

SAFETY DATA SHEET

Issue Date 14-Apr-2025
Revision Number 4.05

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

Product identifier

Product Name Chromium, Powder, -45um, 99.5%
Other means of identification
Product Code(s) 033-18261

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
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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**

Serious eye damage/eye irritation
Respiratory sensitization
Skin sensitization
Specific target organ toxicity (single exposure)
Category 3 Respiratory irritation

Category 2A
Category 1
Category 1
Category 3

Pictograms**Signal word**

Danger

Hazard statements

H319 - Causes serious eye irritation
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H317 - May cause an allergic skin reaction

Precautionary statements-(Prevention)

Wash face, hands and any exposed skin thoroughly after handling Wear protective gloves/protective clothing/eye protection/face protection Avoid breathing dust/fume/gas/mist/vapors/spray In case of inadequate ventilation wear respiratory protection Contaminated work clothing should not be allowed out of the workplace Use only outdoors or in a well-ventilated area

Precautionary statements-(Response)

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
IF ON SKIN: Wash with plenty of soap and water If skin irritation or rash occurs: Get medical advice/attention Wash

contaminated clothing before reuse

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Precautionary statements-(Storage)

Store in a well-ventilated place. Keep container tightly closed 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 Cr

Chemical Name	Molecular weight	CAS RN	Weight-%
Chromium	51.996	7440-47-3	99.5 (subtracting method)

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 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 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 Avoids contact with acids.
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 Acids.

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

Chemical Name	ACGIH	OSHA PEL	NIOSH IDLH
Chromium 7440-47-3	TWA: 0.5 mg/m ³ inhalable particulate matter	TWA: 1 mg/m ³ (vacated) TWA: 1 mg/m ³	IDLH: 250 mg/m ³ TWA: 0.5 mg/m ³

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

gray- blackish gray

Appearance	powder
Odor	Odorless
pH	no data available
Melting point/freezing point	1905 °C
Boiling point, initial boiling point and boiling range	2200 °C
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	7.2
Solubilities	dil. hydrochloric acid , dil. sulfuric acid : soluble . nitric acid , aqua regia : insoluble . water : 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	Acids
Hazardous decomposition products	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
Chromium	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
Chromium	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
Chromium	Based on the NITE GHS classification results.

Serious eye damage/ irritation

Chemical Name	Serious eye damage/irritation source information
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Chromium	Based on the NITE GHS classification results.
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Respiratory or skin sensitization

Chemical Name	Respiratory or Skin sensitization source information
Chromium	Based on the NITE GHS classification results.

Reproductive cell mutagenicity

Chemical Name	germ cell mutagenicity source information
Chromium	Based on the NITE GHS classification results.

Carcinogenicity

Chemical Name	Carcinogenicity source information
Chromium	Based on the NITE GHS classification results.

Chemical Name	NTP	IARC	ACGIH	JSOH
Chromium 7440-47-3	N/A	Group 3	N/A	N/A

Reproductive toxicity

Chemical Name	Reproductive toxicity source information
Chromium	Based on the NITE GHS classification results.

STOT-single exposure

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

STOT-repeated exposure

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

Aspiration hazard

Chemical Name	Aspiration Hazard source information
Chromium	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 Not regulated
 UN/ID No Not applicable
 Proper shipping name:
 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 %
Chromium - 7440-47-3	7440-47-3	99.5 (subtracting method)	1.0

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
Chromium 7440-47-3	N/A	X	X	N/A

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Chromium 7440-47-3	5000 lb	N/A	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product does not contain any chemicals regulated by Proposition 65

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Chromium 7440-47-3	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION

Issue Date 10-Apr-2025

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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