

Material Safety Data Sheet

Customer P.O. No. 5043498

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Section 1 - Product and Company Information

Catalog Number: 47444-U (Reorder Product by this No.)
Product Name: EPA 625 SEMIVOLATILE CALIBRATION KIT, 3X1ML
Data Sheet Number: 506559
Data Sheet Name: 625 SEMIVOL CALIB MIX, 1X1ML, CH₂CL₂/BEN(75:25), 1000UG/ML
Street Address: 595 North Harrison Road
City, State, Zip, Country: Bellefonte, PA 16823-0048 USA
Fax (MSDS Dept.): 814-359-5930
Emergency Phone: 800-521-8956 EXT 2143
CHEMTREC: 800-424-9300

Section 2 - Composition/Information on Ingredient(s)

Substance Name: 625 SEMIVOLATILE CALIBRATION MIX
CAS#: no data available
SARA 313: No
Ingredients:

Ingredient Name	CAS #	% OR Conc.	OSHA PEL	ACGIH TLV	SARA	LD50	Codes
CARBAZOLE	86-74-8	00.1000	N/A	N/A	No	500 mg/kg	OR
ANTHRACENE	120-12-7	00.1000	N/A	N/A	Yes	430 mg/kg	IR
FLUORANTHENE	206-44-0	00.1000	N/A	N/A	Yes	2000 mg/kg	OR
NAPHTHALENE	91-20-3	00.1000	10 ppm	10 ppm	Yes	490 mg/kg	OR
2,4-DIMETHYLPHENOL	105-67-9	00.1000	N/A	N/A	Yes	3400 mg/kg	OR
2,4-DICHLOROPHENOL	120-83-2	00.1000	N/A	N/A	Yes	580 mg/kg	OR
2,4-DINITROPHENOL	51-28-5	00.1000	N/A	N/A	Yes	30 mg/kg	OR
ACENAPHTHENE	83-32-9	00.1000	N/A	N/A	No	600 mg/kg	OR
AZOBENZENE	103-33-3	00.1000	N/A	N/A	No	1000 mg/kg	OR
1,2,4-TRICHLOROBENZENE	120-82-1	00.1000	5 ppm	5 ppm	Yes	756 mg/kg	OR
HEXACHLOROBENZENE	118-74-1	00.1000	N/A	N/A	Yes	4000 mg/kg	OM
HEXACHLOROETHANE	67-72-1	00.1000	1 ppm	1 ppm	Yes	4460 mg/kg	OR
BIS (2-CHLOROISOPROPYL) E	39638-32-9	00.1000	N/A	N/A	No	240 mg/kg	OR
BIS (2-CHLOROETHYL) ETHER	111-44-4	00.1000	5 ppm	5 ppm	Yes	75 mg/kg	OR
2-CHLORONAPHTHALENE	91-58-7	00.1000	N/A	N/A	No	2078 mg/kg	OR
2,4,6-TRICHLOROPHENOL	88-06-2	00.1000	N/A	N/A	Yes	820 mg/kg	OR
4-CHLORO-3-METHYLPHENOL	59-50-7	00.1000	N/A	N/A	No	1830 mg/kg	OR
2-CHLOROPHENOL	95-57-8	00.1000	N/A	N/A	Yes	670 mg/kg	OR
1,2-DICHLOROBENZENE	95-50-1	00.1000	50 ppm	50 ppm	Yes	500 mg/kg	OR
1,3-DICHLOROBENZENE	541-73-1	00.1000	N/A	N/A	Yes	N/A	
1,4-DICHLOROBENZENE	106-46-7	00.1000	75 ppm	75 ppm	Yes	500 mg/kg	OR
2,4-DINITROTOLUENE	121-14-2	00.1000	1.5 mg/m3	1.5 mg/m3	Yes	268 mg/kg	OR
2,6-DINITROTOLUENE	606-20-2	00.1000	1.5 mg/m3	1.5 mg/m3	No	177 mg/kg	OR
4-CHLOROPHENYLPHENYL ETHE	7005-72-3	00.1000	N/A	N/A	No	N/A	
4-BROMOPHENYLPHENYL ETHER	101-55-3	00.1000	N/A	N/A	No	N/A	
BIS (2-CHLOROETHOXY) METH	111-91-1	00.1000	N/A	N/A	No	65 mg/kg	OR
HEXACHLOROBTADIENE	87-68-3	00.1000	0.02 ppm	0.02 ppm	Yes	82 mg/kg	OR
HEXACHLOROCYCLOPENTADIENE	77-47-4	00.1000	0.01 ppm	0.01 ppm	Yes	113 mg/kg	OR
ISOPHORONE	78-59-1	00.1000	4 ppm	5 ppm	No	2330 mg/kg	OR
NITROBENZENE	98-95-3	00.1000	1 ppm	1 ppm	Yes	780 mg/kg	OR
2-NITROPHENOL	88-75-5	00.1000	N/A	N/A	Yes	334 mg/kg	OR
4-NITROPHENOL	100-02-7	00.1000	N/A	N/A	Yes	250 mg/kg	OR
2-METHYL-4,6-DINITROPHENO	534-52-1	00.1000	0.2 mg/m3	0.2 mg/m3	Yes	7 mg/kg	OR
N-NITROSODIMETHYLAMINE	62-75-9	00.1000	N/A	N/A	Yes	26 mg/kg	OR
N-NITROSODI-N-PROPYLAMINE	621-64-7	00.1000	N/A	N/A	No	480 mg/kg	OR
PENTACHLOROPHENOL	87-86-5	00.1000	0.5 mg/m3	0.5 mg/m3	Yes	27 mg/kg	OR

Section 2 - Composition/Information on Ingredient(s)

Ingredient Name	CAS #	% OR Conc.	OSHA PEL	ACGIH TLV	SARA	LD50	Codes
PHENOL	108-95-2	00.1000	N/A	N/A	Yes	317 mg/kg	OR
BIS (2-ETHYLHEXYL) PHTHAL	117-81-7	00.1000	5 mg/m3	5 mg/m3	Yes	30600 mg/kg	OR
BENZYL BUTYL PHTHALATE	85-68-7	00.1000	N/A	N/A	Yes	2330 mg/kg	OR
DI-N-BUTYL PHTHALATE	84-74-2	00.1000	5 mg/m3	5 mg/m3	Yes	8000 mg/kg	OR
DI-N-OCTYL PHTHALATE	117-84-0	00.1000	5 mg/m3	5 mg/m3	Yes	6513 mg/kg	OR
DIETHYL PHTHALATE	84-66-2	00.1000	5 mg/m3	5 mg/m3	Yes	8600 mg/kg	OR
DIMETHYL PHTHALATE	131-11-3	00.1000	5 mg/m3	5 mg/m3	Yes	6900 mg/kg	OR
BENZO (A) ANTHRACENE	56-55-3	00.1000	N/A	N/A	No	>200 mg/kg	VR
BENZO (A) PYRENE	50-32-8	00.1000	N/A	N/A	No	250 mg/kg	IM
BENZO (B) FLUORANTHENE	205-99-2	00.1000	N/A	N/A	No	N/A	
BENZO (K) FLUORANTHENE	207-08-9	00.1000	N/A	N/A	Yes	N/A	
CHRYSENE	218-01-9	00.1000	N/A	N/A	No	N/A	
ACENAPHTHYLENE	208-96-8	00.1000	N/A	N/A	No	N/A	
PYRENE	129-00-0	00.1000	8 mg/m3	N/A	No	2700 mg/kg	OR
BENZO (G,H,I) PERYLENE	191-24-2	00.1000	N/A	N/A	No	N/A	
FLUORENE	86-73-7	00.1000	N/A	N/A	No	N/A	
PHENANTHRENE	85-01-8	00.1000	N/A	0.2 mg/m3	No	700 mg/kg	OM
DIBENZ (A,H) ANTHRACENE	53-70-3	00.1000	N/A	N/A	No	N/A	
INDENO (1,2,3-CD) PYRENE	193-39-5	00.1000	N/A	N/A	Yes	N/A	
BENZENE	71-43-2	31-100	N/A	N/A	No	2990 mg/kg	OR
METHYLENE CHLORIDE	75-09-2	62-100	N/A	N/A	No	1600 mg/kg	OR

CODES: OR (Oral Rat), OM (Oral Mouse), OB (Oral Rabbit),
IR (Intraperitoneal Rat), IM (Intraperitoneal Mouse), IB (Intraperitoneal Rabbit)
VR (Intravenous Rat), VM (Intravenous Mouse), VB (Intravenous Rabbit),
SR (Subcutaneous Rat), SM (Subcutaneous Mouse), SB (Subcutaneous Rabbit)

Formula: MIXTURE

Chemical Name:

Synonym(s):

ANALYTICAL STANDARD IN METHYLENE CHLORIDE:BENZENE

RTECS Number: no data available

MSDS Dictionary:

CAS=Chemical Abstract Service; %=Percentage of Composition; TLV=Threshold
Limit Value; SARA=Superfund Amendments and Reauthorization Act of 1986;
TSCA=Toxic Substances Control Act; N/A=Not Available.

Section 3 - Hazards Identification

Emergency Overview:

Lachrymator.
Stable.
May form explosive peroxides.
May react with oxidizing materials.
May irritate eyes and/or skin.
Absorbed rapidly through skin.
Irritates respiratory tract.
Causes severe respiratory burns.
May be fatal if inhaled.
Harmful if inhaled.
Harmful if swallowed.
Reported mutagen.
Reported teratogen.
Reported animal carcinogen.
Reported human carcinogen.
Reported cancer hazard.
Vapors form explosive mixtures with air.
Containers may explode under fire conditions.
Flashback along vapor trail may occur.
OSHA Regulated Carcinogen - See CFR Title 29 Part 1910.
To the best of our knowledge, the chemical, physical, & toxicological
properties have not been thoroughly investigated.
See Section 11 for toxicological data.

Section 4 - First Aid Measures

Oral Exposure:

Do not induce vomiting.
Give large amounts of water.
Give large amounts of milk.
Never give anything by mouth to an unconscious person.
Never try to make an unconscious person vomit.

Inhalation Exposure:

Immediately move to fresh air.
Contact a physician.
Give oxygen if breathing is labored.
If breathing stops, give artificial respiration.

Dermal Exposure:

Remove contaminated clothing and shoes.
Promptly wash skin with mild soap and large volumes of water.

Eye Exposure:

Flush eyes with water for 15 minutes.

Additional Information: no data available

Section 5 - Fire Fighting Measures

Flammable Hazards:

Flashback along vapor trail may occur.

Explosion Hazards:

May form explosive peroxides.
Vapors form explosive mixtures with air.
Containers may explode under fire conditions.

Thermal Decomposition Components:

Hydrogen chloride, oxides of nitrogen

Extinguishing Media:

Suitable:

CO₂.
Foam.
Dry chemical.
Water may be ineffective.

Firefighting

Protective Equipment:

Wear self-contained breathing apparatus when fighting a chemical fire.

Specific Hazard(s):

May react with oxidizing materials.
Flashback along vapor trail may occur.

Flash Point (F): Value: 12° F

Method:
Closed Cup

Autoignition Temperature:

Lower:

Upper:
8.0%

Explosion Limits:

1.3%

Additional Information: no data available

Section 6 - Accidental Release Measures

Procedure to be followed in case of Leak or Spill:

Ventilate area.
Take up with absorbent material.
Eliminate all ignition sources.

Procedure(s) of Personal Precaution(s):

Avoid eye or skin contact.
Avoid breathing vapors.
Wear protective glasses.
Wear plastic gloves.
Wear face mask with organic vapor canister.

Methods for Cleaning Up:

Additional Information: no data available

Section 7 - Handling and Storage

Handling

User Exposure:

Avoid eye or skin contact.
Avoid breathing vapors.

Storage

Suitable:

Keep away from heat.
Keep away from oxidizers.
Keep away from ignition sources.
Store in sealed container in a freezer.

Additional Information: no data available

Reported cancer hazard.

OSHA Regulated Carcinogen - See CFR Title 29 Part 1910.

Section 8 - Exposure Controls/PPE

Engineering Controls:

Use only in exhaust hood.

Personal Protective Equipment

Respiratory:

Wear face mask with organic vapor canister.

Hand:

Wear plastic gloves.

Eye:

Wear protective glasses.

Additional Equipment:

General Hygiene Measures:

Avoid eye or skin contact.
Avoid breathing vapors.

Additional Information: no data available

Section 9 - Physical and Chemical Properties

Appearance:

Clear colorless liquid

Odor:

Gasoline odor

Molecular Weight:

no data available

pH:

Boiling Point Range:	Value:	Method:
Melting Point Range:	80.1° C	no data available
Vapor Pressure:	5° C	
Vapor Density:	75 mmHg	
Volatile %:	no data available	
Specific Gravity/Density:	100	
Evaporation Rate:	.879 g/cm3 or g/ml 20.0° C (Water=1)	
	no data available	
Flash Point (F):	Value:	Method:
	12° F	Closed Cup
	Lower:	Upper:
Explosion Limits:	1.3%	8.0%
Solubility in Water:	.18	
Refractive Index:		
Autoignition Temperature:		
Additional Information:	no data available	

Section 10 - Stability and Reactivity

Stability:

Stable:

Stable.

Materials to Avoid:

Strong acids.

Section 10 - Stability and Reactivity

Oxidizing agents.

Fluorine, chlorine and bromine.

Conditions to Avoid:

N/A

Hazardous Decomposition Products:

Hydrogen chloride, oxides of nitrogen

Hazardous Polymerization:

Will not occur.

Additional Information: no data available

Section 11 - Toxicological Information

Route of Exposure

Skin Contact:

Dermatitis.

Burns skin.

Skin Absorption:

Absorbed rapidly through skin.

Eye Contact:

Lachrymator.

Burns eyes.

Inhalation:

Pulmonary edema.

Irritates respiratory tract.

Causes severe respiratory burns.

May be fatal if inhaled.

Harmful if inhaled.

Breathing difficulty.

Inhalation may be fatal as a result of spasm, inflammation and edema of the larynx and bronchi, chemical pneumonitis and pulmonary edema.

Ingestion:

Harmful if swallowed.

Critical Effects:

Reported mutagen.

Reported teratogen.

Reported animal carcinogen.

Reported human carcinogen.

Additional Possible Effects:

Leukemia.

Target Organ(s) or System(s):

Lung damage.

Pancreas damage.

Gastrointestinal disturbances.

Depresses central nervous system.

Signs and Symptoms of Exposure:

Headache.

Blurred vision.

Dizziness.

Convulsions.

May irritate eyes and/or skin.

Irritates respiratory tract.

Breathing difficulty.

Leukemia.

Conditions Aggravated by Exposure:

Additional Information: no data available

Reversible corneal effects may occur.

Reported cancer hazard.

OSHA Regulated Carcinogen - See CFR Title 29 Part 1910.

Toxicity Data (LD50): 4894 mg/kg Oral Rat

Section 12 - Ecological Information

Ecotoxicity:

No Data Available.

Section 13 - Disposal Information

Appropriate Method of Disposal of Substance or Preparation:

Comply with all applicable federal, state, or local regulations.

Contact a licensed professional waste disposal service to dispose of this material.

Section 14 - Transport Information

DOT

Proper Shipping Name: BENZENE
UN#: 1114
Class: 3.0
Packing Group: II
Hazard Label: Excepted Qty
PIH: no data available

IATA

Proper Shipping Name: BENZENE
IATA UN Number: 1114
Hazard Class: 3.0
Packing Group: II
Hazard Label: Excepted Qty
PIH: no data available

Section 15 - Regulatory Information

EU Directives Classification

Symbol of Danger: F T

Indication of Danger:

Highly flammable

Toxic

Risk Statements: R: 11 23 24

Highly flammable.

Toxic by inhalation and in contact with skin.

Safety Statements: S: 09 29

Keep container in a well-ventilated place.

Do not empty into drains.

US Classification and Label Text

Indication of Danger:

Risk Statements:

Safety Statements:

US Statements:

United States Regulatory Information

SARA Listed: No

Deminimis:

Notes:

TSCA Inventory Item: Yes

United States - State Regulatory Information

California Prop-65:

Contains material(s) known to the state of California to cause cancer.

Contains material(s) known to the state of California to cause cancer and reproductive toxicity.

Canada Regulatory Information

WHMIS Classification:

Carcinogenicity (CPR 48).

Class B - Division 2 - Flammable liquids (CPR 35).

Class D - Division 1 - Poisonous and infectious materials.

DSL:

NDSL:

Additional Information: no data available

Section 15 - Regulatory Information

Reported cancer hazard.

OSHA Regulated Carcinogen - See CFR Title 29 Part 1910.

Section 16 - Other Information

Disclaimer:

For R&D use only. Not for drug, household or other uses.

Warranty:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Supelco, shall not be held liable for any damage resulting from handling or from contact with the above product. Copyright 2012 Supelco.

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