Aqua King Pool Products
Registration Holder – Hyper Pool Equipment
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MATERIAL SAFETY DATA SHEET (MSDS) *

Poison Centre (R.S.A.): 0860 155 5777

1. *Product and Company Identification.*

1.1. Trade / Commercial Name: **AQUA KING SODA ASH**
1.2. Chemical Name(s): CARBONIC ACID, DISODIUM SALT, DISODIUM CARBONATE, SODA ASH.
1.3. CAS No: 497-19-8.
1.4. Molecular Weight: 105.99.
1.5. Chemical Formula: Na2CO3.
1.6. Chemical Synonyms: Antipyonin, borax, boricin, disodium tetraborate decahydrate, three elephant tronabor sodium pyroborate decahydrate, sodium tetraborate decahydrate.
1.7. Molecular Formula: $B_4Na_2O_7$.
1.8. CAS No: 1303-96-4.
1.9. EINECS No: Not Specified.

2. *Raw Materials Supplier / Manufacturer / Importer / Exporter Details.*

2.1. Company: Vikudha (Tianjin) Corporation Ltd.
2.2. Company Contact: Room 1604, 1605, 1606 Galaxy Mansion, No. 68 Yuexiu Road, Hexi District, Tianjin, China – (86 22) 2837 9281 / office@vikudha.cn.

3. *Composition and Ingredients.*

3.1. Component: Soda Ash.
3.2. Concentration: Not specified.

4. *Hazards Identification.*

4.1. Emergency Overview: Danger! May cause eye burns. Harmful if swallowed or inhaled. Causes irritation to skin and respiratory tract.
4.2. Potential Health Effects:
4.2.1 Inhalation – inhalation of dust may cause irritation to the respiratory tract. Symptoms from excessive inhalation of dust may include coughing and difficult breathing and excessive contact is known to cause damage to the nasal septum.
4.2.2 Ingestion – sodium carbonate is only slightly toxic, but large doses may be corrosive to the gastro-intestinal tract, where symptoms may include severe abdominal pain, vomiting, diarrhoea, collapsing and death.
4.2.3 Skin Contact – excessive contact may cause irritation, with blistering and redness. Solutions may cause severe irritation or burns.
4.2.4 Eye Contact – contact may be corrosive to eyes and cause conjunctival oedema and corneal destruction. Risk of serious injury increases if eyes are kept tightly closed. Other symptoms may appear from absorption of sodium carbonate into the bloodstream via the eyes.
4.2.5 Chronic Exposure – prolonged or repeated skin exposure may cause sensitization.
4.2.6 Aggravation of Pre-Existing Conditions – No information found.

5. *First Aid Measures.*

5.1. First Aid – **Inhalation**: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

5.2. First Aid – **Ingestion:** If swallowed, DO NOT INDUCE VOMITING. Give large quantities of clean water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

5.3. First Aid – **Skin Contact:** Immediately flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Get medical attention. Wash clothing before reuse or thoroughly clean before reuse.

5.4. First Aid – **Eye Contact:** Immediately flush eyes with plenty of clean water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

5.5. Further Professional Medical Assistance – **Note to Physician:** Consider endoscopy in all suspected cases of sodium carbonate poisoning. Perform blood analysis to determine if dehydration, acidosis, or other electrolyte imbalances occurred.

6. *Fire Fighting Measures.*

6.1. **Fire –** Not considered to be a fire hazard.

6.2. **Explosion –** Not considered an explosion hazard, but sodium carbonate may explode when applied to red hot aluminium.

6.3. **Fire Extinguishing Media –** Use any means suitable for extinguishing surrounding fire.

6.4. **Special Information –** Use protective clothing and breathing equipment appropriate for the surrounding fire.

7. *Accidental Release Measures.*

7.1. Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in section 8. When dealing with spills, sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

8. *Handling and Storage.*

8.1. **Handling –** Control dust information. Avoid moisture. Avoid contact with skin and eyes and avoid ingestion.

8.2. **Storage –** Keep containers in a cool, well-ventilated area with lids tightly closed.

9. *Exposure Controls / Personal Protection (PPE).*

9.1. **Airborne Exposure Limits:** Not established.

9.2. **Ventilation System:** 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. Please refer to the ACGIH document, Industrial Ventilation, A Manual of Recommended Practices, most recent edition, for details.

9.3. **Personal Respirators (NIOSH Approved):** For conditions of use where exposure to the dust or mist is apparent, a half-face dust and or mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

9.4. **Skin Protection:** Wear protective gloves and clean body-covering clothing.

9.5. **Eye Protection:** Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in the work area.

10. Physical and Chemical Properties.

10.1. **Appearance:** White powder or granules.
10.2. **Odour:** Odourless.
10.3. **Solubility:** 45.5 g/100ml water @ 100°C (70F).
10.4. **Specific Gravity**: 2.53.
10.5. **pH:** 11.6 Aqueous Solution.
10.6. **% Volatiles by Volume @ 21°C (212F):** 0.
10.7. **Boiling Point:** Decomposes.
10.8. **Melting Point:** 851°C (1564F).
10.9. **Vapor Density (Air =1):** No information found.
10.10. **Vapor Pressure (mm Hg):** No information found.
10.11. **Evaporation Rate (BuAc=1):** No information found.

11. Stability and Reactivity.

11.1. **Stability:** Stable under ordinary conditions of use and storage. Hygroscopic. Readily absorbs moisture from the air. Solutions are strong bases.
11.2. **Hazardous Decomposition Products:** Oxides of carbon and sodium oxide.
11.3. **Hazardous Polymerization:** Will not occur.
11.4. **Incompatibilities:** Fluorine, aluminium, phosphorous pentoxide, sulfuric acid, zinc, lithium, moisture, calcium hydroxide and 2,4,6,-trinitrotoluene. Reacts violently with acids to form carbon dioxide.
11.5. **Conditions to Avoid:** Moisture, heat, dusting, and incompatibles.

12. Toxicological Information.

12.1. **For Sodium Carbonate:** Oral rat LD50: 4090 mg/Kg; Inhalation rat LC50: 2300 mg/m^{3}/2H; Irritation Eye Rabbit: 50 mg severe; investigated as a mutagen, reproductive effector.

13. Ecological Information.

13.1. **Environmental Fate:** No information found:
13.2. **Environmental Toxicity:** No information found.

14. Disposal Considerations.

14.1. Whatever cannot be saved for recovery or recycling, should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state, and local requirements.

15. Transport Information.

15.1. Not listed as hazardous for transport.
15.2. Not regulated.

16. Regulatory Information.

16.1. Users should ensure that they comply with any relevant local, provincial, or national legislation.

17. Other Information.

17.1. **NFPA Ratings:** Health – 2 / Flammability – 0 / Reactivity – 0.
17.2. **Label Hazard Warning:** Danger! May cause eye burns. Harmful if swallowed or inhaled. Causes irritation to skin and respiratory tract.
17.3. **Label Precautions:** Do not get in eyes, on skin, or clothing. Avoid breathing dust. Keep container closed. Use with adequate ventilation. Wash thoroughly after handling.
17.4. **Label First Aid:** In case of contact, immediately flush eyes, or skin with plenty of clean water for at least 15 minutes while removing contaminated clothing and

17.5. shoes. Wash clothing before reuse. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of clean water. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. Get medical attention for any breathing difficulty. In all cases get medical attention immediately.

17.6. **Product Use:** Laboratory Reagent.

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