

SAFETY DATA SHEET Boron Citrate (B 5%), Ksh

1. Identification

Product identifier

Product name Boron Citrate (B 5%), Ksh

Product number FB00CIP2110K, FB00CIP2410K

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 Combustible Dust - USH01

Health hazards Repr. 1B - H360FD

Environmental hazards Not Classified

Label elements

Hazard symbols



Signal word Danger

Hazard statements USH01 May form combustible dust concentrations in air.

H360FD May damage fertility. May damage the unborn child.

Precautionary statements P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P308+P313 If exposed or concerned: Get medical advice/ attention.

P405 Store locked up.

P501 Dispose of contents/ container in accordance with national regulations.

Contains Sodium Borate (B 14.8%)

Other hazards



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

3. Composition/information on ingredients

Mixtures

MALTODEXT (M-100), KOSHER-IP

30-60%

CAS number: 9050-36-6

Classification

Combustible Dust - USH01

Sodium Borate (B 14.8%)

30-60%

CAS number: 12179-04-3

Classification

Repr. 1B - H360FD

10-30%

CAS number: 6132-04-3

Classification

Sodium Citrate

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.

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.

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.



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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

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 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.

Indication of immediate medical attention and special treatment needed

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media 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

Specific hazards None known.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Harmful gases or

vapors.

Advice for firefighters

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. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

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

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.

Environmental precautions



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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. 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. May damage fertility. May damage the unborn child. Pregnant or breastfeeding women should not work with this product if there is any risk of exposure. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

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 Chemical 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

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)

Sodium Borate (B 14.8%)

Long-term exposure limit (8-hour TWA): ACGIH 2 mg/m³ dust, inhalable fraction Short-term exposure limit (15-minute): ACGIH 6 mg/m³ dust, inhalable fraction

A4

ACGIH = American Conference of Governmental Industrial Hygienists. A4 = Not Classifiable as a Human Carcinogen. OSHA = Occupational Safety and Health Administration.

Exposure controls



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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. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

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

Information on basic physical and chemical properties

Appearance Solid. (Powder.)

Color White/off-white.

Odor Characteristic.

Odor threshold Not available.



pH 6.2-10.5

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

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 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.



Materials to avoid Oxidizing materials.

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 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 May damage fertility or the unborn child. May damage the unborn child.

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 Avoid contact during pregnancy/while nursing. May damage fertility. 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.

Persistence and degradability

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. Incineration

or landfill should only be considered when recycling is not feasible.

14. Transport information

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

DOT).



Boron Citrate (B 5%), Ksh

UN Number

UN No. (International)

Not applicable.

UN No. (DOT)

Not applicable.

UN proper shipping name

Proper shipping name

Not applicable.

(International)

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

Not applicable.

the IBC Code

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.

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

Combustible Dust Reproductive toxicity

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

The following ingredients are listed:

Sodium Borate (B 14.8%)

Massachusetts "Right To Know" List

The following ingredients are listed:

Sodium Borate (B 14.8%)

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.

MALTODEXT (M-100), KOSHER-IP



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

Abbreviations and acronyms used 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.

LC₅o: 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

Repr. = Reproductive toxicity

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

Issued by Innophos

Revision date 9/28/2021

Revision

Supersedes date 5/5/2021

Hazard statements in full H360FD May damage fertility. May damage the unborn child.

USH01 May form combustible dust concentrations in air.

^{*}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.