

# **GLASS CHEMICALS BROCHURE**

# **About Us**

Tradeasia International Pte. Ltd. is a privately owned, independent company headquartered in Singapore. We are a global trading organization providing integrated chemical procurement services with certainty and trust, which makes Tradeasia unique.

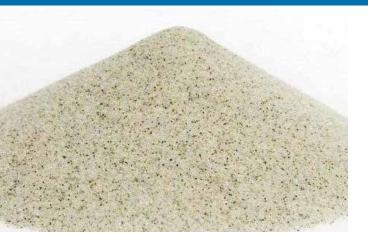


Tradeasia International was setup with the sole intention of carrying out chemical distribution services especially to commodity industries in many parts of the world. Today, Tradeasia International represents a growing number of businesses that are serving a variety of markets. We source and supply about 500-600 containers monthly to our customers worldwide.



# Silica Sand

Silica Sand is typically a form of Silicon dioxide (SiO<sub>2</sub>), made up of two main elements - silica and oxygen. The most common form of Silicon dioxide is quartz, which is a chemically inert and hard mineral that is naturally broken down into tiny granules over time through the wind and water called Silica Sand. The sand can differ in colour and size of the granules, depending on where it was sourced from.



### **Specifications:**

Particle Size	Unit	Specification
+1.18	%	0.01
+0.006	%	0.80
+0.300	%	59.95
+0.015	%	28.49
+0.075	%	9.29
Pan	%	1.46

#### **Applications:**



#### **Glass Industry**

Silicon dioxide (silica sand) is a main component in the glass manufacturing. In fact, silica is the primary ingredient in conventional glass products ranging from windows to glass bottles. The purity level silicon dioxide used in manufacturing process will determine the clarity, color and hardness of the glass product.



#### **Sport Facilities**

Silica sand is used for bunkers and greens on golf courses, as well as for natural and synthetic sports fields.

HS Code : 2505.10 CAS No. : 14808-60-7 Grade : 99.81%

Origin : Egypt

Packaging : 25kg bag, 50kg bag

# **Specifications:**

Property	Unit	Specification
SiO <sub>2</sub>	%	99.81
Fe <sub>2</sub> O <sub>3</sub>	%	0.0153
$Al_2O_3$	%	0.0068
CaO	%	0.04
MgO	%	0.01
Na <sub>2</sub> O	%	0.01
K <sub>2</sub> O	%	0.01
Cl	%	0.01
SO <sub>3</sub>	%	0.01
MnO	%	< 0.01
L.O.I	%	0.203



# **Soda Ash Light**

Soda ash light is also called an anhydrous sodium carbonate with the chemical formula Na<sub>2</sub>CO<sub>3</sub>. It is a white, odorless granular powder soluble in water and forms a strongly alkaline aqueous solution. It is also hygroscopic and absorbs moisture from the atmosphere, causing it to clump together. It exists mainly in its monohydrate form but in the decahydrate and heptahydrate forms.

HS Code : 2836.20.00 CAS No. : 497-19-8 Origin : India, China

Packaging : • 50kg bag, 21MT/20FCL

• 40kg PP/PE bag

### **Specifications - India Origin:**

Property	Unit	Value
Appearance		Free flowing powder, free from visible contamination
Odor		The material should not have any objectionable odor
Color	-	White
Na <sub>2</sub> CO <sub>3</sub>	%	99 min
Chloride (NaCl)	%	0.5 max
Sodium Bicarbonate (NaHCO <sub>3</sub> )	%	0.2 max
Volatile Matter	%	0.2 max
Bulk Density	g/l	400 min / 750 max

# **Specifications - China Origin:**

Property	Unit	Value
Na <sub>2</sub> CO <sub>3</sub>	%	99.2 min
NaCl	%	0.3 max
Na <sub>2</sub> SO <sub>4</sub>	%	0.2 max
Fe <sub>2</sub> SO <sub>3</sub>	%	0.035 max
Loss on Heating	%	0.8 max
Water Insoluble	%	0.04 max



Pulp & Paper Industry

Soda ash light controlling the pH in pulping process, neutralizing the effluent streams, and processing of waste paper.

### **Applications:**



**Glass Industry** 

Soda ash is used as the raw material to make the most common type of glass, soda-lime silica glass, generally used in the flat glass (automotive and construction), glass container (food and drink), and other glass industries.



Soap & Detergent Industry

Soda ash light is used as a filler, pH adjuster, agglomerate aid, and water softener.



Textile Industry

Soda ash light is used in textile industry during scouring, bleaching, and dyeing. It is also used during deacidification of spun rayon.

# **Soda Ash Dense**

Soda ash dense is the industrial name of anhydrous sodium carbonate. Sodium carbonate decahydrate is a colorless, transparent crystalline compound which is commercially known as soda or washing soda. Soda ash is produced by the ammonia soda method (Solvay process) using ammonia and carbon dioxide to treat sodium chloride.

HS Code : 2836.20.00 CAS No. : 497-19-8 Origin : Turkey

Packaging : 1.25MT big bag



## **Specifications:**

Item	Specification	Value
Na <sub>2</sub> CO <sub>3</sub>	99.5% min	99.72%
Na <sub>2</sub> O	58.2% min	58.31%
Fe	10 μg/g max	0.80 µg/g
NaCl	0.1% max	0.059%
Na <sub>2</sub> SO <sub>4</sub>	0.1% max	0.005%
Bulk Density	0.95 - 1.15 g/cm <sup>3</sup>	1.109 g/cm³
Water Insolubles	0.05% max	0.0022%

### **Applications:**



**Glass Industry** 

Soda ash is used as the raw material to make the most common type of glass, soda-lime silica glass, generally used in the flat glass (automotive and construction), glass container (food and drink), and other glass industries.



Soap & Detergent Industry

Soda ash is an important part of a large number of domestic formulations, including soap, refined powder, soaking, and washing powder.



**Food Industry** 

It is used as a buffering agent, neutralize and dough improver, it can be used for pastry and noodle food, and can be used appropriately according to production needs.

# **Aluminium Hydroxide**

Aluminium hydroxide, commonly known as hydrate of alumina, Al(OH)3, is an odourless, white crystalline powder. This substance is stable at standard conditions and is insoluble in water. Aluminium hydroxide is widely known as a material for flame retardant because it can decompose into water and alumina at 200°C. Aluminium hydroxide is also an amphoteric material, it can be base or acid depending on the condition of the solution.

 HS Code
 : 2818.30

 CAS No.
 : 21645-51-2

 Origin
 : Indonesia

Packaging : 1MT jumbo bag



### **Specifications:**

Property	Unit	Specification
Moisture	%	0.1 max
SiO <sub>2</sub>	%	0.01 max
Fe <sub>2</sub> O <sub>3</sub>	%	0.01 max
$Al_2O_3$	%	64 min
Na <sub>2</sub> O	%	0.10 max
Al(OH) <sub>3</sub>	%	99 min
Whiteness	%	91 min

# **Applications:**



#### **Glass Industry**

Aluminum hydroxide usually used in the manufacturing of aluminosilicate glass. The aluminosilicate glass tends to harder to shape and melt, but has better resistance and durability against heat. Aluminosilicate can be applied in the manufacturing of glass-reinforced plastics, fiberglass, top-of-stove cookware and halogen bulb glass.



#### **Paper Industry**

Aluminium hydroxide acts as an extender and bodying agent in the manufacturing of paper. It is used as a filler in paper as it disperses readily and retains for a long time during manufacturing. It is also used as a paper coating agent in the paper industry.



#### **Pharmaceutical Industry**

In the pharmaceutical industry, aluminium hydroxide that combines with magnesium hydroxide is used for neutralising acids. It can also help to increase our immune system and also preparing vaccines to combat tetanus, Hepatitis A, and Hepatits B.

# **Borax Decahydrate**



Borax decahydrate is a white colored inorganic powder having the formula  $\mathrm{Na_2B_4O_7}\cdot 10\mathrm{H_2O}$ . It occurs naturally as Evaporite, or as a combination of various hydrates of borax. Some of the major properties of borax are its high solubility in water, its ability to produce a yellowish green colored flame when ignited, it acts as a mildly alkaline salt, its good chemical stability, and it has good buffering and fluxing properties.

HS Code : 28401900 CAS No. : 1303-96-4 Origin : Argentina Packaging : 25kg bag

### **Specifications:**

Chemical Analysis		
Component	Content	
$Na_2B_4O_7 \cdot 10H_2O$	101.3%	
$B_2O_3$	≥ 36.4%	
В	≥ 11.3%	
Na <sub>2</sub> O	≥ 16.2%	
SO <sub>4</sub>	≤ 60 ppm	
Cl	≤ 2900 ppm	
Fe	≤ 25 ppm	

Granulometric Analysis		
Sieve (A.S.T.M Standard)	Retained (accumulated)	
Mesh 14	≤ 1%	
Mesh 140	≥ 65%	

### **Applications:**



#### **Glass Industry**

Borax decahydrate can improve adhesion and provide a strong thermal bond between the base and the protective surface. Moreover, it cost cheaper as it has higher bulk density.



#### **Agriculture Industry**

Boron is an essential micronutrient for growth and development of healthy plants and in agriculture. Borax Decahydrate are given to the soil directly in the solid form.



#### **Detergent Industry**

Borax helps with the removal of oily soils from fabrics, imparts alkalinity, pH buffering, and softening of the wash water.



#### **Paper Industry**

Borax decahydrate is also used for starch adhesive formulation for corrugated paper and paperboard.



#### Pharmaceutical Industry

Borax is the source of borate that is a suitable polymer bed used in medicine to diagnose hyperglycemia in diabete mellitus.



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