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

Identification of the Product
Product Name: Colored Glass, Gold Ruby extra, transparent
Article No.: 39224
Use of the Substance/Preparation: Artists’ and Restoration Material

Company
Company: Kremer Pigmente GmbH & Co. KG
Address: Hauptstrasse 41-47, D 88317 Aichstetten
Tel/Fax: Tel +49 7565 91120, Fax +49 7565 1606
Internet: www.kremer-pigmente.de, kremer-pigmente@t-online.de
Emergency No.: +49 7565 91120, Mon-Fri 8:00 - 17:00

2. Hazard Identification

Hazard designation: Xn Harmful

Risk Phrases:
R22 Harmful if swallowed.
R20 Harmful by inhalation.

Additional information:
After inhalation: irritation of the respiratory system. Risk of silicosis.
Ingestion of the product may result in vomiting.
Risk of being cut in mouth, throat and other organs.

3. Composition/Information on Ingredients

Chemical Characterization:
Colored glass, EINECS 266-046-0
Inorganic product of fusion.
All components are bound by vitrification.

Hazardous Ingredients:
Manganese dioxide (Xn; R20/22) 0-19.3 %
Zinc oxide (N; R50-53) 0.01-14.5 %
Lead monoxide (T,N; R61-22-33-53-62) 1.0-39.5 %
CAS-Nr: 1317-36-8 EINECS-Nr: 215-267-0 EC-Nr: 082-001-00-6
Copper oxide (Xn) 0.01-8.20 %
CAS-Nr: 1317-38-0 EINECS-Nr: 215-269-1 EC-Nr:
Iron oxide 0.02-4.29 %
CAS-Nr: 1309-37-1 EINECS-Nr: 215-168-1 EC-Nr:
Diarsenic trioxide (T+,N) 0-4.84 %
CAS-Nr: 1327-53-3 EINECS-Nr: 215-481-4 EC-Nr:
Barium oxide (Xn; R20/22) 0-7.01 %
CAS-Nr: 1304-28-5 EINECS-Nr: 215-127-9 EC-Nr:
Nickel oxide (T) 0-5.4 %
CAS-Nr: 1313-99-1 EINECS-Nr: 215-215-7 EC-Nr:
Cobalt oxide (Xn,N) 0.01-6.78 %
Hazardous Ingredients: Cadmium oxide (T+,N) 0-4.8 %
CAS-Nr: 1307-96-6   EINECS-Nr: 215-154-6   EC-Nr:
Selenium (T) 0-3.38 %
CAS-Nr: 7782-49-2   EINECS-Nr: 231-957-4   EC-Nr:

4. First Aid Measures

After inhalation: In case of complaints consult a physician.
After skin contact: Remove contaminated clothing immediately. Wash off immediately with plenty of water and soap.
After eye contact: Rinse open eyes with plenty of water for at least 15 minutes. Consult physician.
After ingestion: Rinse mouth thoroughly with plenty of water and drink plenty of water. Consult physician.

5. Fire-Fighting Measures

Suitable extinguishing media: Use extinguishing media for surrounding fire.
Product itself does not burn.

6. Accidental Release Measures

Personal precautions: Avoid dust formation.
Environmental precautions: Do not discharge into drains, surface or ground water.
Methods of cleaning/absorption: Clean up mechanically. Avoid dust formation.

7. Handling and Storage

Handling
Instructions on safe handling: Avoid dust formation.
Provide adequate ventilation.

Storage
Storage conditions: Store in tightly sealed containers in a dry room.
Storage compatibility: Do not store together with: strong acids and strong alkalis.

8. Exposure Controls/Personal Protection

Additional information about design of technical systems: No further measures, see Section 7.
Components with workplace control parameters (Germany): TWA: 0.1 mg/m3

Personal protective equipment
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 the shift.
Respiratory protection: Dust mask (particle filter P3; EN 136, 140, 149).
Hand protection: Protective gloves
The manufacturer’s directions for use should be observed because of the great diversity of types.
Eye protection: Tightly fitting safety goggles.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>powder</td>
</tr>
<tr>
<td>Color</td>
<td>ruby</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
</tr>
<tr>
<td>Melting temperature</td>
<td>420 - 530°C</td>
</tr>
<tr>
<td>Softening point</td>
<td>&gt; 580°C</td>
</tr>
<tr>
<td>Density</td>
<td>2.4 - 3.3 g/cm³</td>
</tr>
<tr>
<td>Bulk density</td>
<td>1.4 - 2.2 kg/dm³</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>not soluble</td>
</tr>
<tr>
<td>Further information</td>
<td>Flow point: &gt; 900°C</td>
</tr>
</tbody>
</table>

10. Stability and Reactivity

Hazardous decomposition products: If heated above 900°C: formation of fumes of inorganic metal compounds.

11. Toxicological Information

Irritant effect on eyes: Dust may cause irritation.
Inhalation: Harmful by inhalation.

12. Ecological Information

Elimination (Persistency and Degradability): Inorganic substance. Biological degradability is not affected.
Further ecological effects: Very toxic for water organisms; bactericidal effect.
Further information
Water hazard class: 2

13. Disposal Considerations

Product: Product can be taken to a waste disposal site according to local regulations.
Uncleaned packaging: Dispose of according to official local regulations.

14. Transport Information

Further information: Not classified as a dangerous good under transport regulations.

15. Regulatory Information

Designation according to EC Guidelines: The material is subject to classification according to EC lists.
Hazard designation: Xn Harmful
Risk Phrases: R22 Harmful if swallowed.
             R20 Harmful by inhalation.
Safety Phrases: S25 Avoid contact with eyes.
Material Safety Data Sheet
According to regulation (EC) No. 1907/2006 (REACH)

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Safety Phrases:
S45 If swallowed, seek medical advice immediately and show this container or label.
S37 Wear suitable gloves.
S28 After contact with skin, wash immediately with plenty of water.
S22 Do not breathe dust.
S21 When using do not smoke.
S20 When using do not eat or drink.
S02 Keep out of reach of children.
S36 Wear suitable protective clothing.
S24 Avoid contact with skin.

Water hazard class: 2, hazardous for water

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.