

Safety Data Sheet

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



50200 IRIODIN® 320 BRIGHT GOLD PEARL, Pale Gold

Page 1

Revised edition: 24.05.2017

Version: 5.9

Printed: 06.11.2017

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

1.1. Product Identifier

Product Name: IRIODIN® 320 BRIGHT GOLD PEARL, Pale Gold

Article No.: 50200

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.de

E-Mail: info@kremer-pigmente.de

Importer: --

1.4. Emergency No.

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

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.

Classification according to Directive No. 67/548/EC or No. 1999/45/EC

The material is not subject to classification according to EC lists.

Safety Phrases:

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:

Signal word:

Hazard designation:

Safety designation:

P260a

Do not breathe dust.

Hazardous components for labelling:

Other Hazards

next page: 2

Safety Data Sheet

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



50200 IRIODIN® 320 BRIGHT GOLD PEARL, Pale Gold

Page 2

Revised edition: 24.05.2017

Version: 5.9

Printed: 06.11.2017

2.3.

No special hazards known.

3. Composition/Information on Ingredients

3.1. Substance

3.2. Mixture

Chemical Characterization: Mica laminated with titanium dioxide and iron oxide.

Information on Components / Hazardous Ingredients:

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 with soap and rinse with plenty of water.

After eye contact:

Rinse open eyes with plenty of water. In case of discomfort seek medical help.

After ingestion:

Drink plenty of water. Get medical help in case of discomfort.

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

Special hazards:

Product is not flammable.

In case of fire: hazardous vapors may be released.

next page: 3

Safety Data Sheet

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



50200 IRIODIN® 320 BRIGHT GOLD PEARL, Pale Gold

Page 3

Revised edition: 24.05.2017

Version: 5.9

Printed: 06.11.2017

5.3. Advice for Firefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

Collect contaminated extinguishing water and debris separately; avoid contamination of sewage system.

6. Accidental Release Measures

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

Personal precautions:

Do not inhale dust.

Evacuate the danger area, observe emergency procedures, consult an expert.

6.2. Environmental Precautions

Environmental precautions:

No special measures required.

6.3. Methods and Material for Containment and Cleaning Up

Methods and material:

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 special measures required.

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 (VCI):

10-13

Further Information:

7.3. Specific End Use(s)

Further information:

See Section 1.2.; no other uses provided

next page: 4

Safety Data Sheet

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



50200 IRIODIN® 320 BRIGHT GOLD PEARL, Pale Gold

Page 4

Revised edition: 24.05.2017

Version: 5.9

Printed: 06.11.2017

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)

Titanium oxide(IV) oxide, anatase (CAS 1317-70-0): AGW: 1.25 mg/m³, 10 mg/m³ (2)

Category II: substances with a resorptive effect.

Parameters to be controlled:

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:

Recommended (EN 166).

Body protection:

Environmental precautions:

No special measures required.

9. Physical and Chemical Properties

9.1. Information on Basic Physical and Chemical Properties

Form: powder

Color: bright yellow

Odor: odorless

Odor threshold:

No information available.

pH-Value:

8 - 11 (100 g/l H₂O, 20°C)

next page: 5

Safety Data Sheet

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



50200 IRIODIN® 320 BRIGHT GOLD PEARL, Pale Gold

Page 5

Revised edition: 24.05.2017

Version: 5.9

Printed: 06.11.2017

Melting temperature:

not available

Boiling temperature:

not available

Flash point:

not applicable

Evaporation rate:

No information available.

Flammability (solid, gas):

not available

Upper explosion limit:

no information available

Lower explosion limit:

no information available

Vapor pressure:

not applicable

Vapor density:

No information available.

Density:

2.9 - 3.1 g/cm³ (20°C)

Solubility in water:

insoluble (20°C)

Coefficient of variation (n-Octanol/Water):

no information available

Auto-ignition temperature:

No information available.

Decomposition temperature:

No data available.

Viscosity, dynamic:

not available

Explosive properties:

Product does not present an explosion hazard.

Oxidizing properties:

No information available.

Bulk density:

340 - 380 kg/m³

9.2. Further Information

Solubility in solvents:

Viscosity, kinematic

Burning class:

Solvent content:

Solid content:

next page: 6

Safety Data Sheet

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



50200 IRIODIN® 320 BRIGHT GOLD PEARL, Pale Gold

Page 6

Revised edition: 24.05.2017

Version: 5.9

Printed: 06.11.2017

Particle size: 10 - 60 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:

Not testable. All test animals (rat) survived 15 000 mg/kg.

LD50, dermal:

No information available.

LC50, inhalation:

4.6 - 14.9 mg/l air (male animals; Rat); >14.9 mg/l air (female animals)

Primary effects

Irritant effect on skin:

Non irritating (rabbit)

Irritant effect on eyes:

Non-irritating to eyes (rabbit)

Inhalation:

No information available.

Ingestion:

No information available

Sensitization:

No sensitizing effect (guinea pig).

Mutagenicity:

next page: 7

Safety Data Sheet

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



50200 IRIODIN® 320 BRIGHT GOLD PEARL, Pale Gold

Page 7

Revised edition: 24.05.2017

Version: 5.9

Printed: 06.11.2017

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:

The animals studies carried out with pigments similiar to this product did not show any significant negative results.

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

Chronic toxicity: no toxikological or cancerogenic effects observed in a food study over a period of 2.5 years by the addition of 5% of the product (rat).

The product did not show any genetic-toxicological effects in the micronucleus test (2000 mg/kg rat; limit test).

12. Ecological Information

12.1. Aquatic Toxicity

No information available.

Fish toxicity:

Daphnia toxicity:

Bacteria toxicity:

Algae toxicity:

12.2. Persistency and Degradability

No information available.

12.3. Bioaccumulation

No information available.

12.4. Mobility

No information available.

12.5. Results of PBT- und vPvP Assessment

PBT/vPvB assessment not available as chemical safety assessment is not required / not conducted.

12.6. Other Adverse Effects

Water hazard class:

Not hazardous.

Behaviour in sewage systems:

Further ecological effects:

When used properly, no ecological problems expected.

AOX Value:

next page: 8

Safety Data Sheet

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



50200 IRIODIN® 320 BRIGHT GOLD PEARL, Pale Gold

Page 8

Revised edition: 24.05.2017

Version: 5.9

Printed: 06.11.2017

13. Disposal Considerations

13.1. Waste Treatment Methods

Product:

*Dispose of according to official national and local regulations.
Do not mix with other waste.*

European Waste Code (EWC):

Uncleaned packaging:

Packaging may be disposed of in the same manner as the product.

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:

No hazardous goods according to IMDG.

14.3. Transport Hazard Classes

ADR Class:

not applicable

Hazard no.:

Classification code:

Tunnel restriction code:

IMDG Class (sea):

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.

next page: 9

Safety Data Sheet

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



50200 IRIODIN® 320 BRIGHT GOLD PEARL, Pale Gold

Page 9

Revised edition: 24.05.2017

Version: 5.9

Printed: 06.11.2017

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:

0, not hazardous (German Regulation)

Local regulations on chemical accidents:

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

Employment restrictions:

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.

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 amending Directive 79/117/EEC: not regulated / not applicable

Regulation (EC) 649/2012 concerning the export and import of dangerous chemicals: 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.