

SAFETY DATA SHEET

WORKING COPY

OSHA Hazard Communication Standard 29 CFR 1910.1200. Prepared to GHS Rev03.

Date Prepared : 05/14/2015

SDS No : Techsol A, Anhydrous

Techsol A, Anhydrous

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Techsol A, Anhydrous
GENERAL USE: Proprietary
PRODUCT DESCRIPTION: Solvent Blend
PRODUCT CODE: 67100
GENERIC NAME: Denatured Ethyl Alcohol

Distributor:

PTI Process Chemicals

5414 Business Pkwy

Ringwood, IL 60072

Customer Service: 815-653-3855

E-Mail: Info@ptichem.com

**24 Hour Emergency Response
 InfoTrac: 800-535-5053**

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Eye Irritation, Category 2
 Narcotic Effects, Category 3
 Acute Toxicity (Inhalation), Category 4
 Acute Toxicity (Oral), Category 4
 Acute Toxicity (Dermal), Category 4
 Skin Irritation, Category 2
 Target Organ Toxicity (Single exposure), Category 1
 Target Organ Toxicity (Single exposure), Category 3
 Respiratory Tract Irritation, Category 3

Environmental:

Flammable Liquids, Category 2

GHS LABEL

Flammable liquid and vapour



Flame



Health
hazard



Exclamation
mark

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H225: Highly flammable liquid and vapour.
 H319: Causes serious eye irritation.
 H336: May cause drowsiness or dizziness.

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H302: Harmful if swallowed.

H315: Causes skin irritation.

H335: May cause respiratory irritation.

H371: May cause damage to organs (or state all organs affected, if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).

H305: May be harmful if swallowed and enters airways.

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

PRECAUTIONARY STATEMENTS

Prevention:

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read label before use.

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P241: Use explosion-proof [electrical/ventilating/lighting/...] equipment.

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

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P405: Store locked up.

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P240: Ground and bond container and receiving equipment.

P233: Keep container tightly closed.

P102: Keep out of reach of children.

P243: Take action to prevent static discharges.

P242: Use non-sparking tools.

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

P264: Wash ... thoroughly after handling.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

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

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

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P370+P378: In case of fire: Use ... to extinguish.

Storage:

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

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

P405: Store locked up.

Disposal:

P273: Avoid release to the environment.

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

P501: Dispose of contents and container in accordance with local regulations.

POTENTIAL HEALTH EFFECTS

EYES: Contact may cause eye irritation.

SKIN: Can cause irritation if absorbed through the skin.

INGESTION: Can be harmful if ingested.

INHALATION: Can be harmful if inhaled. Can cause respiratory tract irritation. Vapors can cause drowsiness and dizziness.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Ethyl Alcohol	> 85	64-17-5
2-propanol	< 10	67-63-0
Methyl alcohol	< 5	67-56-1
Hexone	< 5	108-10-1

COMMENTS: Formulation is based on weight %

4. FIRST AID MEASURES

EYES: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

SKIN: Remove contaminated clothing and shoes. Immediately flush skin with plenty of water for at least 15 minutes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

INGESTION: Antidote: 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 attention immediately. Induce vomiting by giving one teaspoon of Syrup of Ipecac.

INHALATION: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt, or waistband.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Adverse symptoms may include pain or irritation, watering, and redness.

SKIN: Adverse symptoms may include irritation and redness.

INGESTION: Adverse symptoms may include nausea and vomiting.

INHALATION: Adverse symptoms may include respiratory tract irritation and coughing.

NOTES TO PHYSICIAN: If ingested, this material presents a significant aspiration and chemical pneumonitis hazard. Induction of emesis is not recommended. Consider activated charcoal and/or gastric lavage. If patient is obtunded, protect the airway by endotracheal intubation or by placement of the body in a Trendelenburg and left lateral decubitus position.

ADDITIONAL INFORMATION: Take proper precautions to ensure your own health and safety before attempting rescue and providing first aid. Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: Flammable class 1B liquid.

EXTINGUISHING MEDIA: Use dry chemical, CO₂, water spray (fog) or foam.

HAZARDOUS COMBUSTION PRODUCTS: On combustion, may emit toxic fumes of carbon monoxide.

EXPLOSION HAZARDS: Above flash point, vapor-air mixtures are explosive within flammable limits noted. Vapors can flow along surfaces to distant ignition sources and flash back. Contact with strong oxidizers may cause fire. Sealed containers may rupture when heated. This material may produce a floating fire hazard. Sensitive to static discharge.

FIRE FIGHTING PROCEDURES: Promptly remove all persons from the vicinity of the incident if there is a fire. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

FIRE FIGHTING EQUIPMENT: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Contain spilled material if possible. Absorb with materials such as: Non-combustible material. Collect in suitable and properly labeled containers.

LARGE SPILL: Dike area to contain spill. Wash the spill site with water. See section 13, Disposal Considerations, for additional information.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Avoid dispersal of spilled material and runoff and contact with waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers or waterways).

LAND SPILL: Avoid dispersal of spilled material and runoff and contact with soil. Inform the relevant authorities if the product has caused environmental pollution (soil).

GENERAL PROCEDURES: Wear a self-contained breathing apparatus and appropriate personal protective equipment. (See Exposure Controls/Personal Protection Section).

SPECIAL PROTECTIVE EQUIPMENT: Put on appropriate personal protective equipment (protective gloves, clothing, eye protection, and face protection). Wear appropriate respirator when ventilation is inadequate. Use explosion-proof equipment. Use only non-sparking tools.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Use only in a well ventilated area.

HANDLING: Loosen closure cautiously before opening. Keep away from heat and flame. Follow all SDS/label precautions even after container is emptied because it may retain product residues.

STORAGE: Store in accordance with local regulations. Store in a segregated and approved area in original container protected from sunlight in a dry, cool and well-ventilated and approved area away from incompatible materials. Keep container closed to prevent drying out. Move container away from oxidizing materials. Use appropriate containment to avoid environmental contamination.

STORAGE TEMPERATURE: Store in a cool place below (120) F (49) C.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m ³	ppm	mg/m ³	ppm	mg/m ³
Ethyl Alcohol	TWA	1000	1900	1000	1884		
2-propanol	TWA	400	980	200	490	NL	NL
	STEL			400	960	NL	NL

ENGINEERING CONTROLS: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

PERSONAL PROTECTIVE EQUIPMENT

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EYES AND FACE: Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).

SKIN: Use gloves chemically resistant to this material. Examples of preferred glove barrier material include: Neoprene, Polyvinyl chloride (PVC or vinyl), Polyethylene, Natural rubber (latex), Nitrile/butadiene rubber (nitrile or NBR), Ethyl vinyl alcohol laminate (EVAL). Avoid gloves made of Polyvinyl alcohol (PVA). The selection of the specific glove depends on the particular application, duration, other chemicals involved besides this product, physical requirements, potential skin reaction to glove materials, as well as the instructions/specifications provided by the glove supplier.

RESPIRATORY: Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use the approved respirator. Selection of air-purifying or positive-pressure supplied air, will depend on the specific operation and the potential airborne concentration of the material.

PROTECTIVE CLOTHING: Where contact is likely, wear chemical resistant gloves, a chemical suit, rubber boots, and chemical safety goggles plus a face shield.

WORK HYGIENIC PRACTICES: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking, and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: Slight ethanol/ketone odor

ODOR THRESHOLD: Not yet Determined

APPEARANCE: Clear/water-white

COLOR: Water-white

PHYSICAL STATE COMMENTS: Flammable Liquids

pH: Neutral

PERCENT VOLATILE: 100

FLASH POINT AND METHOD: ~ 13°C (55°F) Tag Closed-Cup (ASTM D56)

FLAMMABLE LIMITS: 3.53 to 21.2

AUTOIGNITION TEMPERATURE: > 404°C (760°F)

VAPOR PRESSURE: ~ 39.75 mm Hg at 19°C (66°F)

VAPOR DENSITY: ~ 1.6

BOILING POINT: ~ 78°C (172°F)

MELTING POINT: -89°C (-128°F)

THERMAL DECOMPOSITION: (DTA) No exotherm

SOLUBILITY IN WATER: Appreciable

EVAPORATION RATE: Not Determined

DENSITY: ~ 6.57 at 20°C (68°F)

SPECIFIC GRAVITY: ~ 0.79 at 20°C (68°F)

(VOC): 100.000

10. STABILITY AND REACTIVITY

REACTIVITY: Normally reactive if handled properly

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HAZARDOUS POLYMERIZATION: Product will not undergo polymerization.

STABILITY: Stable under ordinary conditions of use and storage.

CONDITIONS TO AVOID: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

POSSIBILITY OF HAZARDOUS REACTIONS: No hazardous reactions when stored and handled according to instructions.

HAZARDOUS DECOMPOSITION PRODUCTS: Decomposition products depend upon temperature, air supply and the presence of other materials. Carbon monoxide and carbon dioxide are possible decomposition products.

INCOMPATIBLE MATERIALS: Strong oxidizing agents; strong inorganic acids.

11. TOXICOLOGICAL INFORMATION

ACUTE

DERMAL LD₅₀: 17100 mg/kg

Notes: Rabbit

ORAL LD₅₀: 1400 mg/kg

Notes: Human

INHALATION LC₅₀: 20000 ppm/10 hours

Notes: Rat

EYE EFFECTS: Vapors are irritating to the eyes. Splashes may cause severe irritation with stinging, tearing, redness and pain.

SKIN EFFECTS: Irritating due to the defatting action on skin. Causes redness, pain, drying and cracking of the skin.

CARCINOGENICITY

IARC: Not classified as a human carcinogen.

NTP: Not classified as a human carcinogen.

OSHA: Not classified as a human carcinogen.

TARGET ORGANS: Inhalation- May cause respiratory irritation. -Lungs

12. ECOLOGICAL INFORMATION

BIOACCUMULATION/ACCUMULATION: This product has a low potential to bioaccumulate.

AQUATIC TOXICITY (ACUTE): This product is not expected to be harmful to aquatic organisms according to GHS criteria.

96-HOUR LC₅₀: > 13400 mg/l- Pimephales promelas

48-HOUR EC₅₀: 2000 mg/l- Water Flea (Daphnia magna)

96-HOUR EC₅₀: ~ 17.921 mg/l- Algae

Notes: This product is readily biodegradable.

CHEMICAL FATE INFORMATION: The material is expected to form a slick on the surface of waters after release in calm sea conditions. This is expected to evaporate and enter the atmosphere where it will be degraded through reaction with hydroxyl radicals.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: The generation of waste should be avoided or minimized whenever possible. Whatever cannot be saved for recovery or recycling should be handled as hazardous waste and sent to an RCRA approved incinerator or disposed in an RCRA approved waste facility. Dispose in accordance with all local, state, and federal regulations.

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FOR LARGE SPILLS: Do not allow product to reach sewage system.

PRODUCT DISPOSAL: Disposal must be made according to official regulations.

EMPTY CONTAINER: Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container.

RCRA/EPA WASTE INFORMATION: Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste facility. Although not listed as an RCRA hazardous waste, this material may exhibit one or more characteristics of a hazardous waste and require appropriate analysis to determine specific disposal requirements. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: NA1987,Denatured Alcohol,3,PGII.

PRIMARY HAZARD CLASS/DIVISION: 3

UN/NA NUMBER: NA1987

PACKING GROUP: II

LABEL: Flammable Liquid

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: UN1987,Alcohols, n.o.s.,3,PGII.

UN NUMBER: UN1987

PACKING GROUP: II

VESSEL (IMO/IMDG)

SHIPPING NAME: UN1987,Alcohols, n.o.s.,3,PGII.

UN/NA NUMBER: UN1987

PRIMARY HAZARD CLASS/DIVISION: 3

PACKING GROUP: II

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION



Flammable
Liquid

R10: Flammable.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: NA = Not Applicable

PRESSURE GENERATING: Yes **ACUTE:** Yes **CHRONIC:** No

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Techsol A, Anhydrous**EPCRA SECTION 313 SUPPLIER NOTIFICATION**

Chemical Name	Wt.%	CAS
2-propanol	< 10	67-63-0
Methyl alcohol	< 5	67-56-1
Hexone	< 5	108-10-1

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: This product is listed on the CERCLA Inventory.

Chemical Name	Wt.%	CERCLA RQ
Methyl alcohol	< 5	5,000
Hexone	< 5	5,000

CERCLA RQ: 10,000 lbs (Default)

TSCA (TOXIC SUBSTANCE CONTROL ACT)

Chemical Name	CAS
Ethyl Alcohol	64-17-5
2-propanol	67-63-0
Methyl alcohol	67-56-1
Hexone	108-10-1

TSCA REGULATORY: This product is listed on the TSCA Inventory.

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA)

29 CFR1910.119—PROCESS SAFETY MANAGEMENT OF HIGHLY HAZARDOUS CHEMICALS: None of the chemicals in this product are considered highly hazardous by OSHA.

CANADA

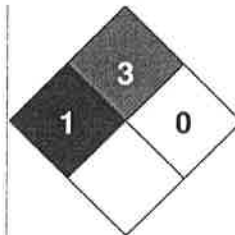
DOMESTIC SUBSTANCE LIST (INVENTORY): This product is listed on Canada's DSL list.

16. OTHER INFORMATION

PREPARED BY: Bruce Washington Date Prepared: 05/14/2015

HMIS RATING

HEALTH	<input type="checkbox"/>	1
FLAMMABILITY		3
PHYSICAL HAZARD		0
PERSONAL PROTECTION		H

NFPA CODES**MANUFACTURER DISCLAIMER:** While reasonable care has been taken to ensure the accuracy and completeness of the information regarding the material described herein, it is the purchaser's responsibility to ensure the suitability of such

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information as it applies to the purchaser's intended use of the material. PTI Process Chemicals assumes no responsibility resulting from the use of this SDS.

