

SAFETY DATA SHEET

Issue Date 13-Jun-2025
 Revision Number 2.05

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

Product identifier

Product Name 4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate

Other means of identification

Product Code(s) 328-36121,324-36123

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 sheetManufacturer Address

FUJIFILM Wako Pure Chemical Corporation
 1-2, Doshomachi 3-Chome,

Chuo-ku Osaka 540-8605, Japan

Tel : +81-6-6203-3741

Fax: +81-6-6201-5964

Distributor

FUJIFILM Irvine Scientific
 E. Warner Avenue, Santa Ana, CA 92705-5505, U.S.A.: +1 949 261 7800

Fax: +1 949 261 6522

2. HAZARDS IDENTIFICATION

GHS classificationClassification of the substance or mixture

Acute toxicity - Oral

Category 2

Pictograms

Signal word

Danger

Hazard statements

H300 - Fatal if swallowed

Precautionary statements-(Prevention)

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product

Precautionary statements-(Response)

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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Formula C11H18N2O·H2SO4

Chemical Name	Molecular weight	CAS RN	Weight-%
4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate	292.35	25646-77-9	90

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.
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Indication of any immediate medical attention and special treatment needed

Note to physicians	Treat symptomatically.
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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 Impact	none.
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.
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Environmental precautions

Environmental precautions	See Section 12 for additional ecological information.
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Methods and material for containment and cleaning up

Methods and material for containment and cleaning up Prevent further leakage or spillage if safe to do so.

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

7. HANDLING AND STORAGE

Precautions for safe handling

Technical measures Avoid contact with strong oxidizing agents.

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

Conditions for safe storage, including any incompatibilities

Storage conditions Store away from sunlight 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

Personal protective equipment

Respiratory protection Dust mask (JIS T 8151)

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 White - dark brown

Appearance crystalline powder - powder

Odor

no data available

pH

no data available

Melting point/freezing point

154 - 157 °C

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

no data available

Upper:

no data available

Lower:

no data available

Vapour pressure

no data available

Vapour density

no data available

Specific Gravity / Relative density

no data available

Solubilities

water : soluble .

n-Octanol/water partition coefficient:(log Pow)

no data available

Auto-ignition temperature:	no data available
Decomposition temperature:	230 °C
Viscosity (coefficient of viscosity)	no data available
Dynamic viscosity	no data available
Particle characteristics	no data available

10. STABILITY AND REACTIVITY

Stability

Chemical stability	Stable under recommended storage conditions.
Reactivity	no data available

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight, Moisture

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x), Sulfur oxides (SO_x)

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate	= 35 mg/kg (Rat)	N/A	N/A

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas-source information
4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate	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
4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate	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
4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate	Based on the NITE GHS classification results.

Serious eye damage/ irritation

Chemical Name	Serious eye damage/irritation source information
4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate	Based on the NITE GHS classification results.

Respiratory or skin sensitization

Chemical Name	Respiratory or Skin sensitization source information
4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate	Based on the NITE GHS classification results.

Reproductive cell mutagenicity

Chemical Name	germ cell mutagenicity source information
4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate	Based on the NITE GHS classification results.

Carcinogenicity

Chemical Name	Carcinogenicity source information
4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate	Based on the NITE GHS classification results.

Reproductive toxicity

Chemical Name	Reproductive toxicity source information
4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate	

4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate	Based on the NITE GHS classification results.
STOT-single exposure	
Chemical Name	STOT -single exposure- source information
4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate	Based on the NITE GHS classification results.
STOT-repeated exposure	
Chemical Name	STOT -repeated exposure- source information
4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate	Based on the NITE GHS classification results.
Aspiration hazard	
Chemical Name	Aspiration Hazard source information
4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate	Based on the NITE GHS classification results.

12. ECOLOGICAL INFORMATION

Ecotoxicity

no data available

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Mobility

no data available

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	UN2811
Proper shipping name:	Toxic solid, organic, n.o.s. (4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate)
UN classification	6.1
Subsidiary hazard class	
Packing group	II
Marine pollutant	Not applicable

IATA

UN/ID No	UN2811
Proper shipping name:	Toxic solid, organic, n.o.s. (4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate)
UN classification	6.1
Subsidiary hazard class	
Packing group	II
Environmentally Hazardous	Not applicable

Substance**IMDG**

UN/ID No	UN2811
Proper shipping name:	Toxic solid, organic, n.o.s. (4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate)
UN classification	6.1
Subsidiary hazard class	
Packing group	II
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 %
4-(N-Ethyl-N-2-hydroxyethyl)-2-methylphenylenediamine Sulfate - 25646-77-9	25646-77-9	90	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

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

Issue Date 11-Jun-2025
 Issue Date 13-Jun-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