SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

SYNCRYSTAL Sapphire

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier
   Trade name : SYNCRYSTAL Sapphire

1.2 Relevant identified uses of the substance or mixture and uses advised against
   This information is not available.

1.3 Details of the supplier of the safety data sheet
   Company : ECKART GmbH
             Guentersthal 4
             91235 Hartenstein
   Telephone : +499152770
   Telefax : +499152777008
   E-mail address : msds.eckart@altana.com
   Responsible/issuing person

1.4 Emergency telephone number
   GBK Gefahrgut Büro GmbH, Ingelheim, Germany:
   (First call in English, response in your language is possible)
   From outside US: (001) 352-323-3500
   US & Canada (toll free) : 1-800-5355-053

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Classification (REGULATION (EC) No 1272/2008)
   Not a dangerous substance according to GHS.
   Classification (67/548/EEC, 1999/45/EC)
   Not a hazardous substance or mixture.

2.2 Label elements
   Labelling (REGULATION (EC) No 1272/2008)
   Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

2.3 Other hazards
   No information available.
SECTION 3: Composition/information on ingredients

3.2 Mixtures

Remarks: No dangerous ingredients according to Regulation (EC) No. 1907/2006

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice: No hazards which require special first aid measures.

If inhaled: If unconscious place in recovery position and seek medical advice.
If symptoms persist, call a physician.

In case of skin contact: Wash off with soap and water.

In case of eye contact: Remove contact lenses.
If eye irritation persists, consult a specialist.

If swallowed: Keep respiratory tract clear.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.

4.2 Most important symptoms and effects, both acute and delayed

This information is not available.

4.3 Indication of any immediate medical attention and special treatment needed

This information is not available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

This information is not available.

5.2 Special hazards arising from the substance or mixture

This information is not available.

5.3 Advice for firefighters
Special protective equipment for firefighters: Wear self contained breathing apparatus for fire fighting if necessary.

Further information: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Avoid dust formation.

6.2 Environmental precautions

This information is not available.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up: Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

This information is not available.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling: For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Hygiene measures: General industrial hygiene practice.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Electrical installations / working materials must comply with the technological safety standards.

Advice on common storage: No materials to be especially mentioned.

Other data: Keep in a dry place. No decomposition if stored and applied.
7.3 Specific end use(s)

This information is not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>titanium dioxide</td>
<td>13463-67-7</td>
<td>TWA (Inhalable)</td>
<td>10 mg/m³</td>
<td>2011-12-01</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>

Further information

The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg·m⁻³ 8-hour TWA of inhalable dust or 4 mg·m⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

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</tr>
</thead>
<tbody>
<tr>
<td>titanium dioxide</td>
<td>13463-67-7</td>
<td>TWA (Respirable)</td>
<td>4 mg/m³</td>
<td>2011-12-01</td>
<td>GB EH40</td>
</tr>
</tbody>
</table>

Further information

The COSHH definition of a substance hazardous to health includes dust of any kind when present at a concentration in air equal to or greater than 10 mg·m⁻³ 8-hour TWA of inhalable dust or 4 mg·m⁻³ 8-hour TWA of respirable dust. This means that any dust will be subject to COSHH if people are exposed above these levels. Some dusts have been assigned specific WELs and exposure to these must comply with the appropriate limit. Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used.

8.2 Exposure controls

**Personal protective equipment**

<table>
<thead>
<tr>
<th>Category</th>
<th>Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye protection</td>
<td>Safety glasses</td>
</tr>
<tr>
<td>Skin and body protection</td>
<td>Protective suit</td>
</tr>
</tbody>
</table>
SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- **Appearance**: powder
- **Colour**: no data available
- **Odour**: odourless
- **pH**: no data available
- **Freezing point**: no data available
- **Boiling point/boiling range**: no data available
- **Flash point**: no data available
- **Bulk density**: no data available
- **Flammability (solid, gas)**: no data available
- **Auto-flammability**: no data available
- **Upper explosion limit**: no data available
- **Lower explosion limit**: no data available
- **Vapour pressure**: no data available
- **Density**: no data available
- **Water solubility**: no data available
- **Solubility in other solvents**: no data available
- **Partition coefficient: n-octanol/water**: no data available
- **Auto-ignition temperature**: no data available
- **Thermal decomposition**: no data available
- **Viscosity, dynamic**: no data available
- **Viscosity, kinematic**: no data available
- **Flow time**: no data available

9.2 Other information

no data available
SECTION 10: Stability and reactivity

10.1 Reactivity
No decomposition if stored and applied as directed.

10.2 Chemical stability
No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions
Hazardous reactions: Stable under recommended storage conditions.
Dust may form explosive mixture in air.

10.4 Conditions to avoid
Conditions to avoid: no data available

10.5 Incompatible materials
Materials to avoid: no data available

10.6 Hazardous decomposition products
Hazardous decomposition products: no data available
Other information: no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity
no data available

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available
Respiratory or skin sensitisation
no data available

Carcinogenicity
no data available

Toxicity to reproduction/fertility
no data available

Reprod.Tox./Development/Teratogenicity
no data available

STOT - single exposure
no data available

STOT - repeated exposure
no data available

Aspiration toxicity
no data available

Further information
Product
no data available

SECTION 12: Ecological information

12.1 Toxicity
no data available

12.2 Persistence and degradability
no data available
12.3 Bioaccumulative potential
   no data available

12.4 Mobility in soil
   no data available

12.5 Results of PBT and vPvB assessment
   no data available

12.6 Other adverse effects
   Product:
   Additional ecological information : no data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods
   Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14: Transport information

14.1 UN number
14.2 Proper shipping name
14.3 Transport hazard class
14.4 Packing group
14.5 Environmental hazards
14.6 Special precautions for user
   Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Water contaminating class (Germany) : WGK 1 slightly water endangering

15.2 Chemical Safety Assessment

no data available

SECTION 16: Other information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.