1. Product and Company Identification

Product Code: 0004608

Product Name: PROTO-FIX® Fixative

Company Name: Alpha-Tec Systems, Inc.
1311 SE Cardinal Ct Suite 170
Vancouver, WA 98683

Phone Number:
1 (360)260-2779

Web site address: Alphatecsystems.com

Email address: Regulatory@Alphatecsystems.com

Emergency Contact: INFOTRAC
International 00-1- (352)323-3500

Information: North America 1 (800)535-5053

Intended Use: For Laboratory Use Only

Product List Product Codes: 0004621,X004601, 0004600, 0004602, 004603, 0004604, 0004605, 0004606C.

2. Hazards Identification

Flammable Liquids, Category 2
Acute Toxicity: Inhalation, Category 4
Acute Toxicity: Oral, Category 4
Skin Corrosion/Irritation, Category 1B
Skin Sensitization, Category 1
Germ Cell Mutagenicity, Category 2
Carcinogenicity, Category 1B
Toxic To Reproduction, Category 2
Specific Target Organ Toxicity (single exposure), Category 1
Specific Target Organ Toxicity (repeated exposure), Category 1

GHS Signal Word: **Danger**

GHS Hazard Phrases:
EUH066 - Repeated exposure may cause skin dryness or cracking.
H225 - Highly flammable liquid and vapor.
H302 - Harmful if swallowed.
H314 - Causes severe skin burns and eye damage.
H317 - May cause an allergic skin reaction.
H332 - Harmful if inhaled.
H341 - Suspected of causing genetic defects.
H350 - May cause cancer .
H361 - Suspected of damaging fertility or the unborn child .
H370 - Causes damage to organs - Kidneys, Nervous system, Respiratory irritation.
H372 - Causes damage to organs - Nervous system, Kidneys, Respiratory irritation. through prolonged or repeated exposure.

GHS Precautionary Phrases:
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 hands thoroughly after handling. P270 - Do not eat, drink or smoke when using this product. P271 - Use only outdoors or in a well-ventilated area. P272 - Contaminated work clothing should not be allowed out of the workplace. P280 - Wear protective gloves/protective clothing/eye protection/face protection.
GHS Response Phrases:	P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. P302+352 - IF ON SKIN: Wash with plenty of soap and water. P303+361+353 - IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower. P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P308+311 - If exposed of concerned: Call a POISON CENTER/Doctor/... P313 - Get medical advice/attention. P310 - Immediately call a POISON CENTER or doctor/physician. P314 - Get medical attention/advice if you feel unwell. P330 - Rinse mouth. P333+313 - If skin irritation or rash occurs, seek medical advice/attention. P362+364 - Take off contaminated clothing and wash it before reuse. P363 - Wash contaminated clothing before reuse.
GHS Storage and Disposal Phrases:	P403+235 - Store in cool/well-ventilated place. P405 - Store locked up. P501 - Dispose of contents/container to safe area according to state and local guidelines.
Potential Health Effects (Acute and Chronic):	Though a single exposure may cause no effect, daily exposures may result in the accumulation of a harmful amount. The toxicological properties of this material have not been fully investigated. Chronic exposure to acetic acid may cause erosion of dental enamel, bronchitis, eye irritation, darkening of the skin, and chronic inflammation of the respiratory tract. Use appropriate procedures to prevent opportunities for direct contact with the skin or eyes and to prevent inhalation. Prolonged or repeated skin contact may cause defatting and dermatitis. Chronic: May cause reproductive and fetal effects. Animal studies have reported the development of tumors. Prolonged exposure may cause liver, kidney, and heart damage.
Inhalation:	Inhalation of high concentrations may cause central nervous system effects characterized by nausea, headache, dizziness, unconsciousness and coma. Causes respiratory tract irritation. May cause narcotic effects in high concentration. Vapors may cause dizziness or suffocation. Effects may be delayed. Causes chemical burns to the respiratory tract. Exposure may lead to bronchitis, pharyngitis, and dental erosion. May be absorbed through the lungs. Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract. Causes upper respiratory tract irritation. Inhalation is the most common route of occupational exposure. At first, methanol causes CNS depression with nausea, headache, vomiting, dizziness and incoordination. A time period with no obvious symptoms follows (typically 8-24 hrs). This latent period is followed by metabolic acidosis and severe visual effects which may include reduced reactivity and/or increased sensitivity to light, blurred, doubl and/or snowy vision, and blindness. Depending on the severity of exposure and the promptness of treatment,

survivors may recover completely or may have permanent blindness, vision disturbances and/or nervous system effects.

Skin Contact: May cause cyanosis of the extremities. Causes skin burns. May be harmful if absorbed through the skin. Contact with the skin may cause blackening and hyperkeratosis of the skin of the hands. Causes burns. Skin Absorption: Readily absorbed through skin. Toxic if absorbed through skin. May cause irritation with pain and stinging, especially if the skin is abraded. Isopropanol has a low potential to cause allergic skin reactions; however, rare cases of allergic contact dermatitis have been reported. Dermal absorption has been considered toxicologically insignificant. The cases of deep coma associated with skin contact are thought to be a consequence of gross isopropanol vapor inhalation in rooms with inadequate ventilation, rather than being attributable to percutaneous absorption of isopropanol per se. May be absorbed through the skin in harmful amounts. Prolonged and/or repeated contact may cause defatting of the skin and dermatitis. Methanol can be absorbed through the skin, producing systemic effects that include visual disturbances.

Eye Contact: Causes severe eye irritation. May cause painful sensitization to light. May cause chemical conjunctivitis and corneal damage. Contact with liquid or vapor causes severe burns and possible irreversible eye damage. Causes eye burns. Produces irritation, characterized by a burning sensation, redness, tearing, inflammation, and possible corneal injury. May cause transient corneal injury. Inhalation, ingestion or skin absorption of methanol can cause significant disturbances in vision, including blindness.

Ingestion: May cause systemic toxicity with acidosis. May cause central nervous system depression, characterized by excitement, followed by headache, dizziness, drowsiness, and nausea. Advanced stages may cause collapse, unconsciousness, coma and possible death due to respiratory failure. May cause severe and permanent damage to the digestive tract. Causes severe pain, nausea, vomiting, diarrhea, and shock. May cause polyuria, oliguria (excretion of a diminished amount of urine in relation to the fluid intake) and anuria (complete suppression of urination). Rapidly absorbed from the gastrointestinal tract. Toxic if swallowed. Ingestion can cause immediate burning pain in the mouth, throat, abdomen; severe swelling of the larynx and skeletal paralysis affecting the ability to breathe, circulatory shock and convulsions.

May cause allergic respiratory and skin reactions. Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause kidney damage. Aspiration of material into the lungs may cause chemical pneumonitis, which may be fatal. The probable oral lethal dose in humans is 240 ml (2696 mg/kg), but ingestion of only 20 ml (224 mg/kg) has, but in gestion of only 20 ml (224 mg/kg) has caused poisoning. May be fatal or cause blindness if swallowed. Aspiration hazard. May cause cardiopulmonary system effects.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration
NA	Trade Secret	Proprietary
NA	Trade Secret	Proprietary
NA	Trade Secret	Proprietary
NA	Trade Secret	Proprietary
NA	Trade Secret	Proprietary
NA	Trade Secret	Proprietary
NA	Trade Secret	Proprietary
NA	Trade Secret	Proprietary
NA	Trade Secret	Proprietary

4. First Aid Measures

Emergency and First Aid Procedures:

In Case of Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing becomes difficult, call a physician. If inhaled, remove to fresh air.

In Case of Skin Contact: Get medical aid. Wash clothing before reuse. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Remove contaminated clothing and shoes. Call a physician. In case of contact, flush skin with plenty of water. Get medical aid if irritation develops and persists.

In Case of Eye Contact: Get medical aid. Gently lift eyelids and flush continuously with water. In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician. In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Get medical aid immediately.

In Case of Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid. Wash out mouth with water provided person is conscious. Call a physician. Get medical aid immediately. If victim is fully conscious, give a cupful of water. If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately. Potential for aspiration if swallowed. If vomiting occurs naturally, have victim lean forward.

Signs and Symptoms Of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Inhalation may result in spasm, inflammation and edema of the larynxand bronchi, chemical pneumonitis, and pulmonary edema. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. May cause convulsions. Gastrointestinal disturbances. Coughing, chest pains, difficulty in breathing. Exposure can cause:

Note to Physician: Treat symptomatically and supportively. Persons with skin or eye disorders or liver, kidney, chronic respiratory diseases, or central and peripheral nervous sytem diseases may be at increased risk from exposure to this substance.
Antidote: Replace fluid and electrolytes. Persons with pre-existing skin disorders or impaired respiratory or pulmonary function may be at increased risk to the effects of this substance. Urine acetone test may be helpful in diagnosis. Hemodialysis should be considered in severe intoxication. Effects may be delayed.
Antidote: Ethanol may inhibit methanol metabolism.

5. Fire Fighting Measures

Flash Pt: No data.

Explosive Limits: LEL: No data. UEL: No data.

Autoignition Pt: No data.

Suitable Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Water may be ineffective. Do NOT use straight streams of water. Carbon dioxide, dry chemical powder, or appropriate foam. Suitable: For large fires, use dry chemical, carbon dioxide, alcohol-resistant foam, or water spray. For small fires, use carbon dioxide, dry chemical, dry sand, or alcohol-resistant foam. Cool containers with flooding quantities of water until well after fire is out.

Fire Fighting Instructions: Replace fluid and electrolytes. As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

	Vapors may form explosive mixtures with air. Vapors can travel to a source of ignition and flash back. Will burn if involved in a fire. Can release vapors that form explosive mixtures at temperatures above the flashpoint. Use water spray to keep fire-exposed containers cool. Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Reacts with most metals to form highly flammable hydrogen gas which can form explosive mixtures with air. Flammable liquid and vapor. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. Combustible liquid. May form explosive peroxides. Ethanol may inhibit methanol metabolism. Water may be ineffective. Material is lighter than water and a fire may be spread by the use of water.
Flammable Properties and Hazards:	No data available.
Hazardous Combustion Products:	No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled:	Use proper personal protective equipment as indicated in Section 8. Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors. PROCEDURE(S) OF PERSONAL PRECAUTION(S) Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves. Methods for cleaning up. Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete. Wash area with soap and water. Use water spray to cool and disperse vapors, protect personnel, and dilute spills to form nonflammable mixtures. Control runoff and isolate discharged material for proper disposal. Spill may be carefully neutralized with soda ash (sodium carbonate). PROCEDURE TO BE FOLLOWED IN CASE OF LEAK OR SPILL. Evacuate area. Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Cover with dry lime or soda ash, pick up, keep in a closed container, and hold for waste disposal. Use water spray to dilute spill to a non-flammable mixture. Clean up spills immediately, observing precautions in the Protective Equipment section. Use water spray to disperse the gas/vapor. Do not use combustible materials such as sawdust. Water spray may reduce vapor but may not prevent ignition in closed spaces. Not available.

7. Handling and Storage

Precautions To Be Taken in Handling:	Wash thoroughly after handling. Use only in a well-ventilated area. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Avoid contact with eyes, skin, and clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Avoid ingestion and inhalation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure. Remove contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. Discard contaminated shoes. Use only with adequate ventilation. Use corrosion-resistant transfer equipment when dispensing. Do not breathe vapor. Do not get in eyes, on skin, on clothing. Take precautionary

measures against static discharges. Avoid breathing dust, mist, or vapor. Do not allow to evaporate to near dryness. Do not ingest or inhale. Avoid use in confined spaces. Not available.

Precautions To Be Taken in Storing: Keep away from heat, sparks and flame. Keep away from sources of ignition. Keep from contact with oxidizing materials. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Do not store near perchlorates, peroxides, chromic acid or nitric acid. Keep tightly closed.

Do not store near alkaline substances. It will contract slightly on freezing. Freezing and thawing does not affect product quality. Suitable: Keep away from heat and open flame. Do not store in direct sunlight. After opening, purge container with nitrogen before reclosing. Periodically test for peroxide formation on long-term storage. Addition of water or appropriate reducing materials will lessen peroxide formation. Store protected from moisture. Containers should be dated when opened and tested periodically for the presence of peroxides. Should crystals form in a peroxidizable liquid, peroxidation may have occurred and the product should be considered extremely dangerous. In this instance, the container should only be opened remotely by professionals. All peroxidizable substances should be stored away from heat and light and be protected from ignition sources. Keep containers tightly closed. Not available.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
NA	Trade Secret	PEL: 1000 ppm	TLV: 1000 ppm	No data.
NA	Trade Secret	PEL: 5 ppm	TLV: 5 ppm	No data.
NA	Trade Secret	No data.	TLV: 5 mg/m3	No data.
NA	Trade Secret	PEL: 15 (dust); 5 (resp.) mg/m3	TLV: 10 mg/m3	No data.
NA	Trade Secret	PEL: 1000 ppm	TLV: 500 ppm STEL: 750 ppm	No data.
NA	Trade Secret	PEL: 10 ppm	TLV: 10 ppm STEL: 15 ppm	No data.
NA	Trade Secret	PEL: 400 ppm	TLV: 200 ppm STEL: 400 ppm	No data.
NA	Trade Secret	PEL: 200 ppm	TLV: 200 ppm STEL: 250 ppm	No data.
NA	Trade Secret	PEL: 0.75 ppm STEL: 2 ppm (15 min)	CEIL: 0.3 ppm	No data.

Respiratory Equipment (Specify Type): A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
(EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Hand: Compatible chemical-resistant gloves. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Eye Protection: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Chemical safety goggles.

	Skin-Specific: Chemical resistant apron. Wear chemical splash goggles and face shield. Other: Faceshield (8-inch minimum).
Protective Gloves:	Wear appropriate protective gloves to prevent skin exposure. Wear butyl rubber gloves, apron, and/or clothing.
Other Protective Clothing:	Wear appropriate protective clothing to prevent skin exposure.
Engineering Controls (Ventilation etc.):	Use explosion-proof ventilation equipment. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits. Safety shower and eye bath. Mechanical exhaust required. Use a corrosion-resistant ventilation system. Use only in a chemical fume hood.
Work/Hygienic/Maintenance Practices:	Wash thoroughly after handling. Wash contaminated clothing before reuse. Discard contaminated shoes. EXPOSURE LIMITS, RTECS. Country Source Type Value. USA ACGIH Ceiling co0.3 PPM USA MSHA Standard Ceiling co0.02 2 MG/M3 USA OSHA. PEL SEE 1910.1048 New Zealand OEL. Remarks: CHECK ACGIH TLV. USA NIOSH TWA 0.016 PPM

9. Physical and Chemical Properties

Physical States:	[ ] Gas [X] Liquid [ ] Solid
Appearance and Odor:	Colorless/Clear. solvent odor.
pH:	No data.
Melting Point:	No data.
Boiling Point:	No data.
Flash Pt:	No data.
Evaporation Rate:	No data.
Flammability (solid, gas):	No data available.
Explosive Limits:	LEL: No data. UEL: No data.
Vapor Pressure (vs. Air or mm Hg):	No data.
Vapor Density (vs. Air = 1):	No data.
Specific Gravity (Water = 1):	No data.
Solubility in Water:	No data.
Saturated Vapor Concentration:	No data.
Octanol/Water Partition Coefficient:	No data.
Autoignition Pt:	No data.
Decomposition Temperature:	No data.
Viscosity:	No data.
Information with regard to primary physical hazard:	

10. Stability and Reactivity

Stability:	Unstable [ ] Stable [X]
Conditions To Avoid - Instability:	Incompatible materials, ignition sources, Excess heat, freezing temperatures, confined spaces, Note: Use great caution in mixing with water due to heat evolution that causes explosive spattering. Always add the acid to water, Light, High temperatures, Not available.
Incompatibility - Materials To Avoid:	Strong oxidizing agents, acids, Alkali metals, Ammonia, hydrazine, Peroxides, Sodium, Acid anhydrides, calcium hypochlorite, chromyl chloride, nitrosyl perchlorate, bromine pentafluoride, Perchloric acid, silver nitrate, mercuric nitrate, potassium tert-butoxide, magnesium perchlorate, Acid chlorides, platinum, uranium hexafluoride, silver oxide, iodine heptafluoride, acetyl bromide, disulfuryl difluoride, tetrachlorosilane + water, acetyl chloride, permanganic acid, ruthenium (VIII) oxide, uranyl perchlorate, Metals. Bases, chlorine trifluoride, Nitric acid, acetaldehyde, chlorosulfonic acid, oleum, ethyleneimine, 2-aminoethanol, ethylene diamine, phosphorus trichloride, phosphorus isocyanate, Incompatible with: aniline, phenols, isocyanates, anhydrides, Strong acids, Amines, ethylene oxide, chlorine, phosgene, Attacks some forms of plastics, rubbers, and coatings. aluminum at high temperatures. Reducing agents, Potassium, metals as powders (e.g. hafnium, raney nickel), powdered aluminum, powdered magnesium. Not available.
Hazardous Decomposition or Byproducts:	Carbon monoxide, irritating and toxic fumes and gases, Carbon dioxide, Not available.
Possibility of Hazardous Reactions:	Will occur [ ] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:	No data available.

11. Toxicological Information

Toxicological Information:	ROUTE OF EXPOSURE: Skin Contact: May cause skin irritation. Skin Absorption: May be harmful if absorbed through the skin. Eye Contact: May cause eye irritation. Inhalation: Material may be irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled. Ingestion: May be harmful if swallowed. Epidemiology: Teratogenicity: There is no human information available. Methanol is considered to be a potential developmental hazard based on animal data. In animal experiments, methanol has caused fetotoxic or teratogenic effects without maternal toxicity. Reproductive Effects: See actual entry in RTECS for complete information. Mutagenicity: Neurotoxicity: ACGIH cites neuropathy, vision and CNS under TLV basis. No information available.
Sensitization:	Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals. TARGET ORGAN(S) OR SYSTEM(S) Kidneys.
Carcinogenicity/Other Information:	Not listed by ACGIH, IARC, NTP, or CA Prop 65.
Carcinogenicity:	NTP? Unknown IARC Monographs? Unknown OSHA Regulated? Unknown

12. Ecological Information

General Ecological Information:

Environmental: When released to the atmosphere it will photodegrade in hours (polluted urban atmosphere) to an estimated range of 4 to 6 days in less polluted areas. Rainout should be significant.
Physical: No information available.
Ecotoxicity: Evaporation from dry surfaces is likely to occur. When spilled on soil, the liquid will spread on the surface and penetrate into the soil at a rate dependent on the soil type and its water content. Acetic acid shows no potential for biological accumulation or food chain contamination.
If released to the atmosphere, it is degraded in the vapor-phase by reaction with photochemically produced hydroxyl radicals (estimated typical half-life of 26.7 days). It occurs in atmospheric particulate matter in acetate form and physical removal from air can occur via wet and dry deposition.
Physical: Natural waters will neutralize dilute solutions to acetate salts.
Other: No information available. Fish: Fathead Minnow: 1000 ppm; 96h; LC50Daphnia: 1000 ppm; 96h; LC50Fish: Gold orfe: 8970-9280 ppm; 48h; LC50 IPA has a high biochemical oxygen demand and a potential to cause oxygen depletion in aqueous systems, a low potential to affect aquatic organisms, a low potential to affect secondary waste treatment microbial metabolism, a low potential to affect the germination of some plants, a high potential to biodegrade (low persistence) with unacclimated microorganisms from activated sludge.
No information available.
Physical: THOD: 2.40 g oxygen/gCOD: 2.23 g oxygen/gBOD-5: 1.19-1.72 g oxygen/g. Dangerous to aquatic life in high concentrations. Aquatic toxicity rating: TLm 961000 ppm. It may be dangerous if it enters water intakes. Methyl alcohol is expected to biodegrade in soil and water very rapidly. This product will show high soil mobility and will be degraded from the ambient atmosphere by the reaction with photochemically produced hyroxyl radicals with an estimated half-life of 17.8 days. Bioconcentration factor for fish (golden ide) < 10.Based on a log Kow of -0.77, the BCF value for methanol can beestimated to be 0.

13. Disposal Considerations

Waste Disposal Method:

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed. APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION.
Contact a licensed professional waste disposal service to dispose of this material.
Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations. RCRA U-Series:
CAS# 67-56-1: waste number U154 (Ignitable waste). CAS# 67-64-1: waste number U002 (Ignitable waste).

14. Transport Information

GHS Classification:

Flammable Liquids, Category 2 - Danger! Highly flammable liquid and vapor
Acute Toxicity: Inhalation, Category 4 - Warning! Harmful if inhaled
Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed
Skin Corrosion/Irritation, Category 1B - Danger! Causes severe skin burns and eye

damage
Skin Sensitization, Category 1 - Warning! May cause an allergic skin reaction
Germ Cell Mutagenicity, Category 2 - Warning! Suspected of causing genetic defects
Carcinogenicity, Category 1B - Danger! May cause cancer
Toxic To Reproduction, Category 2 - Warning! Suspected of damaging fertility or the unborn child
Specific Target Organ Toxicity (single exposure), Category 1 - Danger! Causes damage to organs {<target organs>}

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Combustible liquid, n.o.s. (Ethanol)
DOT Hazard Class: 3 COMBUSTIBLE LIQUID
UN/NA Number: NA1993 **Packing Group:** III

LAND TRANSPORT (Canadian TDG):

TDG Shipping Name: Combustible liquid, n.o.s. (Ethanol)
UN Number: NA1993 **Packing Group:** III
Hazard Class: 3 - COMBUSTIBLE LIQUID **TDG Classification:**

LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Combustible liquid, n.o.s. (Ethanol)
UN Number: NA1993 **Packing Group:** III
Hazard Class: 3 - COMBUSTIBLE LIQUID

AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Not dangerous goods.
UN Number: NA1993 **Packing Group:** III
Hazard Class: 3 - COMBUSTIBLE LIQUID

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
NA	Trade Secret	No	No	No
NA	Trade Secret	Yes 500 LB	Yes NA	Yes
NA	Trade Secret	No	No	No
NA	Trade Secret	No	No	No
NA	Trade Secret	No	Yes NA	No
NA	Trade Secret	No	Yes NA	No
NA	Trade Secret	No	No	Yes
NA	Trade Secret	No	Yes NA	Yes
NA	Trade Secret	Yes 500 LB	Yes NA	Yes

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
NA	Trade Secret	CA PROP.65: No; MA Oil/HazMat: Yes; NJ EHS: No; PA HSL: Yes - 1
NA	Trade Secret	CA PROP.65: No; MA Oil/HazMat: Yes; NJ EHS: Yes; PA HSL: Yes - E
NA	Trade Secret	CA PROP.65: No; MA Oil/HazMat: No; NJ EHS: No; PA HSL: Yes - 1

NA	Trade Secret	CA PROP.65: No; MA Oil/HazMat: No; NJ EHS: No; PA HSL: Yes - 1
NA	Trade Secret	CA PROP.65: No; MA Oil/HazMat: Yes; NJ EHS: No; PA HSL: Yes - E
NA	Trade Secret	CA PROP.65: No; MA Oil/HazMat: Yes; NJ EHS: No; PA HSL: Yes - E
NA	Trade Secret	CA PROP.65: No; MA Oil/HazMat: No; NJ EHS: Yes; PA HSL: Yes - E
NA	Trade Secret	CA PROP.65: Yes: RDTox.; MA Oil/HazMat: Yes; NJ EHS: Yes; PA HSL: Yes - E
NA	Trade Secret	CA PROP.65: Yes: Canc.; MA Oil/HazMat: Yes; NJ EHS: Yes; PA HSL: Yes - B

16. Other Information

Revision Date: 12/15/2023 **Previous revision:** 08/27/2021

Preparer Name: Tim Meehan

Additional Information About This Product: No data available.

Document & Change Control Number SDS0129.E.

Company Policy or Disclaimer: Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the
date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.