



SAFETY DATA SHEET

3,3'-Diindolylmethane

1. Identification

Product identifier

Product name 3,3'-Diindolylmethane

Product number BD0800P310TO

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 Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 STOT SE 3 - H335

Environmental hazards Aquatic Chronic 4 - H413

Label elements

Hazard symbols



Signal word Warning

Hazard statements H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.
H413 May cause long lasting harmful effects to aquatic life.



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Precautionary statements

P261 Avoid breathing dust.
 P264 Wash contaminated skin thoroughly after handling.
 P271 Use only outdoors or in a well-ventilated area.
 P273 Avoid release to the environment.
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
 P302+P352 If on skin: Wash with plenty of water.
 P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P312 Call a poison center/ doctor if you feel unwell.
 P321 Specific treatment (see medical advice on this label).
 P332+P313 If skin irritation occurs: Get medical advice/ attention.
 P337+P313 If eye irritation persists: Get medical advice/ attention.
 P362+P364 Take off contaminated clothing and wash it before reuse.
 P403+P233 Store in a well-ventilated place. Keep container tightly closed.
 P405 Store locked up.
 P501 Dispose of contents/ container in accordance with national regulations.

Contains

3,3'-DIINDOLYLMETHANE

Other hazards

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

3. Composition/information on ingredients

Mixtures

| | |
|---|---------|
| 3,3'-DIINDOLYLMETHANE | 60-100% |
| CAS number: 1968-05-4 | |
| Classification Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 STOT SE 3 - H335 Aquatic Chronic 4 - H413 | |

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.

4. First-aid measures

Description of first aid measures

General information

Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

Inhalation

Remove affected person from source of contamination. 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. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.



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| Ingestion | 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. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. |
| Skin Contact | Brush off loose particles from skin. Rinse with water. |
| Eye contact | Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes. |
| Protection of first aiders | First aid personnel should wear appropriate protective equipment during any rescue. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation. |

Most important symptoms and effects, both acute and delayed

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| General information | 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. |
| Inhalation | A single exposure may cause the following adverse effects: Irritation of nose, throat and airway. Difficulty in breathing. Coughing. |
| Ingestion | May cause irritation. |
| Skin contact | Redness. Irritating to skin. |
| Eye contact | Irritating to eyes. |

Indication of immediate medical attention and special treatment needed

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| Notes for the doctor | Treat symptomatically. |
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5. Fire-fighting measures

Extinguishing media

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| Suitable extinguishing media | 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. |
| Unsuitable extinguishing media | Do not use water jet as an extinguisher, as this will spread the fire. |

Special hazards arising from the substance or mixture

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|-------------------------------|---|
| Specific hazards | None known. |
| Hazardous combustion products | Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors. |

Advice for firefighters

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| Protective actions during firefighting | Avoid breathing fire gases or vapors. Evacuate area. Keep upwind to avoid inhalation of gases, vapors, fumes and smoke. Ventilate closed spaces before entering them. 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. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities. |
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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. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Avoid inhalation of dust. Use suitable respiratory protection if ventilation is inadequate.

Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground. 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. Collect spillage with a shovel and broom, or similar and reuse, if possible. Collect and place in suitable waste disposal containers and seal securely. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Dangerous for the environment. Do not empty into drains. For waste disposal, see Section 13.

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. 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 container tightly sealed when not in use. Avoid handling which leads to dust formation. Avoid discharge to the aquatic environment. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment.

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). Store locked up. Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Utilize retaining walls to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

Storage class Miscellaneous hazardous material storage.

Specific end uses(s)

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

8. Exposure controls/Personal protection



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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.

Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimize worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimize exposure.

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. Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.

Environmental exposure controls

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties



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Information on basic physical and chemical properties

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| Appearance | Solid. (Powder.) |
| Color | White/off-white. |
| Odor | Characteristic. |
| Odor threshold | Not available. |
| pH | Not available. |
| Melting point | Not available. |
| Initial boiling point and range | Not available. |
| Flash point | Not applicable. |
| Evaporation rate | Not applicable. |
| Evaporation factor | Not applicable. |
| Flammability (solid, gas) | Not available. |
| Upper/lower flammability or explosive limits | Not available. |
| 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

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| 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. |



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| 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. |
| Skin corrosion/irritation Summary | Causes skin irritation. |
| Serious eye damage/irritation Summary | Causes serious eye irritation. |
| 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 | May cause respiratory irritation. |
| Target organs | Respiratory system, lungs |
| Specific target organ toxicity - repeated exposure Summary | Based on available data the classification criteria are not met. |
| Aspiration hazard Summary | Not relevant. Solid. |



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| General information | 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 | A single exposure may cause the following adverse effects: Irritation of nose, throat and airway. Difficulty in breathing. Coughing. |
| Ingestion | May cause irritation. |
| Skin Contact | Redness. Irritating to skin. |
| Eye contact | Irritating to eyes. |
| Route of exposure | Ingestion Inhalation Skin and/or eye contact |
| Target Organs | Respiratory system, lungs |

12. Ecological information

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| Acute aquatic toxicity | |
| Summary | Based on available data the classification criteria are not met. |
| Chronic aquatic toxicity | |
| Summary | May cause long lasting harmful effects to aquatic life. |
| 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. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous. |
| Disposal methods | Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. |

14. Transport information



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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

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 OSHA Hazard Communication Standard 29 CFR §1910.1200

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.



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[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.

[SARA \(311/312\) Hazard Categories](#)

Serious eye damage or eye irritation
Skin corrosion or irritation
Specific target organ toxicity (single or repeated exposure)

[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.

[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.



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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.

Classification abbreviations and acronyms

Eye Irrit. = Eye irritation
 Skin Irrit. = Skin irritation
 STOT SE = Specific target organ toxicity-single exposure
 Aquatic Chronic = Hazardous to the aquatic environment (chronic)

Training advice

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

Issued by

Innophos

Revision date

8/31/2021

Revision

1

Hazard statements in full

H315 Causes skin irritation.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H413 May cause long lasting harmful effects to aquatic life.

*This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to determine the suitability of such information for the user's own particular use, and for ensuring that all such uses and applications (including user's labeling of its products) comply with applicable law.