



SAFETY DATA SHEET

According to JIS Z 7253:2019

Revision date 17-Jan-2024

Revision Number 1.05

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Organic Solvent Metabolites Mixture Standard Solution
Product Code	158-01931

Supplier FUJIFILM Wako Pure Chemical Corporation

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Recommended uses For research use only

Restrictions on useSeek expert judgment when using for purposes other than those recommended.

Section 2: HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

Serious eye damage/eye irritationCategory 2AReproductive ToxicityCategory 1BSpecific target organ toxicity (single exposure)Category 1

Category 1 central nervous system, Visual organ, systemic toxicity

Specific target organ toxicity (repeated exposure) Category 1

Category 1 central nervous system, Visual organ

Pictograms



Signal word

Danger

Hazard statements

- H319 Causes serious eye irritation
- H360 May damage fertility or the unborn child
- H370 Causes damage to the following organs: central nervous system, Visual organ, systemic toxicity

H372 - Causes damage to the following organs through prolonged or repeated exposure: central nervous system, Visual organ

Precautionary statements-(Prevention)

- · Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- · Use personal protective equipment as required
- Wash face, hands and any exposed skin thoroughly after handling
- Do not breathe dust/fume/gas/mist/vapors/spray
- Do not eat, drink or smoke when using this product

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

Precautionary statements-(Storage)

· Store locked up

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
Water	<84	18.02	N/A	N/A	7732-18-5
(+/-)-Mandelic acid	0.10	152.15	(3)-1764	*	90-64-2
m-Methylhippuric Acid	0.10	193.20	N/A	N/A	27115-49-7
p-Methylhippuric Acid	0.10	193.20	N/A	N/A	27115-50-0
o-Methylhippuric Acid	0.10	193.20	N/A	N/A	42013-20-7
Hippuric acid	0.10	179.17	(3)-1391	*	495-69-2
Creatinine	0.10	113.12	(9)-408	*	60-27-5
Methanol	<16	32.04	(2)-201	*	67-56-1

Note on ISHL No.:

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

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.

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.

^{*} in the table means announced chemical substances.

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 contaminent and methods and materials for cleaning up

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

Recoverly, 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

Avoid contact with strong oxidizing agents. 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

Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Storage

Safe storage conditions

Storage conditions Container protected from light, and store tightly closed in freezer (-20°C).

Safe packaging material Glass

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 handand eye-wash facility. And display their position clearly.

Exposure limits

Chemical Name	JSOH (Japan)	ISHL (Japan)	ACGIH
Methanol	200ppm(260mg/m ³)	200ppm	TWA 200ppm(260mg/m ³)
67-56-1	-		STEL 250ppm

Personal protective equipment

Respiratory protection Protective mask

Hand protection chemical protective gloves (JIS T 8116) **Eye protection** protective eyeglasses or chemical safety goggles

Skin and body protection Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form

ColorcolorlessTurbidityclearAppearanceliquid

Odor
Melting point/freezing point
Boiling point, initial boiling point and boiling range
Flammability
Evaporation rate:
no data available

Upper/lower flammability or explosive limits

no data available Upper: no data available Lower: Flash point no data available no data available Auto-ignition temperature: **Decomposition temperature:** no data available рΗ no data available Viscosity (coefficient of viscosity) no data available no data available **Dynamic viscosity**

Solubilities water , Alcohols , ether : freely soluble .

n-Octanol/water partition coefficient:(log Pow)
No data available
Particle characteristics
no data available

Section 10: STABILITY AND REACTIVITY

Stability

Reactivity no data available
Chemical stability May be altered by light.

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon monooxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methanol	1400 mg/kg (Human)	15800 mg/kg (Rabbit)	>31500 ppm (Rat) 4 h
			(vapor)

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

Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust- source information	Acute toxicity -inhalation mist- source information
Wiethaner			Based on the NITE GHS classification results.
	Ciassification results.	ciassification results.	ciassification results.

Skin irritation/corrosion

Chemical Name	Skin corrosion/irritation source information
Methanol	Based on the NITE GHS classification results.
Serious eye damage/ irritation	
Chemical Name	Serious eye damage/irritation source information
Methanol	Based on the NITE GHS classification results.
Respiratory or skin sensitization	·
Chemical Name	Respiratory or Skin sensitization source information
Methanol	Based on the NITE GHS classification results.
Reproductive cell mutagenicity	<u>.</u>
Chemical Name	germ cell mutagencity source information
Methanol	Based on the NITE GHS classification results.
Carcinogenicity	
Chemical Name	Carcinogenicity source information
Methanol	Based on the NITE GHS classification results.
	·
Reproductive toxicity	
Chemical Name	Reproductive toxicity source information

Chemical Name	Reproductive toxicity source information
Methanol	Based on the NITE GHS classification results.
STOT-single exposure	

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

STOT-repeated exposure

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

Aspiration hazard

Aspiration nazara				
Chemical Name	Aspiration Hazard source information			
Methanol	Based on the NITE GHS classification results.			

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Methanol	N/A	LC50 : Lepomis macrochirus	LC50 : Artemia
		15400 mg/L 96 h	1340 mg/L 96 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
		Based on the NITE GHS classification
	results.	results.

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

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 Not regulated

UN number

Proper shipping name: **UN classfication** Subsidiary hazard class

Packing group

Marine pollutant Not applicable

IMDG Not regulated

UN number

Proper shipping name: **UN classfication** Subsidiary hazard class

Packing group

Marine pollutant (Sea) Not applicable

Transport in bulk according to No information available

Annex II of MARPOL 73/78 and

the IBC Code

IATA Not regulated

UN number

Proper shipping name: **UN classfication** Subsidiary hazard class

Packing group

Environmentally Hazardous Not applicable

Substance

Section 15: REGULATORY INFORMATION

Japanese regulations

Fire Service Act Not applicable Poisonous and Deleterious Not applicable

Substances Control Law

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)

Class 2 Organic Solvents (Enforcement Order Attached Table No.6-2, Ordinance on

Prevention of Organic Solvent Poisoning Art.1, Para.1, Item 5)

Working Environment Evaluation Standards, Administrative Control Levels (Law Art.65-2,

Para.1)

Not applicable

Regulations for the carriage

and storage of dangerous

goods in ship

Civil Aeronautics Law Not applicable

Marine Pollution Prevention

Enforcement ordinance Appendix No. 1 Noxious liquid substance Category Y

Pollutant Release and Transfer Not applicable

Register Law (2023.4.1-)

Export Trade Control Order Not applicable **Air Pollution Control Law Specified Substances**

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-)
Methanol 67-56-1 (<16)	-	Applicable	-

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 Oraganic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.

Chemical Dictionary, Kyouritsu Publishing Co., Ltd.

etc

Record of SDS revisions

The following contents were revised. Prodauct and company Identification. Handling and

storage. Exposure controls/personal protection. 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