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Everchem Corp (M) Sdn Bhd

MATERIAL SAFETY DATA SHEET

BORAX

1. Product Identification

Product Name: Borax

Other Names: Boronatrocalcite, Sodium Calcium Borate, Granular Ulexite.

INFORMATION : Related to calcined ulexite as following

Chemical Entity	CAS Number
Sodium Calcium Borate	[1319-33-1]

HAZARD IDENTIFICATION

Not hazardous according to criteria of NOHSC/ASCC

PHYSICAL AND CHEMICAL PROPERTIES

Physical aspect: granulated product.

Chemical formula: $Na_2O.2CaO.5B_2O_3.nH_2O$

Odour: odourless

Melting Point: 800'C deg C

Solubility in water. 1.3g/L

pH: 7 – 8

Specific Gravity: 2.2 (water = 1)

Bulk Density (apparently): 0.87 – 0.95 gr/cm^3

2. Stability and Reactivity

Chemical Stability: Product is stable under normal conditions of use, storage and temperature.

Conditions to Avoid: Avoid excessive heat, direct sunlight, generating dust, moisture, static discharges and high temperatures.

Incompatible Materials: Incompatible with oxidizing agents, acids, reducing agents and sources of ignition.

Hazardous Decomposition Products

Product may emit oxides of sodium, oxides of calcium and oxides of boron.

Hazardous Reactions

Hazardous polymerization will not occur.

3. Toxicology Information

Toxicity Data: Oral LD50 Rat: 2660mg/Kg

Health Efferts: Acute

Swallowed: Ingestion of large amounts might cause both vomiting and nausea.

Eye: Dust might cause discomfort due to particulate nature. May cause physical irritation to the eye.

Skin: May cause skin irritation.

Inhaled: Inhalation of dust may result in respiratory irritation.

4. Ecological Information

Ecotoxicity: No data available.

Exposure & Environmental Fate: Avoid contaminating drains, sewers or waterways.

DISPOSAL CONSIDERATIONS

Disposal: Disposal according to all local, state and federal regulations.

Special Precautions for land Fill or Incineration.

Contact a specialist disposal company or the local waste regulator for advice.

TRANSPORT INFORMATION

Shipping Name: Calcined ulexite

Dangerous Goods Class: Not applicable.

Subsidiary Risk: Not applicable.

5. First aid measures

Description of necessary measures according to routes of exposure.

Swallowed: Rinse mouth with water. Give plenty of water to drink. If irritation persists, seek medical attention.

Eye: Immediately flush eyes with plenty of water holding eyelids open. If irritation persists, seek medical attention.

Skin: Remove contaminated clothing. Flush affected area with plenty of water. If irritation persists, seek medical attention.

Inhaled: Remove victim from exposure to fresh air. If rapid recovery does not occur, seek medical attention.

Advice to Doctor: Treat symptomatically based on individual reactions of patient and judgement of doctor.

6. Fire fighting measures

Hazards from Combustion Products: Non-combustible solid. Incompatible with oxidizing agents, acids, reducing agents and sources of ignition. Decomposes on heating emitting toxic fumes. Avoid dust generation. Decomposition products include oxides of sodium, oxides of calcium and oxides of boron.

Extinguishing Media: In case of fire, use appropriate extinguishing media most suitable for surrounding fire conditions.

Special Protective Precautions and Equipment for Fire Fighters: Fire fighters should wear a self contained breathing apparatus and full protective clothing along with protective equipment.

Flammability Conditions: Product is a non-flammable solid.

ACCIDENTAL RELEASE MEASURES

Emergency Procedures: Personnel involved in the clean up should wear full protective clothing. Eliminate all sources of ignition. Increase Ventilation. Avoid generating dust. Do not allow product to reach drains, sewers or waterways. If the product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management Authority. Use spark-proof tools and equipment.

Methods and Materials for Containment and Clean Up: Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Transfer to a suitable, labeled container and hold for safe disposal. Once pick up is complete, flush spill site with plenty of water to eliminate any residue. Hold contaminated water for disposal.

7. Handling and Storage

Precautions for Safe Handling: Ensure an eye bath and safety shower are available and ready for use. Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment.

Conditions for Safe Storage (Including Any Incompatibles): Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials including oxidizing agents, acids, reducing agents and sources of ignition. Protect from direct sunlight, moisture and electrostatic discharges. Store at ambient temperature. This product is not classified dangerous for transport according to The Australian Code for the Transport of Dangerous Goods by Road and Rail.

Container Type: Store in original packaging as approved by manufacturer.

EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards: Borates, tetra, sodium salts (decahydrate) 8hr TWA=5mg/m3

Biological Limit Values: Currently, there are no Biological Exposure Indices (BEIs) determined for the components of this product.

Engineering Controls: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area.

Personal Protection

RESPIRATOR: Wear an NIOSH approved respirator if dusts are generated.

EYES: Safety glasses with side shields conforming with EN166.

HANDS: Impervious gloves (EN374)

CLOTHING: Standard work uniform/clothing.