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



## 50000 Pearl Luster IRIODIN® Silver

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

1. 1. Product Identifier

Product Name: Pearl Luster IRIODIN® Silver

Article No.: 50000

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

Identified uses:

Coloring agent

Uses advised against:

1. Details of the Supplier of the Safety Data Sheet

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

EMail: info@kremer-pigmente.de

1. \$. ! " ergency #o.

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

#### 2. Hazards Identification

#### 2. 1. %lassification of the Substance or Mixture

Classification according to EC

Regulation 1272/2008

This product is not classified as hazardous according to the

CLP/GHS Directive.

Classification according to EC

Regulation No. 67/548 or No. 1999/45

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

Safety Phrases:

S22: Do not breathe dust.

Possible Environmental Effects:

2. 2. &abel ! le " ents

Classification according to EC

Regulation 1272/2008

This product does not require classification and labelling as

hazardous according to CLP/GHS.

Hazard designation:

Not applicable.

Signal word:

Hazard designation:

Safety designation:

P260a Do not breathe dust.

Hazardous components for labelling:

'ther (a)ards

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2. .

No special hazards known.

# 3. Composition/Information on Ingredients

. 1. Substance

. 2. Mixture

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

Hazardous Ingredients:

Tin oxide (Xi; R37) 1-10 % CAS-Nr: 18282-10-5

EINECS-Nr: 242-159-0

EC-Nr:

Additional information:

#### 4. First Aid Measures

\$. 1. Description of the \*irst +id 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:

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

\$. 2. Most i " portant Sy " pto " s and ! ffects, both +cute and Delayed

Symptoms:

No further information available.

Effects:

No further information available.

\$. . Indication of any I " "ediate Medical +ttention and special -reat" ent needed

Treatment:

No information available.

### 5. Fire-Fighting Measures

.. 1. ! xtinguishing Media

Suitable extinguishing media:

Use extinguishing media for surrounding fire.

Unsuitable extinguishing media:

None known.

.. 2. Special (a) ards arising fro "the Substance or Mixture

Special hazards:

In case of fire: hazardous vapors may be released.

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.. . +dvice for \*irefighters

Protective equipment:

Wear self-contained respiratory protective device.

Further information:

#### 6. Accidential Release Measures

0. 1. Personal Precautions, Protective!/uip "ent and! "ergency Procedures

Personal precautions:

Do not inhale dust.

Evacuate the danger area, observe emergency procedures,

consult an expert.

0. 2. ! nviron " ental Precautions

Environmental precautions:

Prevent contamination of soil, drains and surface waters.

0. . Methods and Material for %ontain " ent and %leaning Up

Methods and material:

Take up mechanically and collect in suitable container for disposal.

Rinse spill area. Avoid dust formation.

0. \$. Reference to other Sections

Dispose of contaminated material according to Section 13.

## 7. Handling and Storage

1. 1. Precautions for Safe (andling

Instructions on safe handling:

Avoid formation of dust. Do not inhale dust.

Hygienic measures:

No further measures, see Section 8.

1. 2. %onditions for Safe Storage, including any Inco "patibilities

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:

1. . Specific ! nd Use2s3

Further information:

See Section 1.2.; no other uses provided

#### 8. Exposure Controls/Personal Protection

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4. 1. Para " eters to be %ontrolled

Parameters to be controlled (DE):

TRGS 900

TWA-Value: 3 mg/m3 air-borne fraction (general dust limit)

TWA: 10 mg/m3 general dust limit inhalable fraction.

Peak limit Category: 2 (II)
Category II: substances with a resorptive effect.

Tin dioxide (CAS 18282-10-5): AGW (TRGS 900): 2 mg/m3

(inhalable fraction; as Sn)

Parameters to be controlled (EC):

Tin dioxide, 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:

4. 2. !xposure %ontrols

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

6. 1. Infor "ation on 5asic Physical and %he" ical Properties

Form: powder

Color: silver-gray

Odor: odorless

Odor threshold:

No information available.

pH-Value: 8 - 11 (100 g/l H2O; 25℃)

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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℃)

Solubility in water: insoluble

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 is not explosive.

Oxidizing properties:

No information available.

Bulk density: 300 - 340 kg/m3

6. 2. \*urther Infor " ation

Solubility in solvents:

Viscosity, kinematic

Burning class:

Solvent content:

Solid content:

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Page 6 Revised edition: 02.04.2013 Printed: 19.05.2014 Version: 6.9 Particle size: 10 - 60 μm Other information: 10. Stability and Reactivity 17.1. Reactivity Stable if used according to specifications. %he " ical Stability 17.2. Stable at room temperature. Possibility of (a) ardous Reactions 17. . No information available. 17.\$. %onditions to +void Conditions to avoid: No further information available. Thermal decomposition: No data available. 17... I " co " patible Materials No information available. 17.0. (a) ardous Deco "position Products None known. \*urther Infor " ation 17.1. 11. **Toxicological Information** 11. 1. Infor "ation on -oxicological !ffects Acute Toxicity LD50, oral: Not testable. All test animals (rat) survived 5000 mg/kg. Tin doxide: > 20000 mg/kg (rat; RTECS) LD50, dermal: No information available. LC50, inhalation: > 10.1 mg/l (4h, rat) 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 information available.

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Mutagenicity:

No data available.

Reproductive toxicity:

No data available.

Cancerogenity:

No data available.

Teratogenicity:

No information available.

Specific target organ toxicity (STOT):

Single exposure: the substance or mixture is not classified as

specific target organ toxicant.

Repeated exposure: the substance or mixture is not classified as

specific target organ toxicant.

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.

Subchronic toxicity: no negative results up to 20000 ppm (rat).

12. Ecological Information

12. 1. + / uatic - oxicity

Fish toxicity:

No data available.

Daphnia toxicity:

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

Bacteria toxicity:

no information available

Algae toxicity:

No information available.

12. 2. Persistency and Degradability

Methods for the evaluation of the biological degradability are not

applicable for inorganic substances.

12. . 5ioaccu " ulation

No information available.

12. \$. Moblity

No information available.

12. . . Results of P5 -8 und vPvP +ssess " ent

PBT/vPvB assessment not available as chemical safety

assessment is not required / not conducted.

12. 0. 'ther +dverse!ffects

Water hazard class:

Not hazardous.

Behaviour in sewage systems:

IATA:

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Page 8 Revised edition: 02.04.2013 Version: 6.9 Printed: 19.05.2014 Further ecological effects: When used properly, no ecological problems expected. AOX Value: 13. **Disposal Considerations** 1 . 1. 9 aste - reat " ent 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** 1\$. 1. U# #u " ber ADR, IMDG, IATA U# Proper Shipping #a " e 1\$. 2. ADR/RID: No hazardous goods according to ADR (land transportation). IMDG/IATA: No hazardous goods according to IMDG. 1\$. . -ransport (a)ard %lasses ADR Class: not applicable Hazard no.: Classification code: Tunnel no.: IMDG Class (sea): Hazard no .: EmS No.: IATA Class: not applicable Hazard no.: 1\$. \$. Pac:aging; roup ADR/RID: not applicable IMDG:

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1\$... !nviron " ental (a) ards

None

1\$. 0. Special Precautions for User

Not classified as a dangerous good under transport regulations.

1\$. 1. -ransportation in 5ul: according to +nnex II of M+RP ' & 1 <14 and I556 ode

not applicable

1\$. 4. \*urther Infor " ation

### 15. Regulatory Information

1...1. Safety, (ealth and !nviron "ental Regulations & egislation specific for the Substance or Mixture

Water hazard class:

0, not hazardous

Local regulations on chemical accidents:

EC-Regulation 96/82 does not apply (2003).

Employment restrictions:

Restriction and prohibition of application:

Technical instructions on air quality:

1...2. %he "ical Safety +ssess "ent

EC SVHC-List: This product does not contain a substance in the candidate list for substances of very high concern above the legal limit value (> 0.1 % (w/w) REACH Regulation (EC) 1907/2006, Article 57).

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

1... \*urther Infor " ation

#### 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.