

SAFETY DATA SHEET

Issue Date 14-Nov-2025
Revision Number 3.07

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Bismuth(III) 2-Ethylhexanoate 2-Ethylhexanoic Acid Solution (Bi:25%)
Other means of identification
Product Code(s) 029-13441

Recommended use of the chemical and restrictions on use

Recommended Use For research use only.
Uses advised against Seek expert judgment when using for purposes other than those recommended.

Details of the supplier of the safety data sheet

Manufacturer Address	Distributor
FUJIFILM Wako Pure Chemical Corporation	FUJIFILM Irvine Scientific
1-2, Doshomachi 3-Chome,	E. Warner Avenue, Santa Ana, CA 92705-5505, U.S.A.: +1 949 261 7800
Chuo-ku Osaka 540-8605, Japan	Fax: +1 949 261 6522
Tel : +81-6-6203-3741	
Fax: +81-6-6201-5964	

2. HAZARDS IDENTIFICATION

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

Skin corrosion/irritation
Serious eye damage/eye irritation
Reproductive Toxicity
Specific target organ toxicity (single exposure)
Category 2 respiratory system

Category 1
 Category 2A
 Category 1B
 Category 2

Pictograms**Signal word**

Danger

Hazard statements

H314 - Causes severe skin burns and eye damage
 H319 - Causes serious eye irritation
 H360 - May damage fertility or the unborn child
 H371 - May cause damage to the following organs: respiratory system

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 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

Precautionary statements-(Response)

Immediately 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 ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary statements-(Storage)

Store locked up

Precautionary statements-(Disposal)

Dispose of contents/container to an approved waste disposal plant

Others

Other hazards Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Mixture

Chemical Name	Molecular weight	CAS RN	Weight-%
Bismuth(III) 2-ethylhexanoate	638.59	67874-71-9	76
2-Ethylhexanoic acid	144.21	149-57-5	24

Impurities and/or Additives: Not applicable

4. FIRST AID MEASURES

First aid measures

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact Wash skin with soap and water.

Inhalation Remove to fresh air.

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.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing media

Water spray (fog). Carbon dioxide (CO₂). Foam. Extinguishing powder. Sand.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosion data

Sensitivity to Mechanical none.

Impact

Sensitivity to Static Discharge none.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions, protective equipment and emergency procedures Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods and material for containment and cleaning up Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical measures Flammable. Avoid contact with high temperature objects, spark, and strong oxidizing agents.

Protective measures Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage conditions Keep container protect from light, store in well-ventilated place at room temperature (preferably cool). Keep container tightly closed.

Packaging materials Glass.

Incompatible materials Strong oxidizing agents.

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 Not applicable

Chemical Name	ACGIH	OSHA PEL	NIOSH IDLH
2-Ethylhexanoic acid 149-57-5	TWA: 5 mg/m ³ inhalable fraction and vapor	N/A	N/A

Personal protective equipment

Respiratory protection Protective mask
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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form

Color

Colorless - yellow brown

Turbidity	clear ~ slightly muddy
Appearance	liquid
Odor	characteristic odor
pH	no data available
Melting point/freezing point	no data available
Boiling point, initial boiling point and boiling range	no data available
Flash point	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
Vapour pressure	no data available
Vapour density	no data available
Specific Gravity / Relative density	1.238-1.255
Solubilities	Ethanol , acetone : Very soluble .
n-Octanol/water partition coefficient:(log Pow)	no data available
Auto-ignition temperature:	no data available
Decomposition temperature:	no data available
Viscosity (coefficient of viscosity)	no data available
Dynamic viscosity	no data available
Particle characteristics	no data available

10. STABILITY AND REACTIVITY

Stability

Chemical stability	May be altered by light.
Reactivity	no data available
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), Metal oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Bismuth(III) 2-ethylhexanoate	N/A	> 2000 mg/kg (Rat)	N/A
2-Ethylhexanoic acid	2043 mg/kg (Rat)	1140 mg/kg (Rabbit)	N/A

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas- source information
2-Ethylhexanoic acid	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
2-Ethylhexanoic acid	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
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2-Ethylhexanoic acid	Based on the NITE GHS classification results.
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Serious eye damage/ irritation

Chemical Name	Serious eye damage/irritation source information
2-Ethylhexanoic acid	Based on the NITE GHS classification results.

Respiratory or skin sensitization

Chemical Name	Respiratory or Skin sensitization source information
2-Ethylhexanoic acid	Based on the NITE GHS classification results.

Reproductive cell mutagenicity

Chemical Name	germ cell mutagenicity source information
2-Ethylhexanoic acid	Based on the NITE GHS classification results.

Carcinogenicity

Chemical Name	Carcinogenicity source information
2-Ethylhexanoic acid	Based on the NITE GHS classification results.

Reproductive toxicity

Chemical Name	Reproductive toxicity source information
2-Ethylhexanoic acid	Based on the NITE GHS classification results.

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

Chemical Name	Aspiration Hazard source information
2-Ethylhexanoic acid	Based on the NITE GHS classification results.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
2-Ethylhexanoic acid 149-57-5	EC50 : Desmodesmus subspicatus 41 mg/L 96 h EC50 : Desmodesmus subspicatus 61 mg/L 72 h	LC50 : Pimephales promelas 70 mg/L 96 h	N/A	EC50 : Daphnia magna 85.4 mg/L 48 h

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Mobility

no data available

Chemical Name	Partition coefficient
2-Ethylhexanoic acid 149-57-5	2.7

Mobility in soil

No information available

Other Data

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

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

Precautionary including method of disposing contaminated packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

DOT

UN/ID No UN3265
Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (Bismuth(III) 2-ethylhexanoate)
UN classification 8
Subsidiary hazard class
Packing group III
Marine pollutant Not applicable

IATA

UN/ID No UN3265
Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (Bismuth(III) 2-ethylhexanoate)
UN classification 8
Subsidiary hazard class
Packing group III
Environmentally Hazardous Substance Not applicable

IMDG

UN/ID No UN3265
Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (Bismuth(III) 2-ethylhexanoate)
UN classification 8
Subsidiary hazard class
Packing group III
Marine pollutant (Sea) Not applicable

15. REGULATORY INFORMATION

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS RN	Weight-%	SARA 313 - Threshold Values %
Bismuth(III) 2-ethylhexanoate - 67874-71-9	67874-71-9	76	N/A
2-Ethylhexanoic acid - 149-57-5	149-57-5	24	N/A

SARA 311/312 Hazard Categories

Acute health hazard No
Chronic Health Hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any chemicals regulated by Proposition 65

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
2-Ethylhexanoic acid 149-57-5	X	N/A	N/A

U.S. EPA Label Information

EPA Pesticide Registration NumberNot applicable

16. OTHER INFORMATION

Issue Date 14-Nov-2025

Revision Note

No information available

Disclaimer

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, use, processing, storage, transportation, disposal and release 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.

End of Safety Data Sheet