SAFETY DATA SHEET
Melatonin

1. Identification

Product identifier
Product name Melatonin
Product number BM3600P010CD

Recommended use of the chemical and restrictions on use
Application Ingredient for use in dietary supplements, food supplements, and other nutrition products, as applicable.
Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet
Supplier Innophos
259 Prospect Plains Rd. Bldg A
Cranbury, NJ 08512
1-609-495-2495

Emergency telephone number
Emergency telephone CHEMTREC
Within USA and Canada: 1-800-424-9300
Outside USA and Canada: +1-703-527-3887 (Collect calls accepted)(24/7)

2. Hazard(s) identification

Classification of the substance or mixture
Physical hazards Not Classified
Health hazards Not Classified
Environmental hazards Not Classified

Label elements
Hazard statements NC Not Classified

Other hazards
This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

Melatonin 60-100%
CAS number: 73-31-4

Classification
Not Classified

The full text for all hazard statements is displayed in Section 16.

Composition comments The exact composition and or concentration has been withheld as a trade secret per OSHA 29 CFR 1910.1200.
## Melatonin

### 4. First-aid measures

#### Description of first aid measures

<table>
<thead>
<tr>
<th>General information</th>
<th>Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.</td>
</tr>
<tr>
<td>Skin Contact</td>
<td>Brush off loose particles from skin. Remove affected person from source of contamination. Rinse immediately with plenty of water.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.</td>
</tr>
<tr>
<td>Protection of first aiders</td>
<td>First aid personnel should wear appropriate protective equipment during any rescue.</td>
</tr>
</tbody>
</table>

#### Most important symptoms and effects, both acute and delayed

<table>
<thead>
<tr>
<th>General information</th>
<th>See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Dust may irritate the respiratory system. Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>May cause discomfort if swallowed.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Prolonged contact may cause dryness of the skin.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Dust may cause slight irritation.</td>
</tr>
</tbody>
</table>

#### Indication of immediate medical attention and special treatment needed

<table>
<thead>
<tr>
<th>Notes for the doctor</th>
<th>Treat symptomatically.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific treatments</td>
<td>No special treatment required.</td>
</tr>
</tbody>
</table>

### 5. Fire-fighting measures

#### Extinguishing media

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsuitable extinguishing media</td>
<td>Do not use water jet as an extinguisher, as this will spread the fire.</td>
</tr>
</tbody>
</table>

#### Special hazards arising from the substance or mixture

<table>
<thead>
<tr>
<th>Specific hazards</th>
<th>None known.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous combustion products</td>
<td>Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.</td>
</tr>
</tbody>
</table>

#### Advice for firefighters

| Protective actions during firefighting | Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. |
**Melatonin**

**Special protective equipment for firefighters**
Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

### 6. Accidental release measures

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions**
No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage.

**Environmental precautions**
Avoid discharge to the aquatic environment.

#### Methods and material for containment and cleaning up

**Methods for cleaning up**
Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Reuse or recycle products wherever possible. Remove spillage with vacuum cleaner or collect with a shovel and broom, or similar. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dispose of contents/container in accordance with national regulations.

**Reference to other sections**
For personal protection, see Section 8. For waste disposal, see Section 13.

### 7. Handling and storage

#### Precautions for safe handling

**Usage precautions**
Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Keep container tightly sealed when not in use. Avoid handling which leads to dust formation.

**Advice on general occupational hygiene**
Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

#### Conditions for safe storage, including any incompatibilities

**Storage precautions**
Store away from incompatible materials (see Section 10). No specific recommendations.

**Storage class**
Unspecified storage.

#### Specific end use(s)

**Specific end use(s)**
The identified uses for this product are detailed in Section 1.

### 8. Exposure controls/Personal protection

#### Control parameters

**Occupational exposure limits**
- Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ Total Dust (Particulate Not Otherwise Regulated-PNOR)
- Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ Respirable Fraction (Particulate Not Otherwise Regulated-PNOR)

OSHA = Occupational Safety and Health Administration.
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Protective equipment

Appropriate engineering controls
Provide adequate ventilation. Good general ventilation should be adequate to control worker exposure to airborne contaminants.

Eye/face protection
Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with OSHA 1910.133. No specific eye protection required during normal use.

Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection
Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures
Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.

Respiratory protection
Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.

Environmental exposure controls
Not regarded as dangerous for the environment.

9. Physical and chemical properties

Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid. (Powder.)</td>
</tr>
<tr>
<td>Color</td>
<td>White.</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>pH</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Initial boiling point and range</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Evaporation factor</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
Melatonin

Other flammability
Not available.

Vapor pressure
Not applicable.

Vapor density
Not applicable.

Relative density
Not available.

Bulk density
Not available.

Solubility(ies)
Not available.

Partition coefficient
Not available.

Auto-ignition temperature
Not available.

Decomposition Temperature
Not available.

Viscosity
Not applicable.

Explosive properties
Not available.

Explosive under the influence of a flame
Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Prevent dust accumulation.

Oxidizing properties
Not applicable.

10. Stability and reactivity

Reactivity
See the other subsections of this section for further details.

Stability
Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

Possibility of hazardous reactions
No potentially hazardous reactions known.

Conditions to avoid
There are no known conditions that are likely to result in a hazardous situation.

Materials to avoid
No specific material or group of materials is likely to react with the product to produce a hazardous situation.

Hazardous decomposition products
Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral
Summary
Based on available data the classification criteria are not met.

Acute toxicity - dermal
Summary
Based on available data the classification criteria are not met.

Acute toxicity - inhalation
Summary
Based on available data the classification criteria are not met.
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Skin corrosion/irritation
Summary Based on available data the classification criteria are not met.

Serious eye damage/irritation
Summary Based on available data the classification criteria are not met.

Respiratory sensitization
Summary Based on available data the classification criteria are not met.

Skin sensitization
Summary Based on available data the classification criteria are not met.

Germ cell mutagenicity
Summary Based on available data the classification criteria are not met.

Carcinogenicity
Summary Based on available data the classification criteria are not met.

IARC carcinogenicity None of the ingredients are listed or exempt.

Reproductive toxicity
Summary Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure
Summary Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure
Summary Based on available data the classification criteria are not met.

Aspiration hazard
Summary Not relevant. Solid.

General information No specific health hazards known. Dust may irritate the eyes and the respiratory system. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation Dust may irritate the respiratory system. Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

Ingestion May cause discomfort if swallowed.

Skin Contact Prolonged contact may cause dryness of the skin.

Eye contact Dust may cause slight irritation.

Route of exposure Ingestion Inhalation Skin and/or eye contact

Target Organs No specific target organs known.

12. Ecological information

Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

Acute aquatic toxicity
Summary Based on available data the classification criteria are not met.

Chronic aquatic toxicity
Summary Based on available data the classification criteria are not met.
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Persistence and degradability
Persistence and degradability The degradability of the product is not known.

Bioaccumulative potential
Bio-Accumulative Potential No data available on bioaccumulation.
Partition coefficient Not available.

Mobility in soil
Mobility No data available.

Other adverse effects
Other adverse effects None known.

13. Disposal considerations

Waste treatment methods
General information The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.
Disposal methods Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

14. Transport information

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

UN Number
UN No. (International) Not applicable.
UN No. (DOT) Not applicable.

UN proper shipping name
Proper shipping name (International) Not applicable.
Proper shipping name (DOT) Not applicable.

Transport hazard class(es)
Transport Labels (International) No transport warning sign required.
DOT transport labels No transport warning sign required.

Packing group
Packing group (International) Not applicable.
DOT packing group Not applicable.

Environmental hazards
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Environmentally Hazardous Substance
No.

Special precautions for user
Not applicable.

DOT reportable quantity  Not applicable.
DOT TIH Zone  Not applicable.

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

15. Regulatory information

Regulatory References

US Federal Regulations
SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities
None of the ingredients are listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)
None of the ingredients are listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities
None of the ingredients are listed.

SARA 313 Emission Reporting
None of the ingredients are listed.

CAA Accidental Release Prevention
None of the ingredients are listed.

FDA - Essential Chemical
None of the ingredients are listed or exempt.

FDA - Precursor Chemical
None of the ingredients are listed or exempt.

OSHA Highly Hazardous Chemicals
None of the ingredients are listed.

US State Regulations
California Proposition 65 Carcinogens and Reproductive Toxins
None of the ingredients are listed or exempt.

California Air Toxics "Hot Spots" (A-I)
None of the ingredients are listed.

California Air Toxics "Hot Spots" (A-II)
None of the ingredients are listed.
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California Directors List of Hazardous Substances
None of the ingredients are listed.

Massachusetts “Right To Know” List
None of the ingredients are listed.

Rhode Island “Right To Know” List
None of the ingredients are listed.

Minnesota “Right To Know” List
None of the ingredients are listed.

New Jersey “Right To Know” List
None of the ingredients are listed.

Pennsylvania “Right To Know” List
None of the ingredients are listed.

Inventories
US - TSCA
All the ingredients are listed or exempt.

US - TSCA 12(b) Export Notification
None of the ingredients are listed or exempt.

16. Other information

Abbreviations and acronyms used in the safety data sheet
- TDG: The transport of dangerous goods act
- IATA: International air transport association.
- ICAO: Technical instructions for the safe transport of dangerous goods by air.
- IMDG: International maritime dangerous goods.
- CAS: Chemical abstracts service.
- ATE: Acute toxicity estimate.
- LC₅₀: Lethal concentration to 50% of a test population.
- LD₅₀: Lethal dose to 50% of a test population (median lethal dose).
- EC₅₀: 50% of maximal effective concentration.
- PBT: Persistent, bioaccumulative and toxic substance.
- vPvB: Very persistent and very bioaccumulative.

Training advice
Read and follow manufacturer's recommendations. Only trained personnel should use this material.

Issued by
Innophos

Revision date
9/16/2021

Revision
2

Supersedes date
6/24/2021

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