

SAFETY DATA SHEET

Issue Date 17-Nov-2025
Revision Number 2.08

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

Product identifier

Product Name Cadmium Sulfate-Water (3/8)
Other means of identification
Product Code(s) 033-16402,037-16405

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**

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 classification**Classification of the substance or mixture****Germ cell mutagenicity**

Category 1B

Carcinogenicity

Category 1A

Reproductive Toxicity

Category 1B

Specific target organ toxicity (repeated exposure)

Category 1

Category 1 kidneys**Pictograms****Signal word**

Danger

Hazard statements

H340 - May cause genetic defects

H350 - May cause cancer

H360 - May damage fertility or the unborn child

H372 - Causes damage to the following organs through prolonged or repeated exposure: kidneys

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)

IF exposed or concerned: 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

3. COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Substance

Formula $3\text{CdSO}_4 \cdot 8\text{H}_2\text{O}$

Chemical Name	Molecular weight	CAS RN	Weight-%
Cadmium sulfate hydrate ($3\text{CdSO}_4 \cdot 8\text{H}_2\text{O}$)	769.55	7790-84-3	99.0

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**

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

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 Ensure adequate ventilation, especially in confined areas.

equipment and emergency procedures**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 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. Store locked up.

Packaging materials Polyethylene. Polypropylene.

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
Cadmium sulfate hydrate (3CdSO ₄ · 8H ₂ O) 7790-84-3	TWA: 0.01 mg/m ³ Cd TWA: 0.002 mg/m ³ Cd respirable particulate matter	N/A	IDLH: 9 mg/m ³ Cd dust and fume

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

Appearance

crystals - crystalline powder

Odor

no data available

pH

4.0 - 7.0 (50g/L, 25°C)

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	3.08
Solubilities	water : free soluble . Ethanol : practically insoluble,or insoluble .
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	Stable under recommended storage conditions.
Reactivity	no data available

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Sulfur oxides (SO_x), Metal oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas- source information
Cadmium sulfate hydrate (3CdSO ₄ . 8H ₂ O)	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
Cadmium sulfate hydrate (3CdSO ₄ . 8H ₂ O)	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
Cadmium sulfate hydrate (3CdSO ₄ . 8H ₂ O)	Based on the NITE GHS classification results.

Serious eye damage/ irritation

Chemical Name	Serious eye damage/irritation source information
Cadmium sulfate hydrate (3CdSO ₄ . 8H ₂ O)	Based on the NITE GHS classification results.

Respiratory or skin sensitization

Chemical Name	Respiratory or Skin sensitization source information
Cadmium sulfate hydrate (3CdSO ₄ . 8H ₂ O)	Based on the NITE GHS classification results.

Reproductive cell mutagenicity

Chemical Name	germ cell mutagenicity source information
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Cadmium sulfate hydrate (3CdSO ₄ . 8H ₂ O)	Based on the NITE GHS classification results.
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Carcinogenicity

Chemical Name	Carcinogenicity source information
Cadmium sulfate hydrate (3CdSO ₄ . 8H ₂ O)	Based on the NITE GHS classification results.

Chemical Name	NTP	IARC	ACGIH	JSOH
Cadmium sulfate hydrate (3CdSO ₄ . 8H ₂ O) 7790-84-3	Known	N/A	A2	Group 1

Reproductive toxicity

Chemical Name	Reproductive toxicity source information
Cadmium sulfate hydrate (3CdSO ₄ . 8H ₂ O)	Based on the NITE GHS classification results.

STOT-single exposure

Chemical Name	STOT -single exposure- source information
Cadmium sulfate hydrate (3CdSO ₄ . 8H ₂ O)	Based on the NITE GHS classification results.

STOT-repeated exposure

Chemical Name	STOT -repeated exposure- source information
Cadmium sulfate hydrate (3CdSO ₄ . 8H ₂ O)	Based on the NITE GHS classification results.

Aspiration hazard

Chemical Name	Aspiration Hazard source information
Cadmium sulfate hydrate (3CdSO ₄ . 8H ₂ O)	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

Not regulated

Proper shipping name:

Not applicable

UN classification

Subsidiary hazard class

Packing group

Marine pollutant

Not applicable

IATA Not regulated
UN/ID No -
Proper shipping name:
UN classification
Subsidiary hazard class
Packing group
Environmentally Hazardous Substance Not applicable

IMDG Not regulated
UN/ID No -
Proper shipping name:
UN classification
Subsidiary hazard class
Packing group
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 contains a chemical or 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 %
Cadmium sulfate hydrate (3CdSO ₄ · 8H ₂ O) - 7790-84-3	7790-84-3	99.0	0.1

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 contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Cadmium sulfate hydrate (3CdSO ₄ · 8H ₂ O) 7790-84-3	N/A	X	N/A	N/A

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

Chemical Name	California Proposition 65
Cadmium sulfate hydrate (3CdSO ₄ · 8H ₂ O) - 7790-84-3	Carcinogen

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
Cadmium sulfate hydrate (3CdSO4 . 8H2O) 7790-84-3	X	N/A	X

U.S. EPA Label Information

EPA Pesticide Registration NumberNot applicable

16. OTHER INFORMATION

Issue Date 17-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