

# Safety Data Sheet

According to EC Directive 91/155/EEC

Date of issue:  
Supersedes edition of

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## 1. Identification of the substance/preparation and of the company/undertaking

### *Identification of the product*

Catalogue No.: 104670  
Product name: Iriodin® 100 Silver Pearl

### *Use of the substance/preparation*

colorant

### *Company/undertaking identification*

Company: Merck KGaA \* 64271 Darmstadt \* Germany \* Phone: +49 6151 72-0  
Emergency telephone No.: Please contact the regional Merck representation  
in your country.

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## 2. Composition/information on ingredients

Mica coated with: titanium dioxide

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## 3. Hazards identification

No hazardous product as specified in Directive 67/548/EEC.

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## 4. First aid measures

After inhalation (large amounts of dusts): Fresh air. Consult doctor in the event of any complaints.  
After skin contact: wash off with water.  
After eye contact: rinse out with water.  
After swallowing (large amounts): consult doctor if feeling unwell.

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## 5. Fire-fighting measures

Suitable extinguishing media:  
In adaption to materials stored in the immediate neighbourhood.

Special risks:  
Non-combustible. Ambient fire may liberate hazardous vapours.

Special protective equipment for fire fighting:  
Do not stay in dangerous zone without self-contained breathing apparatus.

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## 6. Accidental release measures

Person-related precautionary measures:  
Avoid inhalation of dusts.

Procedures for cleaning / absorption:  
Take up dry. Forward for disposal. Clean up affected area. Avoid generation of dusts.

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## 7. Handling and storage

### Handling:

No further requirements.

### Storage:

Tightly closed. Dry. Storage temperature: no restrictions.

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## 8. Exposure controls/personal protection

### Personal protective equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.

Respiratory protection: required when dusts are generated.

Eye protection: required

Hand protection: not required

Industrial hygiene:

Wash hands after working with substance.

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## 9. Physical and chemical properties

Form:	powder		
Colour:	silver white		
Odour:	odourless		
pH value at 100 g/l H <sub>2</sub> O	(20 °C)	8-11	(slurry)
Melting point		not available	
Boiling point		not available	
Ignition temperature		not available	
Flash point		not applicable	
Explosion limits	lower	not available	
	upper	not available	
Density	(20 °C)	2.8-3.0	g/cm <sup>3</sup>
Bulk density		170-210	kg/m <sup>3</sup>
Solubility in water	(20 °C)	almost insoluble	
Particle size		10-60	µm

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## 10. Stability and reactivity

### *Conditions to be avoided*

not known to date

### *Substances to be avoided*

no information available

### *Hazardous decomposition products*

not known to date

### *Further information*

none

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## 11. Toxicological information

### *Acute toxicity*

Quantitative data on the toxicity of this product are not available.

### *Further toxicological information*

The results of animal experiments using pigments of this type indicate no toxicologically relevant properties. Since the substance is poorly absorbed, no hazardous properties are to be anticipated. Inhalation of the dusts should be avoided as even inert dusts may impair respiratory organ functions. The individual test results were as follows: skin tolerance (rabbit): no irritant effect; eye irritation test (rabbit): no irritant effect; sensitization test (guinea pig): no sensitizing potential; subchronic toxicity (rat): no findings up to 20,000 ppm. LD<sub>50</sub> (oral, rat): not determinable; all animals still alive after 15,000 mg/kg. Chronic toxicity (rat): 5 % of the product added to the feed for a period of 2.5 years did not show any toxicological changes or carcinogenic effects in animals. LC<sub>50</sub> (inhalational, rat): male animals: between 4.6 and 14.9 mg/l air; female animals: > 14.9 mg/l air. The product did not show any genotoxic effects in the micronucleus test carried out in rats in concentrations of up to 2000 mg/kg (limit test).

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## 12. Ecological information

### *Ecotoxic effects:*

Quantitative data on the ecological effect of this product are not available.

### *Further ecologic data:*

No ecological problems are to be expected when the product is handled and used with due care and attention.

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## 13. Disposal considerations

### *Product:*

Chemicals must be disposed of in compliance with the respective national regulations. Under [www.retrologistik.de](http://www.retrologistik.de) you will find country- and substance-specific information as well as contact partners.

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## *Packaging:*

Merck product packaging must be disposed of in compliance with the country-specific regulations or must be passed to a packaging return system. Under [www.retrologistik.de](http://www.retrologistik.de) you will find special information on the respective national conditions as well as contact partners.

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## **14. Transport information**

Not subject to transport regulations.

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## **15. Regulatory information**

### *Labelling according to EC Directives*

Symbol:	---	
R-phrases:	---	
S-phrases:	22	Do not breathe dust.

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## **16. Other information**

### *Reason for alteration*

Chapter 8: specific control parameter.

General update.

### *Regional representation:*

This information is given on the authorised Safety Data Sheet for your country.

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*The information contained herein is based on the present state of our knowledge. It characterizes the product with regard to the appropriate safety precautions. It does not represent a guarantee of the properties of the product.*