

## SAFETY DATA SHEET

According to JIS Z 7253:2019  
**Revision date** 28-Feb-2024  
 Revision Number 3.06

## Section 1: PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name</b>	Pesticide Mixture Standard Solution PL-17-2 (each 20µg/ml Acetonitrile Solution)
<b>Product Code</b>	168-23691,164-23693

<b>Supplier</b>	FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741 Fax: +81-6-6203-2029
<b>Emergency telephone number</b>	+81-6-6203-3741 / +81-3-3270-8571
<b>Recommended uses</b>	For research use only
<b>Restrictions on use</b>	Seek expert judgment when using for purposes other than those recommended.

## Section 2: HAZARDS IDENTIFICATION

## GHS classification

Classification of the substance or mixture

<b>Flammable liquids</b>	Category 2
<b>Acute toxicity - Dermal</b>	Category 3
<b>Acute toxicity - Inhalation (Vapors)</b>	Category 4
<b>Serious eye damage/eye irritation</b>	Category 2A
<b>Specific target organ toxicity (single exposure)</b>	Category 1
<b>Category 1</b> central nervous system, respiratory system	
<b>Specific target organ toxicity (repeated exposure)</b>	Category 2
<b>Category 2</b> blood system, central nervous system, respiratory system, liver, kidneys	

## Pictograms



Signal word

Danger

## Hazard statements

- H225 - Highly flammable liquid and vapor
- H319 - Causes serious eye irritation
- H311 - Toxic in contact with skin
- H332 - Harmful if inhaled
- H370 - Causes damage to the following organs: central nervous system, respiratory system
- H373 - May cause damage to the following organs through prolonged or repeated exposure: blood system, central nervous system, respiratory system, liver, kidneys

## Precautionary statements-(Prevention)

- Use only outdoors or in a well-ventilated area
- Do not breathe dust/fume/gas/mist/vapors/spray
- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product

- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. 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
- Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary statements-(Response)**

- IF exposed: Call a POISON CENTER or doctor/physician
- 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
- Call a POISON CENTER or doctor/physician if you feel unwell
- Wash contaminated clothing before reuse
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician if you feel unwell
- In case of fire: Use suitable extinguishing media for extinction

**Precautionary statements-(Storage)**

- Store locked up
- Store in a well-ventilated place. Keep cool

**Precautionary statements-(Disposal)**

- Dispose of contents/container to an approved waste disposal plant

**Others**

**Other hazards** Not available

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**Single Substance or Mixture** Mixture

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Acetonitrile	99	41.05	(2)-1508	*	75-05-8
Benfuracarb	0.0020	410.53	(5)-5639	8-(4)-928	82560-54-1
Ametryn	0.0020	227.33	(5)-3847	*	834-12-8
Fluazuron	0.0020	506.21	N/A	N/A	86811-58-7
Triflumizole Metabolite	0.0020	N/A	N/A	N/A	N/A-16-2369-15
4-Chlorobut-2-yn-1-yl (3-chlorophenyl)carbamate	0.0020	258.10	N/A	N/A	101-27-9
Clodinafop-propargyl ester	0.0020	349.74	N/A	N/A	105512-06-9
Pymetrozine	0.0020	217.23	N/A	N/A	123312-89-0
Carfentrazone-ethyl	0.0020	412.19	N/A	8-(3)-1016	128639-02-1
Pyrazophos	0.0020	373.36	N/A	8-(2)-1226	13457-18-6
Mefenpyr-diethyl	0.0020	373.23	N/A	N/A	135590-91-9
Trifloxystrobin	0.0020	408.37	N/A	N/A	141517-21-7
Phoxim	0.0020	298.30	(3)-3374	*	14816-18-3
Etoazole	0.0020	359.41	N/A	N/A	153233-91-1
(R)-1-(Ethylcarbamoyl)ethylcarbonilate	0.0020	236.27	N/A	N/A	16118-49-3
Carbofuran-3-hydroxy	0.0020	237.25	N/A	N/A	16655-82-6
Pyraclostrobin	0.0020	387.82	N/A	8-(2)-2073	175013-18-0
Chlorobufam	0.0020	223.66	N/A	4-(6)-241	1967-16-4
Bromacil	0.0020	261.12	(5)-937	*	314-40-9
Amitraz	0.0020	293.40	N/A	4-(12)-431	33089-61-1
Flamprop-methyl	0.0020	379.37	N/A	N/A	37924-13-3
Pyrimethanil	0.0020	199.25	N/A	8-(2)-1834	53112-28-0

Carbosulfan	0.0020	380.54	N/A	8-(4)-941	55285-14-8
Cymoxanil	0.0020	198.18	N/A	2-(6)-1376	57966-95-7
cis-Fenpropimorph	0.0020	303.48	N/A	N/A	67564-91-4
Triflumizole	0.0020	345.75	(5)-5717	N/A	68694-11-1
Chlorfluazuron	0.0020	540.65	N/A	8-(1)-1809	71422-67-8
Benalaxyl	0.0020	325.40	N/A	N/A	71626-11-4
Prometryn	0.0020	241.36	(5)-3850	*	7287-19-6
Oxabetrinil	0.0020	232.24	N/A	N/A	74782-23-3

**Note on ISHL No.:** \* in the table means announced chemical substances.

## Section 4: FIRST AID MEASURES

### Inhalation

Remove to fresh air. If symptoms persist, call a physician.

### Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

### Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

### Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

### Protection of first-aiders

Use personal protective equipment as required.

## Section 5: FIRE FIGHTING MEASURES

### Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder, Sand

### Unsuitable extinguishing media

No information available

### Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Vapors may form explosive mixtures with air

### Special extinguishing method

No information available

### Special protective actions for fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

## Section 6: ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

### Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

### Methods and materials for contaminant and methods and materials for cleaning up

Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

### Recovery, neutralization

No information available

### Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

## Section 7: HANDLING AND STORAGE

### Handling

#### Technical measures

Highly flammable. Avoid contact with high temperature objects, spark, and strong oxidizing agents. To cut with care and wear protective gloves and protective goggles to ampoule time of the opening (Cutting method to check the label). Use with local exhaust ventilation.

#### Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

#### Safety handling precautions

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

#### Storage

##### Safe storage conditions

**Storage conditions** Container protected from light, and store tightly closed in freezer (-20°C). Packed with an inert gas. Store locked up.

**Safe packaging material** Ampoule

##### Incompatible substances

Strong oxidizing agents

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand- and eye-wash facility. And display their position clearly.

### Exposure limits

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
Acetonitrile 75-05-8	N/A	N/A	TWA: 20 ppm Skin

Chemical Name	Concentration standard value set by the Minister of Health, Labor and Welfare (8hr)	Concentration standard value set by the Minister of Health, Labor and Welfare (Short-Term)
Acetonitrile 75-05-8	10 ppm	N/A

### Personal protective equipment

#### Respiratory protection

gas mask for organic gas ( JIS T 8152 )

#### Hand protection

chemical protective gloves ( JIS T 8116 )

#### Eye protection

protective eyeglasses or chemical safety goggles (JIS T 8147)

#### Skin and body protection

Long-sleeved work clothes

### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

If this product is classified as "Chemical Substances Hazardous to Skin, etc.", use appropriate protective equipment to them.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Data except for the appearance is described as a solvent.

<b>Form</b>	
Color	colorless
Turbidity	clear
Appearance	liquid
<b>Odor</b>	characteristic odor
<b>Melting point/freezing point</b>	-45 °C
<b>Boiling point, initial boiling point and boiling range</b>	82 °C
<b>Flammability</b>	Highly flammable liquid and vapor
<b>Evaporation rate:</b>	no data available
<b>Flammability (solid, gas):</b>	no data available
<b>Upper/lower flammability or explosive limits</b>	
Upper:	16 vol%
Lower:	4.4 vol%
<b>Flash point</b>	9.5 °C
<b>Auto-ignition temperature:</b>	524 °C
<b>Decomposition temperature:</b>	no data available
<b>pH</b>	no data available
<b>Viscosity (coefficient of viscosity)</b>	no data available
<b>Dynamic viscosity</b>	no data available
<b>Solubilities</b>	water , Ethanol , acetone : soluble .
<b>n-Octanol/water partition coefficient:(log Pow)</b>	-0.34
<b>Vapour pressure</b>	9.7kPa
<b>Specific Gravity / Relative density</b>	0.780 - 0.784
<b>Vapour density</b>	1.4(Air=1)
<b>Particle characteristics</b>	no data available

## Section 10: STABILITY AND REACTIVITY

### Stability

<b>Reactivity</b>	no data available
<b>Chemical stability</b>	May be altered by light.
<b>Hazardous reactions</b>	None under normal processing
<b>Conditions to avoid</b>	Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark
<b>Incompatible materials</b>	Strong oxidizing agents
<b>Hazardous decomposition products</b>	Carbon monoxide (CO), Carbon dioxide (CO <sub>2</sub> ), Nitrogen oxides (NO <sub>x</sub> )

## Section 11: TOXICOLOGICAL INFORMATION

Since data of the mixture is not available, data as each components are described.

### Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Acetonitrile	>2,000 mg/kg ( Rat )	978.8 mg/kg ( Rabbit )	16,000 ppm ( Rat ) 4 h
Pyrazophos	151 mg/kg ( Rat )	> 2 g/kg ( Rat )	N/A
Carbosulfan	101 mg/kg (Rat)	4012 mg/kg (Rat)	0.15 mg/m <sup>3</sup> (Rat) 4 h
Oxabetrinil	5 g/kg ( Rat )	> 5 g/kg ( Rat )	150 mg/m <sup>3</sup> ( Rat ) 4 h

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas-source information
Acetonitrile	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Pyrazophos	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Carbosulfan	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust- source information	Acute toxicity -inhalation mist- source information
Acetonitrile	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Pyrazophos	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Carbosulfan	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

**Skin irritation/corrosion**

Chemical Name	Skin corrosion/irritation source information
Acetonitrile	Based on the NITE GHS classification results.
Pyrazophos	Based on the NITE GHS classification results.
Carbosulfan	Based on the NITE GHS classification results.

**Serious eye damage/ irritation**

Chemical Name	Serious eye damage/irritation source information
Acetonitrile	Based on the NITE GHS classification results.
Pyrazophos	Based on the NITE GHS classification results.
Carbosulfan	Based on the NITE GHS classification results.

**Respiratory or skin sensitization**

Chemical Name	Respiratory or Skin sensitization source information
Acetonitrile	Based on the NITE GHS classification results.
Pyrazophos	Based on the NITE GHS classification results.
Carbosulfan	Based on the NITE GHS classification results.

**Reproductive cell mutagenicity**

Chemical Name	germ cell mutagenicity source information
Acetonitrile	Based on the NITE GHS classification results.
Pyrazophos	Based on the NITE GHS classification results.
Carbosulfan	Based on the NITE GHS classification results.

**Carcinogenicity**

Chemical Name	Carcinogenicity source information
Acetonitrile	Based on the NITE GHS classification results.
Pyrazophos	Based on the NITE GHS classification results.
Carbosulfan	Based on the NITE GHS classification results.

Chemical Name	NTP	IARC	ACGIH	JSOH (Japan)
Acetonitrile 75-05-8	-		A4	-
Pyrazophos 13457-18-6	-			-
Carbosulfan 55285-14-8	-			-

**Reproductive toxicity**

Chemical Name	Reproductive toxicity source information
Acetonitrile	Based on the NITE GHS classification results.
Pyrazophos	Based on the NITE GHS classification results.
Carbosulfan	Based on the NITE GHS classification results.

**STOT-single exposure**

Chemical Name	STOT -single exposure- source information
Acetonitrile	Based on the NITE GHS classification results.
Pyrazophos	Based on the NITE GHS classification results.
Carbosulfan	Based on the NITE GHS classification results.

**STOT-repeated exposure**

Chemical Name	STOT -repeated exposure- source information
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Acetonitrile	Based on the NITE GHS classification results.
Pyrazophos	Based on the NITE GHS classification results.
Carbosulfan	Based on the NITE GHS classification results.

**Aspiration hazard**

Chemical Name	Aspiration Hazard source information
Acetonitrile	Based on the NITE GHS classification results.
Pyrazophos	Based on the NITE GHS classification results.
Carbosulfan	Based on the NITE GHS classification results.

## Section 12: ECOLOGICAL INFORMATION

Since data of the mixture is not available, data as each components are described.

**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Acetonitrile	EC50 : <i>Pseudokirchneriella subcapitata</i> >700 mg/L 72 h	LC50 : <i>Oryzias latipes</i> >100 mg/L 96 h	LC50 : <i>Daphnia magna</i> >100 mg/L 96 h
Carbosulfan	N/A	N/A	EC50: <i>Daphnia magna</i> 0.00103 mg/L 48 h
Oxabetrinil	N/A	LC50 : 7.1 mg/L 48 h	EC50 : 8.5 mg/L 48 h

**Other data**

Chemical Name	Short-term (acute) hazardous to the aquatic environment source information	Long-term (chronic) hazardous to the aquatic environment source information
Acetonitrile	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Pyrazophos	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.
Carbosulfan	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

<b>Persistence and degradability</b>	No information available
<b>Bioaccumulative potential</b>	No information available
<b>Mobility in soil</b>	No information available
<b>Hazard to the ozone layer</b>	No information available

## Section 13: DISPOSAL CONSIDERATIONS

**Waste from residues**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated container and contaminated packaging**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

## Section 14: TRANSPORT INFORMATION

**ADR/RID**

<b>UN number</b>	UN1648
<b>Proper shipping name:</b>	ACETONITRILE
<b>UN classification</b>	3
<b>Subsidiary hazard class</b>	
<b>Packing group</b>	II
<b>Marine pollutant</b>	Not applicable

**IMDG**

**UN number** UN1648  
**Proper shipping name:** ACETONITRILE  
**UN classification** 3  
**Subsidiary hazard class**  
**Packing group** II  
**Marine pollutant (Sea)** Not applicable  
**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** No information available

**IATA**

**UN number** UN1648  
**Proper shipping name:** ACETONITRILE  
**UN classification** 3  
**Subsidiary hazard class**  
**Packing group** II  
**Environmentally Hazardous Substance** Not applicable

<b>Section 15: REGULATORY INFORMATION</b>
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**Japanese regulations**

**Fire Service Act** Category IV, Class I petroleums, dangerous grade 2 water-soluble  
**Poisonous and Deleterious Substances Control Law** Deleterious Substances 2nd. Grade  
**Industrial Safety and Health Act** Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57)  
 Notifiable Substances (Law Art.57-2)  
 Dangerous Substances - Flammable Substance (Enforcement Order Attached Table 1 Item 4)  
**Industrial Safety and Health Act (2024-)** 【2024.4.1~】 Chemical Substances Hazardous to Skin, etc.(Regulations Article 594-2 Paragraph 1)  
**Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc** Priority Assessment Chemical Substances (Law Article 2, Para.5)  
**Regulations for the carriage and storage of dangerous goods in ship** Flammable Liquids (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)  
**Civil Aeronautics Law** Flammable Liquids (Ordinance Art.194, MITL Notification for Air Transportation of Explosives etc., Attached Table 1)  
**Marine Pollution Prevention Law** Enforcement ordinance Appendix No. 1 Noxious liquid substance Category Z  
**Pollutant Release and Transfer Register Law (2023.4.1-)** Not applicable  
**Export Trade Control Order** Not applicable  
**Air Pollution Control Law** Hazardous Air Pollutants

Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2)	Pollutant Release and Transfer Register Law (2023.4.1-)
Acetonitrile 75-05-8 ( 99 )	Applicable	Applicable	-
Pyrazophos 13457-18-6 ( 0.0020 )	Applicable	-	-
Carbosulfan 55285-14-8 ( 0.0020 )	Applicable	-	-
Oxabetrinil	Applicable	-	-



Chemical Name	Poisonous and Deleterious Substances Control Law	Industrial Safety and Health Act Substances (Law Art.57-2)	Pollutant Release and Transfer Register Law (2023.4.1-)
74782-23-3 ( 0.0020 )			

## Section 16: OTHER INFORMATION

### Key literature references and sources for data etc.

NITE: National Institute of Technology and Evaluation (JAPAN)  
<http://www.safe.nite.go.jp/japan/db.html>  
IATA dangerous Goods Regulations  
RTECS:Registry of Toxic Effects of Chemical Substances  
Japan Industrial Safety and Health Association GHS Model SDS  
Dictionary of Synthetic Organic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.  
Chemical Dictionary, Kyouritsu Publishing Co., Ltd.  
etc

### Record of SDS revisions

The following contents were revised. Regulatory information.

### Disclaimer

This SDS is according to JIS Z 7253: 2019. 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, 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.

GHS Classification is according to JIS Z 7252:2019. \*JIS: Japanese Industrial Standards

**End of Safety Data Sheet**