

# Material Safety Data Sheet

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



## 10100 Lead Tin Yellow, light

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Revised edition: 01.06.2012

Version: 1

Printed: 17.12.2013

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

#### 1.1. Product Identifier

*Product Name:* Lead Tin Yellow, light

*Article No.:* 10100

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

*Identified uses:*  
Pigment in artists' colors.

*Uses advised against:*

#### 1.3. 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 - info@kremer-pigmente.de

*E-Mail:* kremer@kremer-pigmente.de

#### 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 EC Regulation 1272/2008*

Reproductive toxicity, category 1A  
Acute toxicity (inhalation), hazard category 4  
Acute toxicity (oral), hazard category 4  
Specific target organ toxicity (repeated exposure), category 2  
Hazardous to the aquatic environment, acute category 1  
Hazardous to the aquatic environment, chronic category 1

H302 Harmful if swallowed.

Cat.: 4

H332 Harmful if inhaled.

Cat.:

H360 May damage fertility or the unborn child.

Cat.:

H373 May cause damage to organs through prolonged or repeated exposure.

Cat.: 2

H410 Very toxic to aquatic life with long lasting effects.

Cat.: 1

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

Harmful (Xn) R20 Harmful by inhalation.

Harmful (Xn) R22 Harmful if swallowed.

R33 Danger of cumulative effects.

Hazardous to the environment (N) R50 Very toxic to aquatic organisms.

May cause long-term adverse effects in the aquatic environment.

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R53

R61

May cause harm to the unborn child.

Repr. Cat. 3

R62

Possible risk of impaired fertility.

*Safety Phrases:*

*Possible Environmental Effects:*

See Section 12.

### 2.2. Label Elements

*Classification according to EC Regulation 1272/2008*

*Hazard designation:*



GHS07



GHS08-2



GHS09

*Signal word:*

Danger

*Hazard designation:*

H302

Harmful if swallowed.

H332

Harmful if inhaled.

H360

May damage fertility or the unborn child.

H373

May cause damage to organs through prolonged or repeated exposure.

H410

Very toxic to aquatic life with long lasting effects.

*Safety designation:*

P201

Obtain special instructions before use.

P273

Avoid release to the environment.

P308+P313

If exposed or concerned: Get medical advice/attention.

P501

Dispose of contents/ container according to regional, national and international regulations.

*Hazardous components for labelling:*

### 2.3. Other Hazards

## 3. Composition/Information on Ingredients

### 3.1. Substance

### 3.2. Mixture

*Chemical Characterization:*

Lead stannate,  $PbSnxOy$

*Hazardous Ingredients:*

Lead(II,IV) oxide (T,N; R61-62-50/53-20/22-33;

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H302-332-360-373-400-410); REACH Reg.-No. 01-2119517589-27-0001	100%	CAS-Nr: 1314-41-6 EINECS-Nr: 215-235-6 EC-Nr: 082-001-00-6
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*Additional information:*

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### 4. First Aid Measures

#### 4.1. Description of the First Aid Measures

*General information:*

*Take person away from hazardous area.  
Immediately get medical help.*

*After inhalation:*

*Take affected person to fresh air.  
Get medical help.*

*After skin contact:*

*Wash off immediately with plenty of soap and water and rinse thoroughly.*

*After eye contact:*

*Rinse open eye for several minutes under running water. Should irritation continue, seek medical advice.*

*After ingestion:*

*Consult a doctor.  
Show product label to person applying first aid.*

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

*Symptoms:*

*See Chapter 11 for further information on symptoms and health hazards.*

*Effects:*

*No further information available.*

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

*Treatment:*

*Treat symptomatically.  
Blood and urine tests can determine the amount of lead.*

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### 5. Fire-Fighting Measures

#### 5.1. Extinguishing Media

*Suitable extinguishing media:*

*Foam, carbon dioxide (CO<sub>2</sub>), extinguishing powder, water jet.*

*Unsuitable extinguishing media:*

*None known.*

#### 5.2. Special Hazards arising from the Substance or Mixture

*Special hazards:*

*In case of fire: formation of lead oxide.  
Respiratory protection necessary.*

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### 5.3. Advice for Firefighters

*Protective equipment:*

*Wear self-contained respiratory protective device.*

*Further information:*

*Contaminated extinguishing water and debris should be disposed of according to local regulations.*

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## 6. Accidental Release Measures

### 6.1. Personal Precautions, Protective Equipment and Emergency Procedures

*Personal precautions:*

*Avoid formation of dust.*

*Wear appropriate protective equipment. Keep spectators away.*

### 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:*

*Avoid dust formation.*

*Use damp or absorbing material for clean up.*

### 6.4. Reference to other Sections

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## 7. Handling and Storage

### 7.1. Precautions for Safe Handling

*Instructions on safe handling:*

*Keep out of reach of children.*

*Hygienic measures:*

*Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.*

### 7.2. Conditions for Safe Storage, including any Incompatibilities

*Storage conditions:*

*Store in roofed-in areas at room temperature.*

*Store in tightly sealed containers in a dry room.*

*Do not store together with food stuff and animal feed.*

*Requirements for storage areas and containers:*

*No special measures necessary.*

*Information on fire and explosion protection:*

*Product is not combustible.*

*Storage class (VCI):*

*6.1 B; Non combustible toxic products.*

*Further Information:*

*Warning! Contains lead.*

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### 7.3. Specific End Use(s)

*Further information:*

*No information available.*

### 8. Exposure Controls/Personal Protection

#### 8.1. Parameters to be Controlled

*Parameters to be controlled (DE):*

*Lead and its compounds (referring to the lead content) is 0.1 mg/m<sup>3</sup> air (total dust value).*

*Besides staying within the average concentration amount per shift, exposure limits as an average value cannot exceed the 1 mg/m<sup>3</sup> over 30 minutes per shift.*

*Parameters to be controlled (EC):*

*Derived No-Effect Level (DNEL):*

*No values available.*

*Predicted No-Effect Concentration (PNEC):*

*No values available.*

*Additional Information:*

*The biological workplace tolerance (BAT) is 300 µg/l for women up to 45 yrs. and 700 µg/l for others.*

#### 8.2. Exposure Controls

*Technical protective measures:*

*No further measures, see Section 7.*

*Personal Protection*

*General protective measures:*

*Keep away from foodstuffs and drinks. Do not eat, drink or smoke during work. Wash hands before breaks and at the end of work.*

*Respiratory protection:*

*Wear protective mask, particle filter P2 (for solid and liquid particles DIN 3181) if dust occurs.*

*Hand protection:*

*Protective gloves (EN 374)*

*Protective glove material:*

*The glove material must be sufficiently impermeable and resistant against the product.*

*Change gloves after contamination. Dispose of according to regulations.*

*Chloroprene rubber (CR), nitrile rubber (NBR), butyl rubber, Fluoro carbon rubber (FKM), polyvinyl chloride (PVC).*

*Eye protection:*

*Safety glasses with protective shields (EN 166).*

*Body protection:*

*Protective clothing, chemical resistant.*

*Environmental precautions:*

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*Avoid contamination of sewage system, open water ways and ground water.*

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### 9. Physical and Chemical Properties

#### 9.1. Information on Basic Physical and Chemical Properties

<i>Form:</i>	<i>powder</i>
<i>Color:</i>	<i>bright yellow</i>
<i>Odor:</i>	<i>odorless</i>
<i>Odor threshold:</i>	<i>No information available.</i>
<i>pH-Value:</i>	<i>not determined</i>
<i>Melting temperature:</i>	<i>not known</i>
<i>Boiling temperature:</i>	<i>not available</i>
<i>Flash point:</i>	<i>not combustible</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>not determined</i>
<i>Lower explosion limit:</i>	<i>not determined</i>
<i>Vapor pressure:</i>	<i>not determined</i>
<i>Vapor density:</i>	<i>No information available.</i>
<i>Density:</i>	<i>8.0 g/cm<sup>3</sup></i>
<i>Solubility in water:</i>	<i>practically insoluble</i>
<i>Coefficient of variation (n-Octanol/Water):</i>	<i>not determined</i>
<i>Auto-ignition temperature:</i>	<i>not applicable</i>
<i>Decomposition temperature:</i>	<i>No data available.</i>
<i>Viscosity, dynamic:</i>	<i>not applicable</i>

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### *Explosive properties:*

*Risk of explosion when exposed to heat.*

### *Oxidizing properties:*

*no information available*

### *Bulk density:*

*not determined*

## 9.2. Further Information

### *Solubility in solvents:*

### *Viscosity, kinematic*

### *Burning class:*

### *Solvent content:*

### *Solid content:*

### *Particle size:*

### *Other information:*

*No further information.*

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## 10. Stability and Reactivity

### 10.1. Reactivity

*Can decompose at excessive heat.*

### 10.2. Chemical Stability

*No decomposition if used according to specifications.*

### 10.3. Possibility of Hazardous Reactions

*Reacts with strong oxidants.*

*Reacts with acids.*

*Reacts with strong alkali metals, reducing agents, halogens.*

### 10.4. Conditions to Avoid

#### *Conditions to avoid:*

*Avoid heat.*

#### *Thermal decomposition:*

*No further information available.*

### 10.5. Incompatible Materials

*Keep away from strong oxidizing agents, reducing agents, alkali metals, acids, halogens.*

### 10.6. Hazardous Decomposition Products

*Lead, lead oxides, lead compounds.*

### 10.7. Further Information

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## 11. Toxicological Information

### 11.1. Information on Toxicological Effects

#### *Acute Toxicity*

#### *LD50, oral:*

*Bas. Lead carbonate: >10000 mg/kg (rat) (Lit.)*

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*LD50, dermal:*

*No information available.*

*LC50, inhalation:*

*No information available.*

*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.*

*Mutagenicity:*

*Lead metal: no detailed information available.*

*Reproductive toxicity:*

*Lead metal: the risk that this substance can impair the human fertility is given.*

*Cancerogenity:*

*Not sufficient information available.*

*Teratogenicity:*

*No information available.*

*Specific target organ toxicity (STOT):*

*Repeated exposure: may cause damage to organs.*

*Additional toxicological information:*

*Lead compounds are heavy soluble compounds, however, lead particles dissolve in hydrochloric acid in gastric fluids concentration and may accumulate in the body.*

*Prolonged over-exposure to lead compounds may interfere with the biosynthesis of haemoglobin and may cause irreversible disorders of the nervous system.*

## 12. Ecological Information

### 12.1. Aquatic Toxicity

*Toxic for aquatic organisms. May cause long-term adverse effects in the aquatic environment.*

*Fish toxicity:*

*Daphnia toxicity:*

*Bacteria toxicity:*

*Algae toxicity:*



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### 12.2. Persistency and Degradability

*Lead may be dissolved in acid or alkaline media (amphothery).  
Elimination from water must be done by chemical flocculation.*

### 12.3. Bioaccumulation

*The product contains lead. Any exposure to the environment must be eliminated. Special treatment is necessary before disposing of the product or its by-products or contaminated water.*

### 12.4. Mobility

*The product is almost completely insoluble.*

### 12.5. Results of PBT- und vPvP Assessment

*No data available.*

### 12.6. Other Adverse Effects

*Water hazard class:*

*3, hazardous*

*Behaviour in sewage systems:*

*Further ecological effects:*

*General information for lead compounds:  
Toxic to water organisms.*

*AOX Value:*

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## 13. Disposal Considerations

### 13.1. Waste Treatment Methods

*Product:*

*In accordance with current regulations, product has to be taken to a special waste disposal site, after consultation with site operator and/or with the responsible authority. Product may not be burned.*

*European Waste Code (EWC):*

*Uncleaned packaging:*

*Packaging that may not be disposed of in the same manner as the product.*

*Uncontaminated packaging may be recycled.*

*Waste Code No.:*

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## 14. Transport Information

### 14.1. UN Number

*ADR, IMDG, IATA* 2291

### 14.2. UN Proper Shipping Name

*ADR/RID:* BLEIVERBINDUNG, LÖSLICH, N.A.G. (Bleistannat)

*IMDG/IATA:* LEAD COMPOUND, SOLUBLE, N.O.S. (Lead Stannate)

### 14.3. Transport Hazard Classes

*ADR Class:* 6.1

*Hazard no.:* 6.1

*Classification code:* T5

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<i>Tunnel no.:</i>	<i>E</i>
<i>IMDG Class (sea):</i>	<i>6.1</i>
<i>Hazard no.:</i>	<i>6.1</i>
<i>EmS No.:</i>	<i>F-A, S-A</i>
<i>IATA Class:</i>	<i>6.1</i>
<i>Hazard no.:</i>	<i>6.1</i>
<b>14. 4. Packaging Group</b>	
<i>ADR/RID:</i>	<i>III</i>
<i>IMDG:</i>	<i>III</i>
<i>IATA:</i>	<i>III</i>
<b>14. 5. Environmental Hazards</b>	
<b>14. 6. Special Precautions for User</b>	
<b>14. 7. Transportation in Bulk according to Annex II of MARPOL 73/78 and IBC-Code</b>	
<b>14. 8. Further Information</b>	

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### 15. Regulatory Information

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

*Water hazard class:*

*3, very hazardous for water*

*Local regulations on chemical accidents:*

*Employment restrictions:*

*The employment restrictions for expectant and nursing mothers in accordance with the Maternity Protection Guideline (94/85/EEC) are to be observed.*

*Concerning pregnancy: group B (TRGS 505, TRGS 900, Germany)*

*The employment restrictions for young workers in accordance with the Youth Employment Protection Law (94/33/EC) are to be observed.*

*Restriction and prohibition of application:*

*Technical instructions on air quality:*

*5.2.2.: Inorganic dusty substances*

#### 15. 2. Chemical Safety Assessment

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

#### 15. 3. Further Information

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### 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.*

*Changes:*

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*The following sections were changed: 1-16*