Pro-Solve 905 GHS

Safety Data Sheet

From: Performance Chemical Company
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All non-emergency questions should be directed to (432) 332-3059 for assistance.

24 Hour Emergency Telephone
CHEM-TEL, INC. 1-800-255-3924

NOTE: CHEM-TEL emergency number to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.

1. Product Identification

Trade Name	Pro-Solve 905 Water Treatment
CAS Number:	Mixture – See Section 2
Product Family:	Complex Mixture
Synonyms:	N/AP

2. Hazards Identification

Hazard Classifications: Acute Toxicity-Category 3
Flammable Liquid-Category 2
Respiratory Sensitizer
Eye Effects-Category 1
Skin Sensitizer-Contact Sensitizer
Reproductive Toxicity-Category 1B

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Hazard Statements:
Highly toxic liquid, contact with eyes may cause severe irritation; prolonged contact with skin may cause severe irritation. Ingestion may cause gastric distress. Harmful if inhaled, swallowed or absorbed through skin. Inhalation and skin contact may cause sensitization, extremely harmful to mucous membranes and respiratory tract.

Precautionary Statements:

Expected to cause significant irritation to the eyes. May cause redness, burns, irritation, and tearing.

May cause irritation upon prolonged contact. May cause sensitization.

Harmful if inhaled. May cause coughing, a burning sensation, shortness of breath.

Harmful if ingested. May cause nausea, vomiting.

Repeated, prolonged ingestion may cause liver damage,

3. Composition/Information on Ingredients

Component Name	CAS Registry No.	Concentration % (Wt.)
tetrakishydroxymethylphosponium sulphate	55566-30-8	20%

Methanol	67-56-1	15-30%
Glycol ether EB	111-76-2	5-15%

4. First Aid Measures:

Take proper precautions to ensure your own health and safety before attempting rescue or providing first aid. For more specific information, refer to Exposure Controls and Personal Protection in Section 8 of this SDS.

Inhalation	Remove victim from immediate source of exposure and assure that the victim is breathing. If breathing is difficult, administer oxygen, if available. If victim is not breathing, administer CPR. Seek medical attention.
Eye Contact	Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek immediate medical attention.
Skin Contact	In case of contact, immediately wash with plenty of water for at least 15 minutes. Seek medical attention if irritation develops or persists. Remove contaminated clothing and shoes, Clean contaminated clothing and shoes before reuse.
Ingestion	Wash out mouth with water and keep at rest, Seek immediate medical attention. Do not induce vomiting unless instructed to do so by a physician.
Notes to Physician	All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Treat symptomatically. No specific antidote available.

5. Fire Fighting Measures

NFPA Flammability Classification	OSHA / NFPA Class II Flammable Liquid.
Flash Point Method	CLOSED CUP: > 80 º F. (Tagliabue [ASTM D-56])
Flammable Limits	Lower: App. 1.0% Upper: App. 10.0%
Autoignition Temperature	No Data
Hazardous Combustion Products	Burning or excessive heating may produce smoke, carbon monoxide, carbon dioxide, oxides of nitrogen, and possibly other harmful gasses and/or vapors.
Fire and Explosion Hazards	Combustible Liquid! This material releases vapors at or below ambient temperatures. When mixed with air in certain proportions and exposed to an ignition source, its vapor can cause a flash fire. Use only with adequate ventilation. Vapors are heavier than air and may travel long distances along the ground to an ignition source and flash back. May create vapor/air explosion hazard in confined spaces such as sewers. If container is not properly cooled, it can rupture in the heat of a fire. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.
Extinguishing Media	Use dry chemicals, carbon dioxide (CO2), foam, water fog, or inert gas (nitrogen).
Fire Fighting Instructions	NEVER use a water jet directly on the fire because it may spread the fire to a larger area. Wear a self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode with appropriate turn-out gear and chemical resistant personal protective equipment. Refer to the personal protective equipment section of this MSDS. Notify appropriate authorities if liquid(s) enter sewers / waterways.

6. Accidental Release Measures

Evacuation Procedures and Safety	Ventilate closed spaces before entering. Personnel handling this material should be thoroughly trained to handle spills and releases. Wear appropriate protective gear for the situation. See personal protection information in Section 8. Evacuate and isolate spill area.
Containment of Spill	Stop leak if it can be done without risk. Dike spill using absorbent or impervious materials such as earth, sand, or clay. Dike area to prevent runoff. Collect and contain contaminated absorbent and dike material for disposal.
Cleanup and disposal of Spill	Recover material if possible. DO NOT RETURN MATERIAL TO ITS ORIGINAL CONTAINER. Absorb with an inert absorbent. Shovel up into an appropriate closed container (see Section 7: Handling and Storage) Clean up residual material by washing area with water. Collect washings

for disposal for disposal. The material should be properly packaged and disposed of in compliance with applicable regulations. Decontaminate tools and equipment following cleanup.

Environmental and Regulatory Reporting

Do not flush to drain. Runoff from fire control or dilution water may cause pollution. Prevent material from entering public sewer system or any waterways. Spills may be reportable to the National Response Center. (800-424-8802) and to take State and/or local agencies.

7. Handling and Storage

Handling

Personnel handling this product should be thoroughly trained as to its hazards. Do not get on skin or in eyes. Do not breathe vapors and mists. Avoid direct or prolonged contact with skin and eyes. Use only as directed.

Storage

Store and transport in accordance with all applicable laws. Keep containers tightly closed and store in a cool, dry, well-ventilated place, plainly labeled, and out of closed vehicles. Keep away from all ignition sources! Ground all equipment containing this material. Containers should be able to withstand pressures expected from warming and cooling in storage. This product should be stored in a cool, well-ventilated area. All electrical equipment in areas where this material is stored or handled should be installed in accordance with applicable requirements of the NFPA's National Electrical Code (NEC).

8. Exposure Controls and Personal Protection

Engineering Guidelines:

Exposure limits represent regulated or recommended worker breathing zone concentrations measured by validated sampling and analytical methods, meeting the regulatory requirements. The following limits apply to this material, where, if indicated, S=skin and C=ceiling limit:

Phosphonium, Tetrakis (Hydroxymethyl)-, Sulfate (2;1) (Salt)

	Notes	TWA	STEL
ACGIH		2 mg/cu m	

Engineering Controls

Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures: general area dilution/exhaust ventilation.

Eye Protection

Safety glasses with side shields are recommended as a minimum protection. During transfer operations or when there is a likelihood of misting, splashing, or spraying, chemical goggles and face shield should be worn. Suitable eye wash equipment should be readily available.

Skin Protection

Skin contact should be prevented through use of suitable protective clothing, gloves, and footwear, selected with regard for use conditions and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Respiratory Protection

When respirators are required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Occupational Exposure Guidelines

Substance	Applicable Workplace Exposure Levels		
Methyl Alcohol (Methanol)	US(ACGIH)/2003	200 ppm.	8Hrs / TWA
	US(ACGIH)/2003	250 ppm.	15 min/STEL
	US(OSHA)/2003	200 ppm.	8Hrs / TWA

9. Physical and Chemical Properties

Physical State	Liquid	**Color**	Water clear to light chartreuse
Odor	Characteristic Odor	**pH**	3-6
Specific Gravity	1.031 @ 20c (68 F)	**Liquid Density**	8.60 Lbs. / Gallon
Vapor Pressure	Not available	**Vapor Density**	>1
Boiling Point / Range	239º F.	**Freezing Point**	32°F.

Evaporation Rate < 1 (Butyl Acetate =1) **Solubility in Water** Soluble

10.Stability and Reactivity

Chemical Stability	This material is stable under normal handling and storage conditions described in Section 7. Under unusual conditions, such as very high temperatures and/or in the presence of strong reducing agents, the product may break down to form hazardous decomposition products noted below. The customer is advised to seek further advice from Premier Chemical Service Personnel when considering such applications.
Hazardous Polymerization	Not expected to occur.
Conditions to Avoid	Keep away from extreme heat. Temperatures above 160C
Materials Incompatibility	Strong bases, strong acids, strong oxidizing agents,, strong reducing agents
Hazardous Decomposition Products	Yields carbon monoxide & dioxide, oxides of sulfur & phosphorous, phosphine gas, organophosphine vapors & hydrogen.

11.Toxicological Information

Acute Eye Irritation Toxicological Information and Interpretation; eye-eye irritation, rabbit. Severely irritating. This material is expected to cause significant irritation to the eyes.

Product Summary	This product contains Methanol, which can cause blindness and be life threatening. Methanol is a human poison. It can produce severe metabolic acidosis, blindness and death. The onset of symptoms may be delayed for 18 to 24 hours after ingestion. Toxicity is related to the degree of acidosis produced.
Carcinogenicity	None of the intentional materials in this product are listed by ACGIH, IARC, NIOSH, NTP or OSHA.
Epidemiology (Methanol)	Methanol has been shown to produce fetotoxicity in the embryo or fetus of laboratory animals. Specific developmental abnormalities include cardiovascular, musculoskeletal, and urogenital systems.
Teratogenicity (Methanol)	Effects on Newborn: Behavioral, Oral, rat: TDLo = 7500 mg/kg (female 17-19 days after conception). Effects on Embryo or Fetus: Fetotoxicity, Inhalation, rat: TCLo = 100000 ppm/7H (femaile 7-15 days after conception). Specific Developmental Abnormalities: Cardiovascular, Musculoskeletal, Urogenital, Inhalation, rat: TCLo = 20000 ppm/7H (7-14 days after conception.
Reproductive Effects	Methanol: Paternal Effects: Spermatogenesis: Intraperitoneal, mouse TDLo = 5 gm/kg (male, 5 days pre-mating). Fertility: Oral, rat: TDLo – 35295 mg/kg (female 1-15 days after conception). Paternal Effects: Testes, Epididymis, Sperm duct: Oral, rat: TDLo = 200 ppm /20H (male 78 weeks pre-mating).
Neurotoxicity	No information available
Mutagenicity	Methanol: DNA Inhibition: Human Lymphocyte = 7900 mg/L. Cytogenetic analysis: Oral, mouse = 1 gm/kg.
Delayed (Subchronic and Chronic) Effects	No Data Available.
Other Studies	Methanol: Standard Draize Test (Skin, rabbit) = 20 mg/24H (Moderate) Standard Draize Test: Administration into the eye (rabbit) = 40 mg (Moderate). Standard Draize Test: Administration into the eye (rabbit) = 100 mg/24H (Moderate).

12.Ecological Information

Ecotoxicity

Ecological effects testing has not been conducted on this material. If spilled, this material, its storage tank water bottoms and sludge, and any contaminated soil or water may be hazardous to human, animal, and aquatic life. The petroleum distillates content of this product is volatile and might contribute to the creation of atmospheric smog. n-Heptane, heptane isomers, and iso-octane all have estimated half-lives of between 2.4 and 4.4 days in air when photochemical hydroxyl and/or nitrate radicals are present. Toluene has a half-life of from 3 hours to slightly over 1 day and cyclohexane has a half-life of from 6 hours to over 4 days when hydroxyl radicals are present.

Environmental Fate

This material is potentially toxic to freshwater and saltwater ecosystems. It will normally float on water with its lighter components evaporating rapidly. In stagnant or slow-flowing waterways, a hydrocarbon layer can cover a large surface area. As a result, this covering layer might limit or eliminate natural atmospheric oxygen transport into the water. With time, if not removed, oxygen depletion in the waterway might be enough to cause a fish kill or create an anaerobic environment. This coating action can also be harmful or fatal to plankton, algae, aquatic life, and water birds.

For additional ecological information concerning components of this product, users should refer to the Hazardous Substances Data Bank R and the Oil and Hazardous Materials / Technical Assistance Data System (OHM/TADS) maintained by the U.S. National Library of Medicine. (See Section 2 for components.)

13.Disposal Considerations

Waste Management Information

Dispose of in accordance with all applicable local, state, and federal regulations. Recovered non-usable material may be regulated by US EPA as a hazardous waste due to its ignitability (D001) and/or its toxic (D018) characteristics. In addition, conditions of use may cause this material to become a hazardous waste, as defined by Federal or State regulations. It is the responsibility of the user to determine if the material is a RCRA “hazardous waste” at the time of disposal. Transportation, treatment, storage, and disposal of waste material must be conducted in accordance with RCRA regulations (see 40 CFR Parts 260 through 271). State and/or local regulations might be even more restrictive. Contact the RCRA/Superfund Hotline at (800) 424-9436 or your regional US EPA office for guidance concerning case specific disposal issues.

14.Transport Information

DOT Information - 49 CFR 172.101

Proper Shipping Name	UN 1992, Flammable liquid, toxic, N.O.S. (Contains tetrakishydroxymethylphosponium sulphate, methanol)
Hazard Class	6.1
Packing Group	II
UN / NA ID	UN 1992
ERG	131
Product Name	PS 905
Placard	

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15.Regulatory Information

TSCA (Toxic Substance Control Act)

All components of this product are listed on the U.S. Toxic Substances Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemption has been granted in accordance with 40 CFR 723.50.

SARA Title III (Superfund Amendments and Reauthorization Act)

311/312 Categories:

Immediate Health

A "YES" in the SARA TITLE III column in Section 2 indicates a toxic chemical subject to annual reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and of 40 CFR 372.

CERCLA (Comprehensive Response Compensation and Liability Act)

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) has notification requirements for releases or spills to the environment of the Reportable Quantity (RQ for this mixture >20,000 lbs) or greater amounts according to 40 CFR 302.

CALIFORNIA PROP 65, SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986

There are chemical present known to the state of California to cause cancer or reproductive toxicity.

16.Other Information

Disclaimer of Liability:

The information in this msds was obtained from sources which we believe are reliable. However, the information is provided without any warranty, expressed or implied regarding its correctness. Some information presented and conclusions drawn herein are from sources other than direct test data on the substance itself. This msds was prepared and is to be used only for this product.

The conditions or methods of handling, storage, use, and disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with handling, storage, use or disposal of the product.

Abbreviations:

App. = Approximately EQ = Equal > = Greater Than < = Less Than N/AP = Not Applicable ND = No Data
NE = Not Established
ACGIH = American Conference of Governmental Industrial Hygienists AIHA = American Industrial Hygiene Association
IARC = International Agency for Research on Cancer NTP = National Toxicology Program
NIOSH = National Institute of Occupational Safety and Health OSHA = Occupational Safety and Health Administration
NPCA = National Paint and Coating Manufacturers Association HMIS = Hazardous Materials Information System
NFPA = National Fire Protection Association EPA = Environmental Protection Agency

Explanation of the HMIS® Ratings

HMIS® III - HEALTH HAZARD RATINGS

*** Chronic Hazard** Chronic (long-term) health effects may result from repeated overexposure
0 Minimal Hazard No significant risk to health
1 Slight Hazard Irritation or minor reversible injury possible
2 Moderate Hazard Temporary or minor injury may occur
3 Serious Hazard Major injury likely unless prompt action is taken and medical treatment is given
4 Severe Hazard Life-threatening, major or permanent damage may result from single or repeated overexposures

HMIS® III - FLAMMABILITY RATINGS

0 Minimal Hazard Materials that will not burn
1 Slight Hazard Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

2 Moderate Hazard Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur. Includes liquids having a flash point at or above 100 F but below 200 F. (Classes II & IIIA)

3 Serious Hazard Materials capable of ignition under almost all normal temperature conditions. Includes flammable liquids with flash points below 73 F and boiling points above 100 F. as well as liquids with flash points between 73 F and 100 F. (Classes IB & IC)

4 Severe Hazard Flammable gases, or very volatile flammable liquids with flash points below 73 F, and boiling points below 100 F. Materials may ignite spontaneously with air. (Class IA)

HMIS® III - PHYSICAL HAZARD RATINGS

0 Minimal Hazard Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.

1 Slight Hazard Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

2 Moderate Hazard Materials that are unstable and may undergo violent chemical changes at normal temperature and pressure with low risk for explosion. Materials may react violently with water or form peroxides upon exposure to air.

3 Serious Hazard Materials that may form explosive mixtures with water and are capable of detonation or explosive reaction in the presence of a strong initiating source. Materials may polymerize, decompose, self-react, or undergo other chemical change at normal temperature and pressure with moderate risk of explosion.

4 Severe Hazard Materials that are readily capable of explosive water reaction, detonation or explosive decomposition, polymerization, or self-reaction at normal temperature and pressure.