according to Regulation (EC) No. 1907/2006



Revision Date: 09.07.2021 Version: 1.2 Product number: 104813 Print Date: 10.07.2021

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product number 104813

Product name Iriodin® 9502 Red-Brown WR

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Colouring agent

1.3 Details of the supplier of the safety data sheet

Company Merck Performance Materials Germany GmbH,

Frankfurter Str. 250, 64293 Darmstadt,

Germany

Merck Surface Solutions GmbH, Mainzer Str. 41, 64579 Gernsheim,

Germany

Tel.+49(0)6151722440

Responsible Department Head of Operations * +61 3 9728 7600 *

Monday through Friday 8:00am to 5:00pm

Regional representation Merck Ltd.

PO Box 76171, Manukau City 2241, Tel: (06) 356 7328
Fax: (06) 356 7311
Email: info@merck.co.nz

1.4 Emergency telephone number

0800 CHEMCALL (0800 243 622) 0800 POISON (0800 764 766)

CHEMTREC National Emergency Telephone Number +(64)-98010034

[CCN 842835]

CHEMTREC International Emergency Telephone Number +1 703-741-

5970 [CCN 842835]

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

according to Regulation (EC) No. 1907/2006

Iriodin® 9502 Red-Brown WR

Revision Date: 09.07.2021

Version: 1.2 Product number: 104813 Print Date: 10.07.2021

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

Precautionary statements : Prevention:

P260 Do not breathe dust.

2.3 Other hazards

None known.

SECTION 3: Composition/information on ingredients

Chemical nature : Mica coated with:

ferric oxide auxiliaries

3.1 Substance

Not applicable

3.2 Mixtures

Hazardous components

Remarks : No hazardous ingredients

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled : fresh air.

In case of skin contact : Take off immediately all contaminated clothing. Rinse skin

with water/ shower.

In case of eye contact : rinse out with plenty of water.

Remove contact lenses.

If swallowed : make victim drink water (two glasses at most). Consult doctor

if feeling unwell.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : We have no description of any toxic symptoms.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

The Safety Data Sheets for catalogue items are available at www.merckgroup.com

according to Regulation (EC) No. 1907/2006

Iriodin® 9502 Red-Brown WR

Revision Date: 09.07.2021

Version: 1.2 Product number: 104813 Print Date: 10.07.2021

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Unsuitable extinguishing

media

For this substance/mixture no limitations of extinguishing

agents are given.

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

: Not combustible.

Ambient fire may liberate hazardous vapours.

5.3 Advice for firefighters

Special protective equipment:

for firefighters

Stay in danger area only with self-contained breathing

apparatus. Prevent skin contact by keeping a safe distance or

by wearing suitable protective clothing.

Further information : Prevent fire extinguishing water from contaminating surface

water or the ground water system.

Suppress (knock down) gases/vapours/mists with a water

spray jet.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Advice for non-emergency personnel:

Avoid inhalation of dusts.

Evacuate the danger area, observe emergency procedures,

consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Cover drains. Collect, bind, and pump off spills.

Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area.

Avoid generation of dusts.

The Safety Data Sheets for catalogue items are available at www.merckgroup.com

according to Regulation (EC) No. 1907/2006

Iriodin® 9502 Red-Brown WR

Revision Date: 09.07.2021

Version: 1.2 Product number: 104813 Print Date: 10.07.2021

6.4 Reference to other sections

Indications about waste treatment see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Observe label precautions.

Hygiene measures : Change contaminated clothing. Wash hands after working

with substance.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage

areas and containers

: Store in original container.

Further information on storage conditions

Tightly closed. Dry.

Risks from decomposition products: see section 10.3

Recommended storage

temperature

Recommended storage temperature see product label.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

Components with workplace control parameters

| Components | CAS-No. | Value type (Form of exposure) | Control parameters / Permissible concentration | Basis | |
|------------------|---|--|--|--------|--|
| mica (muscovite) | 12001-26-2 | WES-TWA (Respirable dust) | 3 mg/m3 | NZ OEL | |
| | | TWA (Respirable particulate matter) | 3 mg/m3 | ACGIH | |
| iron(III) oxide | 1309-37-1 | WES-TWA (Dust and fume) | 5 mg/m3 (Iron) | NZ OEL | |
| | Further information: A range of airborne contaminants are associated with gas and arc welding. The type of metal being welded, the electrode employed and the welding process will all influence the composition and amount of fume. Gaseous products such as oxides of nitrogen, carbon monoxide and ozone may also be produced. In the absence of specific substances such as | | | | |

according to Regulation (EC) No. 1907/2006

Iriodin® 9502 Red-Brown WR

Revision Date: 09.07.2021

Version: 1.2 Product number: 104813 Print Date: 10.07.2021

| chromium, and where conditions do not support the generation of toxic gases, the fume concentration inside the welder's helmet should not exceed 5 mg/m3. | | | | |
|---|--|---------|-------|--|
| | TWA (Respirable particulate matter) | 5 mg/m3 | ACGIH | |

Engineering measures Technical measures and appropriate working operations

should be given priority over the use of personal protective

equipment.

See section 7.1.

Personal protective equipment

Respiratory protection required when dusts are generated.

Filter P 1 (acc. to DIN 3181) for solid particles of inert Filter type

substances

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Hand protection

Remarks not required

Eye protection Safety glasses

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form powder

Colour red brown

Odour odourless

Odour Threshold Not applicable

рΗ substance/mixture is non-soluble (in water)

Melting point No information available.

No information available. **Boiling point**

Flash point Not applicable

according to Regulation (EC) No. 1907/2006

Iriodin® 9502 Red-Brown WR

Revision Date: 09.07.2021

Version: 1.2 Product number: 104813 Print Date: 10.07.2021

Evaporation rate No information available.

Flammability (solid, gas)

The product is not flammable.

Lower explosion limit No information available.

Upper explosion limit No information available.

Vapour pressure No information available.

Relative vapour density

No information available.

Density 3.1 - 3.3 g/cm3

at 20 °C

Solubility(ies) No information available.

Water solubility at 20 °C

practically insoluble

Partition coefficient: n-

octanol/water

No information available.

Auto-ignition temperature No information available.

Decomposition temperature No information available.

Viscosity, kinematic No information available.

Explosive properties Not classified as explosive.

Oxidizing properties none

9.2 Other data

Bulk density 150 - 210 kg/m3

Particle size Particle size

5 - 40 µm

SECTION 10: Stability and reactivity

10.1 Reactivity

See section 10.3

10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Hazardous reactions : no information available

The Safety Data Sheets for catalogue items are available at www.merckgroup.com

according to Regulation (EC) No. 1907/2006

Iriodin® 9502 Red-Brown WR

Revision Date: 09.07.2021 Print Date: 10.07.2021

Version: 1.2 Product number: 104813 Print Date: 10.07.2021

10.4 Conditions to avoid

Conditions to avoid : no information available

10.5 Incompatible materials

Materials to avoid : no information available

10.6 Hazardous decomposition products

in the event of fire: See section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product:

Acute oral toxicity : No data available
Acute inhalation toxicity : No data available
Acute dermal toxicity : No data available

Components:

No data available

Skin corrosion/irritation

Product:

No data available

Components:

No data available

Serious eye damage/eye irritation

Product:

Species: In vitro study Observation period: 240 min Method: OECD Test Guideline 437

Result: No eye irritation

Remarks: (in analogy to similar compounds)

Components:

No data available

Respiratory or skin sensitisation

Product:

No data available

Components:

No data available

according to Regulation (EC) No. 1907/2006

Product number: 104813

Iriodin® 9502 Red-Brown WR

Revision Date: 09.07.2021 Print Date: 10.07.2021

Germ cell mutagenicity

Product:

Version: 1.2

No data available

Components:

No data available

Carcinogenicity

Product:

This information is not available.

Components:

This information is not available.

STOT - single exposure

Product:

No data available

Components:

No data available

STOT - repeated exposure

Product:

No data available

Components:

No data available

Repeated dose toxicity

Product:

No data available

Components:

No data available

Aspiration toxicity

Product:

No data available

Components:

No data available

11.2 Other information

Product:

Hazardous properties cannot be excluded, but are relatively improbable due to the compound's poor water solubility.

Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions.

Handle in accordance with good industrial hygiene and safety practice.

according to Regulation (EC) No. 1907/2006

Iriodin® 9502 Red-Brown WR

Revision Date: 09.07.2021 Print Date: 10.07.2021

Version: 1.2 Product number: 104813 Print Date: 10.07.2021

SECTION 12: Ecological information

12.1 Toxicity

Product:

No data available

Components:

No data available

12.2 Persistence and degradability

Product:

No data available

Components:

No data available

12.3 Bioaccumulative potential

Product:

No data available

Components:

No data available

12.4 Mobility in soil

Product:

No data available

Components:

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher...

Components:

No data available

12.6 Other adverse effects

Product:

Additional ecological

information

Discharge into the environment must be avoided.

Components:

No data available

according to Regulation (EC) No. 1907/2006

Iriodin® 9502 Red-Brown WR

Version: 1.2 Product number: 104813 Revision Date: 09.07.2021 Print Date: 10.07.2021

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Waste material must be disposed of in accordance with the

national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned

containers like the product itself.

See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have

further questions.

Waste should not be disposed of by release to sewers.

SECTION 14: Transport information

International Regulations

Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Rotterdam Convention (Prior Informed Consent) : Not applicable

Storage class : 10 - 13

SECTION 16: Other information

Training advice

Provide adequate information, instruction and training for operators.

Decimal notation: "Thousands" places are identified with a comma (example: 2,000 mg/kg means "two thousand mg/kg"). Decimal places are identified with a dot (example: 1.35 g/cm3).

Revision Note

Safety datasheet sections which have been updated

General revision

according to Regulation (EC) No. 1907/2006

Iriodin® 9502 Red-Brown WR

Version: 1.2 Product number: 104813 Print Date: 10.07.2021

Revision Date: 09.07.2021

Key or legend to abbreviations and acronyms used in the safety data sheet

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL -Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS -Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA -International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization: KECI - Korea Existing Chemicals Inventory: LC50 - Lethal Concentration to 50 % of a test population: LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified: NFPA - National Fire Protection Association: NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Disclaimer

The information contained herein is based on the present state of our knowledge. It characterises the product with regard to the appropriate safety precautions. It does not represent a guarantee of any properties of the product. This safety datasheet only contains information relating to safety and does not replace any product information or product specification.