Material Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier
Trade name: Nacarat KT-6071
Relevant identified uses of the substance or mixture and uses advised against: colouring agent
Uses advised against: not known
Details of the supplier of the safety data sheet: Manufacturer:

2. HAZARD IDENTIFICATION

Classification of the substance or mixture
Additional information: not available

Label elements
GHS label elements: not applicable
Hazard pictogram(s): not applicable
Signal word(s): not applicable
Hazard statement(s): not applicable
Precautionary statement(s): not applicable
Other hazards: not known

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical family: mica - titanium oxide - iron oxide. Contains no hazardous ingredients

<table>
<thead>
<tr>
<th>Common chemical name</th>
<th>CAS No.</th>
<th>EINECS No.</th>
<th>Colour Index</th>
<th>Chemical composition</th>
<th>Hazard classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mica</td>
<td>12001-26-2</td>
<td>310-127-6</td>
<td>77019</td>
<td>55-59</td>
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<td>Titanium dioxide</td>
<td>13463-67-7</td>
<td>236-675-5</td>
<td>77891</td>
<td>40-44</td>
<td>Not classified</td>
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<td>Iron oxide</td>
<td>1309-37-1</td>
<td>215-168-2</td>
<td>77491</td>
<td>0-1</td>
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</table>
4. FIRST AID MEASURES

Description of first aid measures
Inhalation: in case of accident by inhalation : remove causality to fresh air and keep at rest
Skin contact : wash affected skin with plenty of water
Eye contact : if contact with eyes directly, flush with gently flowing fresh water thoroughly; If eye irritation persists, get medical advice/attention
Ingestion : if ingested, wash out mouth with water, drink milk or egg white
Notes to physician : no special measures are required

Most important systems and effects,
Both acute and delayed
Actue : none
Long term (repeated) : may cause irritation to the respiratory system. Cough. Increased difficulty in breathing

Indication of immediate medical attention and special treatment needed
Recommended
a. Chest XRay
b. Lung functionality tests

5. FIREFIGHTING MEASURES

Extinguishing media
Suitable extinguishing media : extinguish with waterspray, foam or dry chemical
Unsuitable extinguishing media : carbon dioxide

Special hazards arising from the substance or mixture
Thermal hazards : noncombustible. None anticipated
Advice for firefighters : fire fighters should wear complete protective clothing including self-contained breathing apparatus

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Personal precautions : do not breathe dust
Personal protection equipment : wear appropriate personal protective equipment, avoid direct contact
In case of emergency : a self contained breathing apparatus and suitable protective clothing should be worn in fire conditions
Environmental precautions : do not allow to enter drains, sewers or watercourses
Methods and material for
Containment and cleaning up : collect mechanically and dispose of according to Section 13. Use vacuum equipment for collecting spilt materials, where practicable
Reference to other sections : see sections 8 and 13

7. HANDLING AND STORAGE
Precautions for safe handling     : avoid breathing dust  
Conditions for safe storage  
including any incompatibilities  : keep container in a wellventilated place  
Specific end use(s) : not known  

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters         : provide adequate ventilation when using the material and follow the principles of good  
                              occupational hygiene to control personal exposures  
Exposure limit values        : not known  

Exposure controls  
Appropriate engineering controls :provide adequate ventilation to ensure that the occupational exposure limit is not  
exceeded. Isolate the dispersive process step away from other operations. This can be  
achieved by local exhaust ventilation or general ventilation  

Individual protections measures, such as personal protective equipment(PPE)  
Hand/eye/face protection   : wear gloves, eye protection and an approved dust mask if dust is generated during  
                              handling. Goggles giving complete protection to eyes. Dust mask covering nose and mouth  
Skin protection        : apron or other light protective clothing, boots and plastic or synthetic rubber gloves  
Respiratory protection   : dust mask covering nose and mouth  
Thermal hazards        : none  
Environmental exposure controls : avoid dust generation. Avoid accumulation of dust  

9. PHYSICAL AND CHEMICAL PROPERTIES

Form                       : powder  
Colour            : Nacarat  
Odour            : odourless  

pH           : 6.0-9.0 (4% H2O)  
Boiling point, ° C        : not applicable  
Melting point, ° C        : decomposes  
Freezing point, ° C       : not applicable  
Density       : 2.9-3.0 kg/L  
Bulk density  : 24-28g/100g  
Vapour pressure          : not applicable  
Solubility (in water)        : insoluble  
Particle size       : 10-60µm  

10. STABILITY AND REACTIVITY
Reactivity: there may be violent or incandescent reaction of the product with metals at high temperatures (e.g., aluminium; calcium; magnesium; potassium; sodium; zinc; lithium).
Chemical stability: stable under normal conditions.
Possibility of hazardous reactions: none.
Conditions to avoid: high temperature.
Incompatible materials: strongly acidic, strongly alkaline, oxidizing agents.
Decomposition products: no information available.

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:
This inorganic pigment in general is considered to be practically nontoxic.
Acute toxicity: not available.
Carcinogenicity: not available.

12. ECOLOGICAL INFORMATION

Toxicity: no data.
Persistence and degradability: insoluble in water. This product is predicted not to degrade in soil and water.
Bioaccumulative potential: no data.
Mobility in soil: not applicable.
Results of PBT and vPvB assessment: not applicable.
Other adverse effects: not known.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods: dispose of contents in accordance with local, state or national legislation.

14. TRANSPORT INFORMATION

Not classed as dangerous for transport.

<table>
<thead>
<tr>
<th>International Transport Regulations</th>
<th>ADR/RID</th>
<th>ADN</th>
<th>IMDG</th>
<th>ICAO/IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
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<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Proper shipping name</td>
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<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
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<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Packing group</td>
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<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Special precautions for user</td>
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<td>None</td>
<td>None</td>
<td>None</td>
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</table>

Date of issue : 07.09.2011 – Version : EU_EN/2 – Print date : February 2014

<table>
<thead>
<tr>
<th>Transport in bulk according to Annex II of MARPOL73/78 and The IBC Code</th>
<th>Not applicable</th>
<th>Not applicable</th>
<th>Not applicable</th>
<th>Not applicable</th>
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</thead>
<tbody>
<tr>
<td>Hazard label(s)</td>
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</tr>
<tr>
<td>Additional information</td>
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</table>

15. REGULATORY INFORMATION


Safety, health and environmental regulations/legislations specific for the substance or mixture : not available

16. OTHER INFORMATION

Annex to the extended Safety Data Sheet (eSDS)

ADR : European Agreement concerning international carriage of Dangerous goods by Road

CAS : Chemical Abstracts Service

EC : European Community

ICAO : International Civil Aviation Organization

IMDG : International Maritime Dangerous Goods

IATA : International Air Transport Association

DATA SOURCES


Book on “Safe Handling of Pigments”, European Edition 1995, BCMA, EPSOM ETAD, VdMi

HSDB

NIOSH ICSC

Hazardous Substance Fact Sheet, New Jersey Department of Health and Senior Service

We have described our product concerning possible safety requirements by the abovementioned information given to the best of our knowledge and experience. All data given are never meant to guarantee any quality description nor product properties.