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

1. PRODUCT IDENTIFIER

1.1 PRODUCT NAME: Peerless Screen Wash

PRODUCT NUMBER(S): 219100

TRADE NAMES/SYNONYMS: Blend

1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST RECOMMENDED USE: Printing Screen Wash 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 2), H225 Skin irritation (Category 3), H315 Serious eye damage (Category 1), H318 Specific target organ toxicity - single exposure (Category 3), Central Nervous System, Respiratory System, H335, H336 Specific target organ toxicity – Repeated exposure, Inhalation (Category 2), Central Nervous System, Liver, Kidney, H373 Aspiration Hazard (Category 1), H304 Acute aquatic toxicity (Category 2), H401

2.2 GHS Label elements, including precautionary statements



Signal word DANGER

Hazard statement(s)

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H304 May be fatal if swallowed and enters airways.

H318 Causes serious eye damage.

H335 May cause respiratory irritation

H336 May cause drowsiness or dizziness.

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

H401 Toxic to aquatic life.

Precautionary statement(s)

Prevention:

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.

P261 Avoid 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/ protective clothing/ 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 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor 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.

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

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

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: Repeated exposure may cause skin dryness or cracking.

3. INGREDIENTS

3.1 SUBSTANCE: Not applicable. 3.2 MIXTURE:

Ingredient	CAS No.	% by Ran	/ WT. ge	CLASSIFICATION
	67-64-1 EC-No.200-662-2 Idex-No.606-001-00-8	42	Skin Eye i	mable liquids (Category 2), H225 irritation (Category 3), H316 rritation (Category 2A), H319
RegNo. 01-/	STOT-SE (Category 3), Central Nervous System, H336			
Total aromatic cont toluene:	ent: Mixture of ortho-, r	neta-, ar	nd para-	dimethyl benzene, ethyl benzene and
Xylenes	1330-20-7	58		mable liquids (Category 3), H226
EC-No.215-535-7				irritation (Category 2), H315
In		•	rritation (Category 2A), H319	
RegNo. 01-2119488216-32-XXXX			STO1 H335	Γ-SE (Category 3), Respiratory System,
				-RE (Category 2), Inhalation, Central
				ous System, Liver, Kidney, H373
			•	ration hazard (Category 1), H304 e aquatic toxicity (Category 2), H401

4. FIRST-AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES:

INHALATION: PEERLESS SCREEN WASH

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

SKIN CONTACT: PEERLESS SCREEN WASH

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

EYE CONTACT: PEERLESS SCREEN WASH

<u>**FIRST AID- Wash eyes immediately with large amounts of water or</u> <u>normal saline, occasionally lifting upper and lower lids, until no evidence</u> <u>of chemical remains (approximately 15-20 minutes). Remove contact</u> <u>lenses, if worn, after initial flush. Get medical attention immediately.</u>

INGESTION: PEERLESS SCREEN WASH

<u>**FIRST AID- Do NOT induce vomiting. Never give anything by</u> mouth to an unconscious person. Rinse mouth with water. 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: of high concentrations may result in nausea, vomiting, headache, ringing of the ears, and severe breathing difficulties. High vapor concentrations are anesthetic and central nervous system depressants. Excitation is followed by impaired motor coordination, slurred speech, sensory disturbances such as double vision and vertigo, flushing of the face, rapid pulse, and sweating. Nausea and vomiting are common. Other symptoms include dryness of the mouth and the throat, headache, sleepiness, dizziness, light headedness, weakness, and loss of energy. Very high exposures may cause unconsciousness, coma, or death. Kidney toxicity may occur but is rare following acute exposure. Post-alcoholic headache and gastritis are common in recovery. Inhalation exposure may cause lung irritation and cough. Skin: contact result in loss of natural oils and often results in dermatitis. May result in redness, irritation, since acetone has a drying effect on the skin. Eye: Splashes are toxic to eyes. Hemorrhagic inflammatory lesions may develop. Ingestion: causes burning sensation in mouth and stomach, nausea, vomiting and salivation. Minute amounts aspirated into the lungs can produce sever hemorrhagic

pneumonitis and severe pulmonary injury or death.

<u>Chronic Effects</u>: Irritation of the eyes, nose, and throat are the most common problems associated with chronic exposure to acetone. Central nervous system effects such as dizziness and sleepiness can occur, as can dryness, irritation, and inflammation of the skin. Repeated exposure of the eyes to high concentrations of vapor may cause reversible eye damage. Chronic effects of ingestion on humans not readily available.

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

Specific details on antidote: No recommendation given.

5. FIRE FIGHTING PROCEDURES

FLASH POINT: -17°C (1.4°F) closed cupUEL: 9.3% (V)AUTOIGNITION TEMP.: 464-529°C (867-984°F)LEL: 1.7% (V)UNIFORM FIRE CODE: Flammable Liquid Class IBELECTRICAL HAZARD: Class I, group D

5.1 <u>SUITABLE EXTINGUISHING MEDIA</u>: DRY CHEMICAL, CARBON DIOXIDE, WATER SPRAY OR REGULAR FOAM (1990 Emergency Response Guidebook, DOT P 5800.5).FOR LARGER FIRES, USE WATER SPRAY, FOG OR REGULAR FOAM (1990 Emergency Response Guidebook, DOT P 5800.5).

Unsuitable extinguishing media: Do not use waterjet.

5.2 <u>SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:</u> FIRE AND EXPLOSION HAZARD: DANGEROUS FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME. DUE TO LOW ELECTROCONDUCTIVITY OF THE SUBSTANCE, FLOW OR AGITATION MAY GENERATE ELECTROSTATIC CHARGES RESULTING IN SPARKS WITH POSSIBLE IGNITION. VAPORS ARE HEAVIER THAN AIR AND MAY TRAVEL A CONSIDERABLE DISTANCE TO A SOURCE OF IGNITION AND FLASH BACK. VAPOR-AIR MIXTURES ARE EXPLOSIVE. Highly dangerous fire hazard when exposed to heat, sparks, flame, or oxidants. Peerless Screen Wash is extremely flammable and its vapors form explosive mixtures with air. Containers may explode in heat of fire. 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 of 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.

<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: 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. 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. 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. Use of flooding amounts of water as a fog; solid streams may be ineffective. Cool containers with water-fog from as far a distance as possible. Avoid breathing vapors; keep upwind. Wear NIOSH/MSHA approved self-contained breathing apparatus (SCBA) for confined spaces. Fire fighters should wear full protective clothing and NIOSH/MSHA approved self-contained breathing apparatus (SCBA) with full face-piece operated in the pressure demand or other positive pressure mode. If protective equipment is not available or not used, fight fire from a protected location or safe distance. Water may be used to flush spills away from exposures and to dilute spills to non flammable mixtures.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY

<u>PROCEDURES</u>: 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.

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.

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.

WATER SPILL: 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.

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.

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): XYLENES -1000lbs.; ACETONE – 5000lbs. Blend – 2381lbs.

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 into the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers. Keep away from heat, sparks and flame. Do not breathe vapor. Avoid contact with eyes, skin and clothing. Keep container tightly closed and upright to prevent leakage. Use only with adequate ventilation. Containers of this material may be hazardous when empty. Since emptied containers retain product residues, assume emptied containers to have the same hazard qualities as full 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. Store away from incompatible substances.

<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
	67-64-1 No.200-662-2 606-001-00-8 330-49-XXXX	42	1000ppm TWA (OSHA) 250ppm TWA (NIOSH) 500ppm TWA (ACGIH) 750ppm STEL (ACGIH)

Total aromatic content: Mixture of ortho-, meta-, and para-dimethyl benzene, ethyl benzene and
toluene:Xylenes1330-20-758100ppm TWA (OSHA)

s 1330-20-7 EC-No.215-535-7 Index-No.601-022-00-9 Reg.-No. 01-2119488216-32-XXXX 100ppm TWA (OSHA) 125ppm STEL (OSHA) 100ppm TWA (ACGIH) 125ppm STEL (ACGIH) 100ppm TWA (NIOSH) 125ppm STEL (NIOSH) 900ppm (IDLH)

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.

RESPIRATORY PROTECTION:

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., 1910.132, 1910.134 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):

1 to 10 times TWA-MESA/NIOSH approved chemical cartridge respirator with organic vapor cartridge(s).

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

10 TIMES TWA+ PPM- Any approved supplied-air respirator.

Any approved self-contained breathing apparatus.

ESCAPE- Any air-purifying full face-piece respirator (gas mask) with a chin-style or front- or back-mounted organic vapor canister. Any appropriate escape-type self-contained breathing apparatus.

BODY CLOTHING: Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged contact with this substance.

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: 0.4 mm Break through time: 35 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 and/or a full face shield where splashing is possible. Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work area.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

Peerless Screen Wash	
APPEARANCE:	Volatile liquid
COLOR:	Colorless
ODOR:	Sweetish, aromatic, pungent odor
ODOR THRESHOLD:	No Data Available
pH:	No Data Available
MOLECULAR WEIGHT:	No Data Available
MELTING POINT:	No Data Available
BOILING POINT:	133-290°F (56°C)
SPECIFIC GRAVITY:	0.838 @ 20°C
DENSITY (25°C):	0.838 g/ml (20°C)
VAPOR PRESSURE:	85 mm Hg @ 20°C (68.0°F)
VAPOR DENSITY:	No data available
WATER SOLUBILITY:	44%
PARTITION COEFFICIENT N-	No data available
OCTANOL/WATER	
FLASH POINT:	-17.0°C (1.4°F)
EVAPORATION RATE (BUTYL ACETATE=1)	: 3.91
UPPER FLAMMABILITY LIMIT:	9.3% (V)
LOWER FLAMMABILITY LIMIT:	1.7% (V)

AUTO INGNITION TEMPERATURE: DECOMPOSITION TEMPERATURE: VISCOSITY: EXPLOSIVE PROPERTIES: OXIDIZING PROPERTIES: 867-983°F No data available No data available No data available 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>: Stable under recommended storage conditions.
- 10.3 <u>POSSIBILITY OF HAZARDOUS REACTIONS:</u> Vapors may form explosive mixtures with air.

<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, flames and sparks. Extremes of temperature and direct sunlight.
- 10.5 INCOMPATIBILITIES- WITH ACETONE:

ACIDS: Incompatible AMINES (ALIPHATIC): Incompatible BROMINE: Violent reaction with excess amounts of bromine **BROMINE TRIFLUORIDE:** Explosion on contact **BROMOFORM:** Violent reaction in presence of bases (e.g. potassium) hydroxide) CHLOROFORM: Violent reaction in presence of a base CHROMIUM TRIOXIDE: Ignition on contact at ambient temperature CHROMYL CHLORIDE: Incandescent reaction DIOXYGEN BIFLUORIDE + SOLID CARBON DIOXIDE: Explosion at -78 C HEXACHLOROMELANINE: Possible explosion HYDROGEN PEROXIDE: Explosion **NITRIC ACID:** Ignition NITRIC + ACETIC ACID MIXTURE: Possible explosion NITRIC + SULFURIC ACID MIXTURE: Violent oxidation NITROSYL CHLORIDE: Explosive reaction NITROSYL PERCHLORATE: Ignition and explosion NITRYL PERCHLORATE: Ignition and explosion hazard **OXIDIZERS (STRONG):** Fire and explosion hazard PERMONOSULFURIC ACID: Explosion

PLASTICS: Incompatible PLATINUM + NITROSYL CHLORIDE: Possible explosion **POTASSIUM-TERT-BUTOXIDE:** Ignition **RAYON:** Incompatible SODIUM HYPOBROMITE: Explosion SODIUM HYPOIODITE: Possible explosion SULFUR DICHLORIDE: Violent reaction SULFURIC ACID AND POTASSIUM BICHROMATE: Ignition THIODIGLYCOL + HYDROGEN PEROXIDE: Possible explosion THIOTRIAZYL PERCHLORATE: Possible explosion 1.1.1-TRICHLOROETHANE: Exothermic condensation by a basic catalyst TRICHLOROMELANINE: Possible explosion See also ketones. **KETONES:** ACETALDEHYDE: Violent condensation reaction NITRIC ACID + HYDROGEN PEROXIDE: Formation of explosive product **PERCHLORIC ACID: Violent decomposition**

10.5 INCOMPATIBILITIES: XYLENE

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>: 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 Eye--> x

ACUTE HEALTH EFFECTS:

Effects of overexposure:

Inhalation of high concentrations may result in nausea, vomiting, headache, ringing of the ears, and severe breathing difficulties. High vapor concentrations are anesthetic and central nervous system depressants. Excitation is followed by impaired motor coordination, slurred speech, sensory disturbances such as double vision and vertigo, flushing of the face, rapid pulse, and sweating. Nausea and vomiting are common. Other symptoms include dryness of the mouth and the throat, headache, sleepiness, dizziness, light headedness, weakness, and loss of energy. Very high exposures may cause unconsciousness, coma, or death. Kidney toxicity may occur but is rare following acute exposure. Post-alcoholic headache and gastritis are common in recovery. Inhalation exposure may cause lung irritation and cough.

Skin contact result in loss of natural oils and often results in dermatitis. May result in redness, irritation, since acetone has a drying effect on the skin.

Splashes are toxic to eyes. Hemorrhagic inflammatory lesions may develop.

Ingestion causes burning sensation in mouth and stomach, nausea, vomiting and salivation. Minute amounts aspirated into the lungs can produce sever hemorrhagic pneumonitis and severe pulmonary injury or death.

Chronic Effects: Irritation of the eyes, nose, and throat are the most common problems associated with chronic exposure to acetone. Central nervous system effects such as dizziness and sleepiness can occur, as can dryness, irritation, and inflammation of the skin. Repeated exposure of the eyes to high concentrations of vapor may cause reversible eye damage. Chronic effects of ingestion on humans not readily available.

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
Acetone	 5800mg/kg 	 7426mg/kg 	 50100ppm/6hr
Xylene	4300mg/kg	1700mg/kg 	5000ppm/4hr

ACETONE:

Additional Toxicity Data:

500 PPM inhalation-human TCLD; 110 GM/H3/1 hour inhalation-mouse LCLO; 2857 MG/KG oral-man TDLO; 8 GM/KG oral-dog LDLO; 3000 MG/KG oral-mouse LD50; 5 GM/KG dermal-dog LDLO; 5000 MG/KG subcutaneous-guinea pig LDLO; 5500 MG/KG intravenous-rat LD50; 4 GM/KG intravenous-mouse LDLO; 1576 MG/KG intraperitoneal-mouse LD50; 8 GM/KG intraperitoneal-dog LDLO; 1159 MG/KG unreported-man LDLO; mutagenic data (RTECS); reproductive effects data (RTECS).

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:** Guinea pig Result: Does not cause skin sensitization.

MUTAGENIC EFFECTS: Germ Cell Mutagenicity: No information available. 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 TOXICITY: No data available.

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

AT INCREASED RISK FORM EXPOSURE: Persons with chronic respiratory or skin diseases.

ASPIRATION HAZARD: No data available

11.2 ADDITIONAL DATA: Alcohol may enhance the toxic effects.

XYLENES:

IRRITATION DATA: 200 PPM eye-human; 87 MG eye-rabbit mild; 5 MG/24 hours eye-rabbit severe; 100% skin-rabbit moderate; 500 MG/24 hours skin-rabbit moderate. 1700 MG/KG subcutaneous-rat LD50 10000 PPM/ 6 hours inhalationman LDLO; 200 PPM inhalation-human TCLO;; 450 PPM inhalation-guinea pig LDLO; 50 MG/KG oral-human LDLO;;; 129 MG/KG intravenous-rabbit LDLO; 2 GM/KG intraperitoneal-mammal LDLO; 2459 MG/KG intraperitoneal-guinea pig LDLO; reproductive effects data (RTECS), (DPIRDU), (85IFAI), (38MKAJ). 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

No data is available for this blend.

ACETONE:

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.

12.1 AQUATIC TOXICITY (Acute):

Toxicity to fish:

LC50 - Oncorhynchus mykiss (rainbow trout) - 5,540.00 mg/l - 96 h

LC50 - Leuciscus idus (Golden Orfe) – 11300 mg/l - 48 h

LC50 – Gambusia affinis (Moskquito Fish) – 13000 mg/l – 48 h

LC50 – Pimphales promelas (Fathead Minnow) – 6210 mg/l – 96 h

Toxicity to aquatic invertebrates:

EC50 - Daphnia magna (Water flea) - 8800 mg/l - 48 h

Toxicity to Algae:

EC50 – Algae - 3400mg/l – 48 h

Toxicity to Microorganisms:

EC50 Bacteria - 1700 mg/l - 16 h

12.2 PERSISTANCE AND DEGRADABILITY:

Result 91%- Readily biodegradable; (OECD Test Guideline 301B)Biological Oxygen Demand:1850 mg/g, 5 hOxygen Demand (Theoretical):2200 mg/gCarbon Dioxide (Theoretical):2273 mg/mgProcessDegradation rateTimeBiotic/abiotic91%28 daysCarbon dioxide generation90.9%28 days

12.3 BIOACCUMULATIVE POTENTIAL:

log Pow -.0.24

Will not bio-accumulate.

Bio-centration Factor: 0.69, Method of testing BCF.

12.4 MOBILITY IN SOIL:

SURFACE TENSION: 26.2 mN/m 0°C

This product is water soluble and may spread in water systems.

12.5 RESULTS OF PBT AND vPvB:

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

12.6 OTHER ADVERSE EFFECTS: Slightly toxic to aquatic life.

XYLENES:

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 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.

13. **DISPOSAL GUIDELINES**

13.1 WASTE DISPOSAL METHODS: The waste material should be treated and/or disposed of at site authorized to handle hazardous chemical waste. Appropriate Federal, State and Local Regulatory Authorities should be contacted before discharge, treatment or disposal of waste material.

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.

CONTAMINATED PACKAGING: Dispose of as unused product.

RCRA: The unused product is a RCRA hazardous waste if discarded. The RCRA ID numbers are: Acetone - U002 and Xylenes - U239

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> UN1993
14.2 USDOT Shipping Name> Flammable Liquid n.o.s.
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> Blend – 2381lbs.
Sea Transport (IMDG)
14.1 ID Number> UN1993
14.2 Proper shipping name> FLAMMABLE LIQUID, N.O.S.
14.3 Hazard Classification> 3 (Flammable Liquid)
Label Codes> 3
14.4 Package Code> II

14.5 Marine Pollutant> N	lo
14.6 Special precautions for user> N	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.
- 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) - Listed as a toxic chemical Ethylbenzene CAS-No.100-41-4;

Xylene 1330-20-7

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 <u>Act)</u> SECTION 102(A) Hazardous Substances (40 CFR 302.4) - Listed

Reportable Quantity - Acetone CAS-No. 67-64-1 - 5,000 pounds. Xylenes CAS-No. 1330-20-7 – 1000lbs.

SECTION 101(14) Reportable Quantity: Acetone CAS-No. 67-64-1 - 5,000 pounds. Xylenes CAS-No. 1330-20-7 – 1000lbs. Blend – 2381lbs.

Massachusetts Right to Know Components Acetone CAS-No. 67-64-1 Xylenes CAS-No. 1330-20-7 Ethylbenzene CAS-No.100-41-4;

Pennsylvania Right to Know Components Acetone CAS-No. 67-64-1 Xylenes CAS-No. 1330-20-7 Ethylbenzene CAS-No.100-41-4; New Jersey Right to Know Components Acetone CAS-No. 67-64-1 Xylenes CAS-No. 1330-20-7 Ethylbenzene CAS-No.100-41-4;

California Prop. 65 Components WARNING! This product contains a chemical known to the State of California to cause cancer. Ethylbenzene CAS-No.100-41-4

DEA (Drug Enforcement Agency)

Acetone CAS-No. 67-64-1 is subject to the Chemical Diversion and Trafficking Act of 1988 and subject to certain record keeping and reporting requirements. (21 CFR 1310 and 1313)

TSCA (Toxic Substance Control Act)

Acetone CAS-No. 67-64-1, Xylene 1330-20-7 and Ethylbenzene CAS-No.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=2	Fire=3	Reactivity=0	
HMIS RATINGS (SCALE 0-4):	Health=2	Fire=3	Reactivity=0	PPE=H

Hazard statement(s) from Section 2 and 3:

H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H304 May be fatal if swallowed and enters airways.

H318 Causes serious eye damage.

H335 May cause respiratory irritation

H336 May cause drowsiness or dizziness.

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

H401 Toxic to aquatic life.

Date of Preparation-----> February 24, 2005 Revision Number-----> 2.4 Revision Content-----> General update all sections Revision Date-----> October 24, 2018 Prepared by----->T.G. Fenstermaker, Jr

Acronyms:

ACGIH	-	American Conference of Governmental Industrial Hygenists
AIHA	-	American Industrial Hygiene Association
ANSI	-	American Nation Standards Institute
API	-	American Petroleum Institute
CERCLA	۱ -	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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