reasonably anticipated to be a human carcinogen (Methylene chloride) OSHA: OSHA specifically regulated carcinogen (Methylene chloride) REPRODUCTIVE TOXICITY: No information available.

Specific target organ toxicity (STOT-SE)- single exposure (Globally Harmonized System): May cause respiratory irritation. May cause drowsiness or dizziness. Specific target organ toxicity (STOT-RE)- repeated exposure (Globally Harmonized System): Inhalation - May cause damage to organs through prolonged or repeated exposure. - Central nervous system Oral - May cause damage to organs through prolonged or repeated exposure. -Liver. Blood

ASPIRATION HAZARD: No information available.

11.2 ADDITIONAL DATA:

Exposure to animals of greater than 5000ppm of Dichloromethane has caused cardiac arrhythmias, however, there have been no reports in humans of effects on the heart. A 1986 NTP, 2 year animal inhalation study report states that there is clear evidence of carcinogenicity in mice (lung and liver tumors) and female rats (mammary tumors). Experience in industry has shown no increased incidences of cancer of any type in the worker population. This product contains a chemical known to the state of California to cause cancer. <u>Xylenes</u> –

SKIN CORROSION/IRRITATION: Skin - Rabbit Result: Skin irritation - 24 h SERIOUS EYE DAMAGE/EYE IRRITATION: Eyes - Rabbit Result: Moderate eye irritation

RESPIRATORY OR SKIN SENSITIZATION: No data available

MUTAGENIC EFFECTS: No information available.

CARCINOGEN STATUS:

Xylene:

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans

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.

Ethylbenzene:

IARC: 2B - Group 2B: Possibly carcinogenic to humans

REPRODUCTIVE TOXICITY: No data available.

Specific target organ toxicity (STOT-SE) - single exposure (Globally Harmonized System) May cause respiratory irritation.

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

Harmonized System) Inhalation - May cause damage to organs through prolonged or repeated exposure. - Central nervous system, Liver, Kidney

ASPIRATION HAZARD: May be fatal if swallowed and enters airways.

AT INCREASED RISK FROM EXPOSURE: Pregnant women.

11.2 ADDITIONAL DATA: Blurred vision, Incoordination., Headache, Nausea, Vomiting, Dizziness, Weakness, anemia, Prolonged or repeated exposure to skin causes defatting and dermatitis.

Alcohol may enhance the toxic effects. Stimulants such as epinephrine or ephedrine may induce ventricular fibrillation.

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.

<u>Dichloromethane (Methylene Chloride)</u> -12.1 <u>AQUATIC TOXICITY</u>: (acute) Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 193.00 mg/l - 96 h NOEC - Cyprinodon variegatus (sheepshead minnow) - 130 mg/l - 96 h Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) - 1,682.00 mg/l - 48 h

12.2 PERSISTENCE AND DEGRADABILITY:

aerobic - Exposure time 28 d Result: 68 % - Readily biodegradable. (OECD Test Guideline 301D). When released into water, this material may biodegrade to a moderate extent. When released into the air, this material is expected to have a half-life of greater than 30 days.

12.3 <u>BIOACCUMULATIVE POTENTIAL</u>: Log octanol/water partition coefficient of log Pow 1.25. This material is not expected to significantly bio-accumulate. 12.4 <u>MOBILITY IN SOIL</u>: When released into soil this material is expected to quickly evaporate. When released into the soil, this material may leach into groundwater. 12.5 RESULTS OF PBT AND vPvB: Data are not available.

12.6 OTHER ADVERSE EFFECTS: Slightly hazardous to water.

<u>Xylenes</u> -

HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS

May be dangerous if it enters water intakes.

Notify local health and wildlife officials.

Notify operators of nearby water intakes.

12.1 AQUATIC TOXICITY (Acute):

Toxicity to fish:

LD50 - Oncorhynchus mykiss (rainbow trout) - 3.3 mg/l - 96 h

Toxicity to daphnia and other invertebrates:

EC50 - Daphnia magna (Water flea) - 75.49 mg/l - 24 h

Toxicity to algae:

EC50 - Pseudokirchneriella subcapitata - 72 mg/l - 14 d Growth inhibition

12.2 PERSISTANCE AND DEGRADABILITY: Readily Biodegradable

12.3 BIOACCUMULATIVE POTENTIAL: No data available.

12.4 MOBILITY IN SOIL: No data available

12.5 RESULTS OF PBT AND vPvT :

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.

ETHYLBENZENE:

12.1 AQUATIC TOXICITY (Acute):

Toxicity to Fish:

LC50 - Oncorhynchus mykiss (rainbow trout) - 4.2 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia magna (Water flea) – 1.8 – 2.4 mg/l - 48 h

Toxicity to algae:

EC50 - static test - Skeletonema costatum (marine diatom) - 4.9 mg/l - 72 h 12.2 PERSISTANCE AND DEGRADABILITY:

aerobic - Exposure time 28 d Result: 70 - 80 % - Readily biodegradable.

12.3 BIOACCUMULATIVE POTENTIAL:

Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected. Log Pow: 3.6@20°C(68°F)

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.

13. **DISPOSAL CONSIDERATIONS**

13.1 <u>WASTE TREATMENT METHODS</u>: 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.

<u>CONTAMINATED PACKAGING:</u> Dispose of as unused product.

RCRA: The unused product is a RCRA hazardous waste if discarded. The RCRA ID number is: Dichloromethane - U080; Xylenes – U239, D001 If the waste is a spent solvent, the appropriate spent solvent code should be used.

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-----> UN1992

14.2 USDOT Shipping Name-----> Flammable Liquids, Toxic, n.o.s.

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

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

14.4 USDOT Package Code-----> II

14.5 Marine Pollutant-----> No

14.6 Special precautions for user-----> No Emergency Response Guide-----> 131 Reportable quantity-----> 1000lbs. Poison inhalation hazard-----> No

Sea Transport (IMDG) 14.1 ID Number----> UN1992

- 14.2 Proper shipping name-----> FLAMMABLE LIQUIDS, TOXIC, N.O.S.
- 14.3 Hazard Classification-----> 3, 6.1 (Flammable Liquid, Toxic)
- Label Codes-----> 3, 6.1
- 14.4 Package Code-----> II
- 14.5 Marine Pollutant-----> No
- 14.6 Special precautions for user-----> No EMS-Number-----> F-A, S-A

Air Transport (IATA)

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

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 Methylene Chloride CAS 75-09-2; Xylenes CAS 1330-20-7; Ethyl benzene CAS 100-41-4

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

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

SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Listed Methylene Chloride CAS 75-09-2, Xylenes CAS 1330-20-7, Ethyl benzene CAS 100-41-4 Reportable Quantity – 1000lbs.

SECTION 101(14) Reportable Quantity: Methylene Chloride CAS 75-09-2, Xylenes CAS 1330-20-7, Ethyl benzene CAS 100-41-4 Reportable Quantity – 1000lbs.

Massachusetts Right to Know Components Methylene chloride CAS-No.75-09-2 Xylenes CAS 1330-20-7 Ethyl benzene CAS 100-41-4 Pennsylvania Right to Know Components Methylene chloride CAS-No.75-09-2 Xylenes CAS 1330-20-7 Ethyl benzene CAS 100-41-4

New Jersey Right to Know Components Methylene chloride CAS-No.75-09-2 Xylenes CAS 1330-20-7 Ethyl benzene CAS 100-41-4

California Prop. 65 Components WARNING! This product contains chemicals known to the State of California to cause cancer. Methylene chloride CAS-No.75-09-2; Ethyl benzene CAS 100-41-4

TSCA (Toxic Substance Control Act)

Methylene Chloride CAS 75-09-2, Xylenes CAS 1330-20-7, Ethyl benzene CAS 100-41-4 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:

HMIS (Hazardous Materials Identification System) **Hazard Rating:**

4-Extreme 3-High 2-Moderate 1-Slight 0-Insignificant

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

Hazard statement(s) from Section 2 and 3:

H226 Flammable liquid and vapor.

H315 Causes skin irritation.

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.

H373 May cause damage to organs (Liver, Blood) through prolonged or repeated exposure if swallowed.

H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure if inhaled.

H401 Toxic to aquatic life.

Date of preparation-----> January 28, 1997 Revision Number-----> 1.7 Revision Content-----> General update all sections Revision-----> December 14, 2018 Prepared by-----> T.G. Fenstermaker Jr.

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