SAFETY DATA SHEET

IReflex 5000 white

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : IReflex 5000 white
Product code : 000216D70

Manufacturer or supplier's details
Company name of supplier : ECKART GmbH
Address : Guentersthal 4
          Hartenstein 91235
Telephone : +499152770
Telefax : +499152777008
Emergency telephone : CHEMTREC: 800-424-9300
                      CHEMTREC: 1-703-527-3387 (International)
                      GBK Gefahrgut Buero GmbH, Ingelheim, Germany:
                      From outside US: (001) 352-323-3500
                      (First call in English, response in your language is possible)
                      US & Canada (toll free):1-800-5355-053

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Not a hazardous substance or mixture.

GHS label elements
Not a hazardous substance or mixture.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>7429-90-5</td>
<td>&gt;= 70 - &lt; 90</td>
</tr>
<tr>
<td>Titanium oxide (TiO2)</td>
<td>13463-67-7</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
</tbody>
</table>
SECTION 4. FIRST AID MEASURES

General advice: Take the victim into fresh air. 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 immediately with soap and plenty of 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.

Most important symptoms and effects, both acute and delayed: None known.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Dry sand
Special powder against metal fire

Unsuitable extinguishing media: ABC powder
Carbon dioxide (CO2)
Water
Foam

Specific hazards during fire fighting: Contact with water liberates extremely flammable gas (hydrogen).

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

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.
SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
- Use personal protective equipment.
- Evacuate personnel to safe areas.
- Avoid dust formation.

Methods and materials for containment and cleaning up:
- Use mechanical handling equipment.
- Do not use a vacuum cleaner.
- Pick up and arrange disposal without creating dust.
- Sweep up and shovel.
- Do not flush with water.
- Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion:
- Use explosion-proof equipment.
- During processing, dust may form explosive mixture in air.
- Take measures to prevent the build up of electrostatic charge.
- When transferring from one container to another apply earthing measures and use conductive hose material.
- Normal measures for preventive fire protection.

Advice on safe handling:
- Avoid creating dust.
- Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.
- Store away from heat.
- For personal protection see section 8.
- Smoking, eating and drinking should be prohibited in the application area.

Hygiene measures:
- General industrial hygiene practice.

Conditions for safe storage:
- Earthing of containers and apparatuses is essential.
- Reaction with water liberates extremely flammable gas (hydrogen)
- Use explosion-proof equipment.
- Store in original container.
- Keep containers tightly closed in a cool, well-ventilated place.
- Keep away from sources of ignition - No smoking.
- Keep container closed when not in use.
Electrical installations / working materials must comply with the technological safety standards.

Materials to avoid: Do not store together with oxidizing and self-igniting products. Never allow product to get in contact with water during storage. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Further information on storage stability: Keep in a dry place.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>7429-90-5</td>
<td>LMPE-PPT</td>
<td>10 mg/m³</td>
<td>MX OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LMPE-PPT (Dust)</td>
<td>10 mg/m³</td>
<td>MX OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable fraction)</td>
<td>1 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td>Titanium oxide (TiO2)</td>
<td>13463-67-7</td>
<td>VLE-PPT</td>
<td>10 mg/m³</td>
<td>NOM-010-STPS-2014</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable fraction)</td>
<td>1 mg/m³ (Titanium dioxide)</td>
<td>ACGIH</td>
</tr>
<tr>
<td>Silica</td>
<td>7631-86-9</td>
<td>LMPE-PPT (Respirable)</td>
<td>10 mg/m³</td>
<td>MX OEL</td>
</tr>
</tbody>
</table>

#### Personal protective equipment

**Respiratory protection**: Use suitable breathing protection if workplace concentration requires. Breathing apparatus with filter. P1 filter
Hand protection
Material: Leather
Glove length: Long sleeve gloves

Remarks: Leather gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.

Eye protection:
Face shield
Safety glasses

Skin and body protection:
Anti-static and fire resistant protective clothing. DIN EN 11612; EN 533; EN 1149-1; Anti-static safety shoes

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: powder
Color: light gray
Odor: odorless
Odor Threshold: No data available
pH: No data available
Melting point/range: 660 °C

Boiling point/boiling range: 2,467 °C

Flash point: No data available
Evaporation rate: No data available
Flammability (solid, gas): Combustible Solids

Upper explosion limit / Upper flammability limit: No data available
Lower explosion limit / Lower flammability limit: 30 g/m3

Vapor pressure: No data available
Relative density: No data available
Solubility(ies): No data available
Partition coefficient: n-octanol/water: No data available
Autoignition temperature: No data available
Decomposition temperature: No data available
Viscosity: No data available
Reactivity: No decomposition if stored and applied as directed.

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

Possibility of hazardous reactions:
- Contact with acids and alkalis may release hydrogen.
- Stable under recommended storage conditions.
- Dust may form explosive mixture in air.

Conditions to avoid: No data available

Incompatible materials:
- Acids
- Bases
- Oxidizing agents
- Water

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Not classified based on available information.

Ingredients:

Titanium oxide (TiO2):
- Acute oral toxicity: LD50 (Rat): > 5,000 mg/kg
- Acute inhalation toxicity: LC50 (Rat): 6.8 mg/l
  Exposure time: 4 h
  Test atmosphere: dust/mist
- Acute dermal toxicity: LD50 (Rabbit): > 5,000 mg/kg

Silica:
- Acute oral toxicity: LD50 (Rat): 5,000 mg/kg
  (Mouse): 15,000 mg/kg
- Acute inhalation toxicity: (Rat): 0.139 mg/l
  Exposure time: 4 h
- Acute dermal toxicity: LD50 (Rabbit): > 5,000 mg/kg

Skin corrosion/irritation
Not classified based on available information.
Serious eye damage/eye irritation
Not classified based on available information.

Respiratory or skin sensitization
Skin sensitization
Not classified based on available information.

Respiratory sensitization
Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

STOT-single exposure
Not classified based on available information.

STOT-repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.

Further information

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Ingredients:
Silica:
Toxicity to daphnia and other aquatic invertebrates : (Daphnia): 7,600 mg/l
Toxicity to algae : (Chlorella pyrenoidosa): 440 mg/l

Persistence and degradability
No data available

Bioaccumulative potential
No data available
SAFETY DATA SHEET

IReflex 5000 white

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues : In accordance with local and national regulations.
Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.
In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION

International Regulations
Remarks : Not classified as dangerous in the meaning of transport regulations.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

Domestic regulation

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
Federal Law for the control of chemical precursors, essential chemical products and machinery for producing capsules, tablets and pills.
Not applicable

The ingredients of this product are reported in the following inventories:
DSL : All components of this product are on the Canadian DSL
TSCA : On TSCA Inventory

SECTION 16. OTHER INFORMATION

Full text of other abbreviations
The information provided in this Material 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.

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