

Material Safety Data Sheet



Chromatography Solvent

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Section 1 – Product Description

Product Name: Chromatography Solvent (Petroleum Ether/Acetone)
Recommended Use: Science education applications
Synonyms: Petroleum Ether: Acetone Solution
Product Code(s): 866031
Size: 125mL
Distributor: Biozoa Biological Supply Company. Seoul, Geumcheon-gu, Doosan-ro 70, B-1008(Hyundai-Center)
Chemical Information: 02-862-1372 (9am-6pm (ET) M-F)

Section 2 – Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;



DANGER

Highly flammable liquid and vapor. Causes serious eye irritation. May cause genetic defects. May cause cancer. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

GHS Classification:

Germ Cell Mutagenicity Category 1B, Carcinogenicity Category 1B, Aspiration Hazard Category 1, Serious Eye Damage/Eye Irritation Category 2, Hazardous to the aquatic environment - Acute Category 2, Hazardous to the aquatic environment - Chronic Category 2, Acute Toxicity - Inhalation Gas Category 5, Acute Toxicity - Oral Category 5

Other Safety Precautions: IF exposed or concerned: Get medical advice/attention

Section 3 – Composition / Information on Ingredients

Chemical Name	CAS #	%
Petroleum ether	8032-32-4	90
Acetone	67-64-1	10

Section 4 – First Aid Measures

Emergency and First Aid Procedures:

Eyes – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin – IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

Ingestion – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician

Inhalation – In case of accident by inhalation: remove casualty to fresh air and keep at rest.

Section 5 – Firefighting Procedures

Extinguishing Media: Use media suitable to extinguish surrounding fire.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products: Carbon dioxide, Carbon monoxide, Nitrogen oxides

Section 6 – Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled: No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS Ventilate the contaminated area. Isolate area. Keep unnecessary personnel away.

Environmental Precautions: Avoid breathing dust/fume/gas/mist/vapors/spray.
Absorb the liquid and scrub the area with detergent and water. Pick up wash liquid with additional absorbent and place in a disposable container.

Section 7 – Handling and Storage

Handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/.../ equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required. Keep away from ... (incompatible materials to be indicated by the manufacturer). Keep away from sources of ignition - No smoking. Do not breathe gas/fumes/vapor/spray. Keep container tightly closed in a cool, well-ventilated place.

Storage

Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly closed in a cool, well-ventilated place.

Storage

Red - Flammables. Store in approved flammable containers. Store away from oxidizing materials.

Section 8 – Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Petroleum Ether	N/A	N/A	(Vacated) 300 ppm 1,350 mg/m ³	(Vacated) 400 ppm 1,800 mg/m ³
Acetone	500 ppm TWA	750 ppm STEL	1000 ppm TWA; 2400 mg/m ³ TWA	N/A

Control Parameters

Engineering Measures: No exposure limits exist for the constituents of this product. General room ventilation might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

Respiratory Protection: No respiratory protection required under normal conditions of use.

Respirator Type(s): NIOSH approved air purifying respirator with organic vapor cartridge.

Eye Protection: Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves: Nitrile

Section 9- Physical Data

Molecular Weight: N/A	Melting Point: < -79 °C
Boiling Point: 20-75 °C	Vapor Pressure: N/A
Vapor Density (Air=1): 2.5 (Pet.Ether)	Specific Gravity (H2O=1): 0.6(Pet.Ether)
Percent Volatile by Volume: Approximately 99.5%	Evaporation Rate (BuAc=1): 6.82(Pet.Ether)
Solubility in Water: Practically Insoluble	Appearance and Odor: Colorless liquid

Section 10 - Reactivity Data

Stability: N/A
Conditions to Avoid: Temperatures above flash point in combination with sparks, open flames, or other sources of ignition
Incompatibility (Material to Avoid): Strong oxidizing agents, Caustics (bases), Peroxides, Strong acids, Oxidizing materials, Halogens
Hazardous Polymerization: Will not occur

Section 11 – Toxicity Data

Routes of Entry: Inhalation, Ingestion, and Skin contact.
Symptoms (Acute): Eye disorders
Delayed Effects: No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Petroleum ether	8032-32-4	Oral LD50 Rat > 4300 mg/kg Oral LD50 Mouse > 4300 mg/kg		INHALATION LC50 Rat > 1400 ppm
Acetone	67-64-1	Oral LD50 Mouse 3000 mg/kg	Dermal LD50 Rabbit 20000 mg/kg	

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
Acetone	67-64-1	Not listed	Not listed	Not listed

Chronic Effects:

Mutagenicity: Evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: Central Nervous System, Cardiovascular system
Chronic: Male Reproductive System

Section 12- Ecological Data

Overview: Slight ecological hazard. In high concentrations, this product may be dangerous to plants and/or wildlife.
Mobility: No data
Persistence: Evaporation into atmosphere, Biodegradation
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Petroleum ether	8032-32-4	72 HR EC50 PSEUDOKIRCHNERIELLA SUBCAPITATA 4700 MG/L
Acetone	67-64-1	96 HR LC50 LEPOMIS MACROCHIRUS 8300 MG/L 96 HR LC50 ONCORHYNCHUS MYKISS 4.74 - 6.33 ml/l 48 HR EC50 DAPHNIA MAGNA 12600 - 12700 MG/L

Section 13 – Disposal Information

Waste Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

Section 14 – Transport Information

DOT Proper Shipping Name: Not Regulated

Section 15 – Regulatory Information

TSCA Status: All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Petroleum Ether	8032-32-4	No	No	No	No	No
Acetone	67-64-1	No	No	5000 lb final RQ; 2270 kg final RQ	No	No

Section 16 – Additional Information

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Biozoa Biological Supply makes representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists
CAS Number	Chemical Services Abstract Number
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOT	U.S. Department of Transportation
IARC	International Agency of Research on Cancer
N/A	Not Available
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
ppm	Parts per million
RCRA	Resource Conservation and Recovery Act
SARA	Superfund Amendments and Reauthorization Act
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act