

SAFETY DATA SHEET

According to JIS Z 7253:2019
Revision date 09-Feb-2023
 Revision Number 2.03

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name	Malaoxon Standard
Product Code	137-15211

Manufacturer	FUJIFILM Wako Pure Chemical Corporation 1-2 Doshomachi 3-Chome Chuo-ku, Osaka 540-8605, Japan Phone: +81-6-6203-3741 Fax: +81-6-6203-5964
Supplier	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
Emergency telephone number	+81-6-6203-3741 / +81-3-3270-8571
Recommended uses and restrictions on use	For research use only

Section 2: HAZARDS IDENTIFICATION

GHS classification**Classification of the substance or mixture**

Acute toxicity - Oral

Category 3

Acute toxicity - Dermal

Category 2

Pictograms**Signal word**

Danger

Hazard statements

H301 - Toxic if swallowed

H310 - Fatal in contact with skin

Precautionary statements-(Prevention)

- Wash face, hands and any exposed skin thoroughly after handling
- Do not eat, drink or smoke when using this product
- Do not get in eyes, on skin, or on clothing
- Wear protective gloves/protective clothing/eye protection/face protection

Precautionary statements-(Response)

- IF ON SKIN: Gently wash with plenty of soap and water
- Immediately call a POISON CENTER or doctor/physician
- Remove/Take off immediately all contaminated clothing
- Wash contaminated clothing before reuse
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Rinse mouth

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 Substance

Formula C10H19O7PS

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS RN
Malathion-O-analogue	98.0	314.29	N/A	N/A	1634-78-2

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

Impurities and/or Additives: Not applicable

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

Water spray (fog), Carbon dioxide (CO₂), 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.

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. 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**

Keep container protect from light tightly closed. Store in a cool (2-10 °C) place. Packed with an inert gas.

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 hand- and eye-wash facility. And display their position clearly.

Exposure limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Personal protective equipment**Respiratory protection**

Protective mask

Hand protection

Protective gloves

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**Color**

Colorless - yellow brown

Turbidity

clear

Appearance

liquid

Odor

no data available

Melting point/freezing point

no data available

Boiling point, initial boiling point and boiling range

no data available

Flammability

no data available

Evaporation rate:

no data available

Flammability (solid, gas):

no data available

Upper/lower flammability or explosive limits

Upper:	no data available
Lower:	no data available
Flash point	no data available
Auto-ignition temperature:	no data available
Decomposition temperature:	no data available
pH	no data available
Viscosity (coefficient of viscosity)	no data available
Dynamic viscosity	no data available
Solubilities	water , Ethanol and acetone : soluble .
n-Octanol/water partition coefficient:(log Pow)	no data available
Vapour pressure	no data available
Specific Gravity / Relative density	no data available
Vapour density	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, Heat, flames and sparks, static electricity, spark
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	Carbon monoxide (CO), Carbon dioxide (CO ₂), Phosphorus oxide, Sulfur oxides (SO _x)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Malathion-O-analogue	158 mg/kg(Rat)	119 mg/kg(Rabbit)	N/A

Skin irritation/corrosion	no data available
Serious eye damage/ irritation	no data available
Respiratory or skin sensitization	no data available
Reproductive cell mutagenicity	no data available
Carcinogenicity	no data available
Reproductive toxicity	no data available
STOT-single exposure	no data available
STOT-repeated exposure	no data available
Aspiration hazard	no data available

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity No information available

Other data no data available

Persistence and degradability No information available
Bioaccumulative potential No information available

Mobility in soil No information available
 Hazard to the ozone layer 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

UN number UN2810
 Proper shipping name: Toxic liquid, organic, n.o.s. (Malathion-O-analogue)
 UN classification 6.1
 Subsidiary hazard class
 Packing group II
 Marine pollutant Not applicable

IMDG

UN number UN2810
 Proper shipping name: Toxic liquid, organic, n.o.s. (Malathion-O-analogue)
 UN classification 6.1
 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 UN2810
 Proper shipping name: Toxic liquid, organic, n.o.s. (Malathion-O-analogue)
 UN classification 6.1
 Subsidiary hazard class
 Packing group II
 Environmentally Hazardous Substance Not applicable

Section 15: REGULATORY INFORMATION

International Inventories

EINECS/ELINCS -
 TSCA -

Japanese regulations

Fire Service Act Category IV, Class III petroleum, dangerous grade 3
 Poisonous and Deleterious Substances Control Law Not applicable
 Industrial Safety and Health Act Not applicable
 Regulations for the carriage and storage of dangerous goods in ship Toxic Substances - Poison (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)
 Civil Aeronautics Law Toxic and Infectious Substances (Ordinance Art.194, MITL Notification for Air Transportation of Explosives etc., Attached Table 1)
 Pollutant Release and Transfer Register Law Not applicable
 Register Law (~2023.3.31)
 Pollutant Release and Transfer Register Law (2023/4/1~) Not applicable

Export Trade Control Order Not 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 Organic Chemistry , SSOCJ, Koudansha Scientific Co.Ltd.
Chemical Dictionary, Kyouritsu Publishing Co., Ltd.
etc

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 Z7252(2019). *JIS: Japanese Industrial Standards

End of Safety Data Sheet