

Safety Data Sheet

According to regulation (EC) No. 1907/2006 (REACH)



50005 IRIODIN® 9103 Rutile Sterling Silver WR

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Revised edition: 07.07.2021

Version: 11.0

Printed: 20.07.2021

1. Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Product Name: IRIODIN® 9103 Rutile Sterling Silver WR
Article No.: 50005
UFI: 2S74-E9F7-G5S9-JGVW

1.2. Relevant identified Uses of the Substance or Mixture and Uses advised against

Identified uses:
Coloring agent

Uses advised against:

1.3. Details of the Supplier of the Safety Data Sheet (Producer/Importer)

Company: Kremer Pigmente GmbH & Co. KG
Address: Hauptstr. 41-47, 88317 Aichstetten, Germany
Tel./Fax.: Tel +49 7565 914480, Fax +49 7565 1606
Internet: www.kremer-pigmente.com
E-Mail: info@kremer-pigmente.com
Importer: --

1.4. Emergency No.

Emergency No.: +49 7565 914480 (Mon-Fri 8:00 - 17:00)

1.4.2 Poison Center:

2. Hazards Identification

2.1. Classification of the Substance or Mixture

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product does not require classification and labelling as hazardous according to CLP/GHS.

Possible Environmental Effects:

2.2. Label Elements

Classification according to Regulation (EC) No. 1272/2008 (CLP/GHS)

This product does not require classification and labelling as hazardous according to CLP/GHS.

Hazard designation:

Not applicable.

Signal word:

Hazard designation:

EUH212

Warning! Hazardous respirable dust may be formed when used. Do not breathe dust.

Safety designation:

Hazardous components for labelling:

Other Hazards

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2.3.

No special hazards known.

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: Mica laminated with titanium dioxide, tin oxide and additives.

Information on Components / Hazardous Ingredients:

Tin oxide, SnO₂; REACH Reg. No. 01-2119946062-44

1 - 10 %

CAS-Nr: 18282-10-5

EINECS-Nr: 242-159-0

EC-Nr:

Additional information:

4. First Aid Measures

4.1. Description of the First Aid Measures

General information:

Take affected persons out into the fresh air.

After inhalation:

Supply fresh air. Consult physician if symptoms persist.

After skin contact:

Wash off with water.

After eye contact:

Rinse eyes with water.

After ingestion:

Give water to drink (at the most 2 glasses). Consult a physician in case of complaints.

4.2. Most important Symptoms and Effects, both Acute and Delayed

Symptoms:

No further information available.

Effects:

No further information available.

4.3. Indication of any Immediate Medical Attention and special Treatment needed

Treatment:

No information available.

5. Fire-Fighting Measures

5.1. Extinguishing Media

Suitable extinguishing media:

Use extinguishing media for surrounding fire.

Unsuitable extinguishing media:

None known.

5.2. Special Hazards arising from the Substance or Mixture

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Special hazards:

*Product is not flammable.
In case of fire: hazardous vapors may be released.*

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

*Avoid inhalation of dust.
Evacuate the danger area, observe emergency procedures,
consult an expert.*

6.2. Environmental Precautions

Environmental precautions:

Prevent contamination of soil, drains and surface waters.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

*Cover drains. Collect, bind and pump off spills.
Observe possible material restrictions! (see sections 7.2 resp.
10.5).
Take up mechanically and collect in suitable container for disposal.
Rinse spill area. Avoid dust formation.*

6.4. Reference to other Sections

Dispose of contaminated material according to Section 13.

7. Handling and Storage

7.1. Precautions for Safe Handling

Instructions on safe handling:

Avoid formation of dust. Do not inhale dust.

Hygienic measures:

No further measures, see Section 8.

7.2. Conditions for Safe Storage, including any Incompatibilities

Storage conditions:

Store in tightly sealed containers in a dry room.

*Requirements for storage areas and
containers:*

No special measures necessary.

*Information on fire and explosion
protection:*

No special measures necessary.

Storage class:

10-13 (TRSG 510)

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Further Information:

7.3. Specific End Use(s)

Further information:

See Section 1.2.; no other uses provided

8. Exposure Controls/Personal Protection

8.1. Parameters to be Controlled

Parameters to be controlled (DE):

TRGS 900

TLV: 1.25 mg/m³ air-borne fraction (general dust limit)

TLV: 10 mg/m³ inhalable fraction (general dust limit)

Peak limit Category: 2 (II)

Category II: substances with a resorptive effect.

Titanium dioxide (CAS 13463-67-7), TLV (TRGS 900): 1.25 mg/m³ (8h, airborne dust), 10 mg/m³ (8h, inhalable dust); 2(II)

Tin oxide (CAS 18282-10-5): TLV (TRGS 900): 2 mg/m³ (inhalable fraction; as Sn)

Parameters to be controlled:

Tin oxide (CAS 18282-10-5), ECTLV: 2 mg/m³ (Time weighted average; as Sn)

Derived No-Effect Level (DNEL):

Predicted No-Effect Concentration (PNEC):

Additional Information:

8.2. Exposure Controls

Technical protective measures:

Technical protective measures have priority to personal protective measures.

Personal Protection

General protective measures:

Wash hands before breaks and after work.

Respiratory protection:

Dust mask recommended when very dusty (with particle filter P1).

Hand protection:

Not required

Protective glove material:

Eye protection:

Safety glasses (EN 166)

Body protection:

Environmental precautions:

No special measures required.

9. Physical and Chemical Properties

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9. 1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>powder</i>
<i>Color:</i>	<i>white</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>no information available</i>
<i>pH-Value:</i>	<i>not soluble in water</i>
<i>Melting temperature:</i>	<i>not available</i>
<i>Boiling temperature:</i>	<i>not available</i>
<i>Flash point:</i>	<i>not applicable</i>
<i>Evaporation rate:</i>	<i>No information available.</i>
<i>Flammability (solid, gas):</i>	<i>non-combustible</i>
<i>Upper explosion limit:</i>	<i>no information available</i>
<i>Lower explosion limit:</i>	<i>no information available</i>
<i>Vapor pressure:</i>	<i>not applicable</i>
<i>Vapor density:</i>	<i>No information available.</i>
<i>Density:</i>	<i>2.9 - 3.1 g/cm³ (20°C)</i>
<i>Solubility in water:</i>	<i>insoluble</i>
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>no information available</i>
<i>Auto-ignition temperature:</i>	<i>No information available.</i>
<i>Decomposition temperature:</i>	<i>No data available.</i>
<i>Viscosity, dynamic:</i>	<i>not available</i>
<i>Explosive properties:</i>	<i>Product does not present an explosion hazard.</i>
<i>Oxidizing properties:</i>	

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no information available

Bulk density: 170 - 220 kg/m³

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic:

Burning class:

Solvent content:

Solid content:

Particle size: 5 - 40 µm

Other information:

10. Stability and Reactivity

10.1. Reactivity

Stable if used according to specifications.

10.2. Chemical Stability

Stable at room temperature.

10.3. Possibility of Hazardous Reactions

No information available.

10.4. Conditions to Avoid

Conditions to avoid:

No further information available.

Thermal decomposition:

No data available.

10.5. Incompatible Materials

No information available.

10.6. Hazardous Decomposition Products

None known.

10.7. Further Information

11. Toxicological Information

11.1. Information on Toxicological Effects

Acute Toxicity

LD50, oral:

Tin oxide: > 2000 mg/kg (rat, m/f; ECHA)

LD50, dermal:

No information available.

LC50, inhalation:

Tin oxide: LC50 (4h, rat, m/f): could not be determined because no mortality of rats was observed at the maximum achievable concentration (OECD 403)

Primary effects

Irritant effect on skin:

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Tin oxide: non irritating (OECD 431)

Irritant effect on eyes:

Non-irritating to eyes (in vitro; 240 min, rabbit; OECD 492)

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

Tin oxide:

Non sensitizing (OECD 429, Mouse Local Lymph Node Assay (LLNA))

Mutagenicity:

No relevant data found.

Reproductive toxicity:

No relevant data found.

Carcinogenicity:

No relevant data found.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

Single exposure: no information available.

Repeated exposure: no information available.

Additional toxicological information:

No quantitative toxicological data available for this product.

Avoid inhalation of dust. Even inert dusts can impair the function of the respiratory system.

12. Ecological Information

12.1. Aquatic Toxicity

Fish toxicity:

Tin oxide: LC50: >100 mg/l (96h, Oncorhynchus mykiss; OECD 203)

Tin oxide: NOEC: >100 mg/l (96h, Oncorhynchus mykiss; OECD 203)

Daphnia toxicity:

Tin oxide: EC50: > 100 mg/l (48h, Daphnia magna)

Tin oxide: NOEC: > 100 mg/l (48h, Daphnia magna)

Bacteria toxicity:

Tin dioxide: EC50: > 1000 mg/l (3h, active sludge; OECD 209)

Algae toxicity:

Tin oxide: NOEC: 9.77 mg/l (72h, Desmodesmus subspicatus; OECD 201)

12.2. Persistency and Degradability

Tin oxide:

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Methods for the evaluation of the biological degradability are not applicable for inorganic substances.

12.3. Bioaccumulation

No information available.

12.4. Mobility

No information available.

12.5. Results of PBT- und vPvP Assessment

On the basis of available data, the product does not contain any PBT or vPvB substances in percentage greater than 0.1 %.

12.6. Other Adverse Effects

Water hazard class:

1, slightly hazardous (German Regulation; Self-assessment).

Behaviour in sewage systems:

Further ecological effects:

When used properly, no ecological problems expected.

AOX Value:

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

Dispose of product residues according to the waste disposal guidelines 2008/98/EC as well as according to official national and local regulations.

Do not mix with other waste.

European Waste Code (EWC):

Uncleaned packaging:

Contaminated packaging must be disposed like the substance.

Waste Code No.:

14. Transport Information

14.1. UN Number

ADR, IMDG, IATA

14.2. UN Proper Shipping Name

ADR/RID:

No hazardous goods according to ADR (land transportation).

IMDG/IATA:

Not hazardous goods

14.3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel restriction code:

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IMDG Class (sea):

not applicable

Hazard no.:

EmS No.:

IATA Class:

not applicable

Hazard no.:

14. 4. Packaging Group

ADR/RID:

not applicable

IMDG:

IATA:

14. 5. Environmental Hazards

None

14. 6. Special Precautions for User

Not classified as a dangerous good under transport regulations.

14. 7. Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code

not applicable

14. 8. Further Information

15. Regulatory Information

15. 1. Safety, Health and Environmental Regulations/Legislation specific for the Substance or Mixture

Water hazard class:

1, slightly hazardous for water (German Regulation)

Local regulations on chemical accidents:

Seveso III Directive: not applicable under Directive 2012/18/EC.

Employment restrictions:

The employment restrictions for young workers in accordance with the Youth Employment Protection Law are to be observed.

Restriction and prohibition of application:

EC. REACH, Section XVII, Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: not applicable

Technical instructions on air quality:

15. 2. Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out for this product.

REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59): not applicable

15. 3. Further Information

Regulation (EC) 1005/2009 - Substances that Deplete the Ozone Layer: not regulated / not applicable

Regulation (EC) 850/2004 - Persistent organic pollutants and

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*amending Directive 79/117/EEC: not regulated / not applicable
EC. REACH, Annex XIV, Candidate List of Substances of very
High Concern (SVHC): not regulated / not applicable*

16. Other Information

This product should be stored, handled and used in accordance with good hygiene practices and in conformity with any legal regulations. This information contained herein is based on the present state of knowledge and is intended to describe our product from the point of view of safety requirements. It should be therefore not be construed as guaranteeing specific properties.