

# **TEXTILE CHEMICALS BROCHURE**



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# 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.



# Sodium Sulphate Anhydrous

Glauber's salt is also a synonym for sodium sulfate anhydrous and is commonly used in the industries. Sodium sulfate anhydrous, also known as thenardite, has a formula of Na<sub>2</sub>SO<sub>4</sub>. It has an appearance of white crystalline solid and is chemically very stable. It is unreactive toward most oxidizing or reducing agents at normal temperatures.

HS Code	: 2833.11.00
CAS No.	: 7757-82-6
Origin	: Indonesia
Packaging	: 500 @ 50 kg PP/PE bags,
	25 MT / 20' FCL



#### **Specifications:**

Property	Unit	Value
Appearance		White powder
Na <sub>2</sub> SO <sub>4</sub>	%	99.93 (min)
Insoluble in Water	%	0.2 (max)
NaCl	%	0.2 (max)
Fe	ppm	20
Water Content	%	0.1 (max)

#### **Applications :**



Sodium sulphate is used as a "leveling" agent where it reduces the negative charges on fibers. By doing so, it allows dyes to penetrate the textiles evenly and effectively. Sodium sulphate anhydrous also used in leather industry for tanning.



The major use of sodium sulphate is as a filler in powder products, for example in detergents. Nowadays, liquid detergent that doesn't include sodium sulphate has become more popular which decreasing the used of sodium sulphate.



In paper industries, sodium sulphate is use in the Kraft process of wood pulp. The wood chips loaded by sodium sulphate and being heated. This cause the sodium sulphate reduce into sodium sulfide that breaks the bond in cellulose of the wood, therefore the wood chips become soft and easily form into wood pulp.



#### **Glass Industry**

Another common use of sodium sulphate is in glass industries to prevent the formation of air bubbles in molten glass. Sodium sulphate also act as dryer for organic compound. It removes water from organic compound, although it remove slower than another drying agent such as magnesium sulphate, it is more efficient.



# **Caustic Soda**

Caustic soda is mainly used in the form of caustic soda flakes or pearls. It is also known as sodium hydroxide, has a white solid appearance and a formula of NaOH. It is an inorganic alkali salt, hygroscopic in nature and is soluble in water and polar solvents. It has a slippery feel and also absorbs carbon dioxide in the atmosphere to from sodium carbonate.

HS Code	: 2815.11.00
CAS No.	:1310-73-2
Origin	: China, Taiwa
Packaging	: 1000 @ 25
	25 MT / 20'

. 2015.11.00
: 1310-73-2
: China, Taiwan, India
: 1000 @ 25 kg PP/PE bags,
25 MT / 20'FCL

Specifications:		
Property	Unit	Value
Appearance		White flakes, pearls. micropearls
Purity	%	98.00 (min)
Density	%	2.13
Boiling Point	%	1388
Melting Point	ppm	318
Solubility in Water	ppm	41.8

#### **Applications :**



**Textile Industry** Caustic soda is used in the manufacturing of textile. Caustic soda is used in the scouring process, mercerization process, as well as dyeing process.



**Paper Industry** Caustic soda is also used in pulp and paper industry during the cooking process and oxygen delignification process.



Soap & Detergent Industry

It is also used to manufacture soap and detergents, applied during the saponification process in soap industry and neutralization process in detergent industry.



Leather Industry Caustic soda is used during the liming process to help swell the hides or skins in leather industry

Linear alkylbenzene sulfonic acid, also known as LABSA, has a chemical formula of  $CH_3(CH_2)_{11}C_6H_4SO_3H$ . LABSA exist as a yellow liquid that is soluble in water and non-volatile. It is also bio-degradable and hence easily distinguished from alkylbenzene sulfonate by its linear, straight chain structure. LABSA is the largest-volume synthetic surfactant because of its relatively low cost and good performance.

LABSA

HS Code CAS No.	: 3402.11.90 : 27176-87-0
Origin	: Indonesia
Packaging	: 18 @ 1000 kg drum, 18MT /20'FCL

#### **Specifications:**

Property	Unit	Value
Appearance		Brown liquid
Active Matter (Alkyl Benzene Acid)	%	96
Free Oil	%	≤2.00
Sulphate	%	≤1.50
Color (5% Am. Aq. Sol.)	%	≤50
Water Content	%	≤1.00
pH Value		2 - 3

#### **Applications :**



**Textile Industry** In textile industry, LABSA is used as an mercerising and washing agent. It also can be used as dyeing assistant.



Agricultural Industry

LABSA is used in pesticides to enhance the quality of the spray and produce better crops. It is used in numerous industrial applications as a coupling agent and as an emulsifier for agricultural herbicides.



**Detergent Industry** 

LABSA is commonly used as a synthetic surfactant due to its low cost and effectiveness. It is widely used as an anionic surfactant in a wide range of domestic detergent powder and dish wash cleaner.



**Other Applications** 

LABSA is used as a degreaser in plating and leather making industry as well as a deinking agent in the paper industry.

# Hydrogen Peroxide

Hydrogen peroxide is a colourless liquid at room temperature with a bitter taste with formula  $H_2O_2$ . Small amounts of gaseous hydrogen peroxide occur naturally in the air. Hydrogen peroxide is unstable, decomposing readily to oxygen and water with release of heat. Although non-flammable, it is a powerful oxidizing agent that can cause spontaneous combustion when it comes in contact with organic material.

HS Code	: 2847.00.00
CAS No.	: 7722-84-1
Origin	: Taiwan
Packaging	: 672 @ 30 kg Polycans,
	20.16 MT / 20'FCL

#### Specifications:

Property	Unit	Value
Appearance		Colourless liquid
Purity	%	50
рН		1.2 - 2.5
Density at 20°C	g/cm <sup>3</sup>	1.195
Free Acid as H <sub>2</sub> SO <sub>4</sub>	%	0.05
Residual	%	0.20
Stability	%	97

#### **Applications :**



Pulp & Paper Industry Hydrogen peroxide is used as a clean bleaching agent during chemical and mechanical pulping process of paper and pulp.



Textile Industry

Hydrogen peroxide is used as a bleaching agent in textile industry and they are more environmental friendly than the chlorine-based bleaches. Hydrogen peroxide is also used in dyes.



Waste-water Treatment Hydrogen peroxide is a cleaner oxidizing agent which is used to treat waste water, contaminated soil, and toxic air emissions.



**Chemical Intermediates** 

Hydrogen peroxide is also used to manufacture a wide range of organic and inorganic compounds such as hydroquinone, ketones, aldehydes, alcohols, hydro-oxyl amines, epoxy derivatives, etc.

# Sodium Hydrosulphite



Sodium hydrosulfite, also known as sodium dithionite or hydros, has a formula of  $Na_2S_2O_4$ . It is a white crystalline powder and exists in both the anhydrous and dehydrated forms. Sodium hydrosulfite is a versatile chemical and is used mainly in textile dyeing, manufacturing of pulp and paper, commercial bleaching agent, bleaching of foodstuffs and as a reducing agent in hair treatment.

HS Code	: 2830.10.90
CAS No.	: 16721-80-5
Origin	: China
Packaging	: 500 @ 50 kg PP/PE bag
	25 MT / 20'FCL

#### Specifications:

Property	Unit	Value
Appearance		Yellow flakes
Purity	%	68 (min)
Sodium Sulphide	%	3.5(max)
Sodium Sulphite	%	0.003 (max)
Water Insolubles	%	0.005 (max)

#### **Applications :**



Textile Industry

Sodium hydrosulphite is commonly used textile industry as a reducing agent as well as a bleaching agent on various types of fabrics such as nylon, wool, and cotton. More to that it is also used for stripping of colour from various fabrics kinds.



In the paper and pulp Industry, sodium hydrosulphite is used to refine the appearance and is used as a bleaching agent. During the processing of paper and pulp, Sodium hydrosulfite plays a major role in finishing.



Being a reducing agent, sodium hydrosulphite is used an as antioxidant in hair treatment process. It is also used in the formulation of body and hand products, deodorants, hair dyes and colours.



Food Industry

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Sodium hydrosulphite is also used in packed food products as a preservative. And during the conversion process of jaggery to sugar, it is used as a bleaching agent

## **Formic Acid**

Formic acid is the simplest carboxylic acid and has a formula of HCOOH. It has a pungent and penetrating odour at room temperature. It is also miscible with water and most polar organic solvents but immiscible in non-polar solvents. It can undergo a series of organic reactions to form other relevant organic compounds, such as with alcohol to form esters, reduction to form aldehydes, decomposition to form carbon dioxide and water, and reaction with sulfuric acid to yield carbon monoxide.



HS Code	: 2915.11.00
CAS No.	: 64-18-6
Origin	: China
Packaging	: • 1000 @ 25 kg PE Jerry cans,
	25 MT / 20'FCL
	• 980 @ 25 kg Galvanized Drum,
	24.5 MT / 20'FCL

#### **Specifications:**

Property	Unit	Value
Appearance		Clear, colourless liquid
Purity	%	85
Odor		Pungent
Cl-	%	≤0.0060
SO <sub>4</sub> <sup>2-</sup>	%	≤0.020
Fe <sup>3+</sup>	%	≤0.0006
Residue	%	≤0.06

#### **Applications :**



Textile & Dyes Industry

Formic acid is used in dyeing and dye fixing, setting and retaining colors in fibers. Due to its acidic nature, it is also used as a neutralizing agent and pH adjuster in textile processing and finishing of textile.



Formic acid is used in leather tanning and production during the pickling process to lower the pH of the hides or skins.



Formic acid is an additive for coatings and a neutralization agent (i.e. cationic electro deposition paints).



Formic acid has a wide range of uses. It is used as a miticide, to kill tracheal mite. It is used instead of mineral acids in some cleaning products such as lime scale remover and toilet cleaners. Its esters are used in the making of perfumes.

### Soda Ash Light

Soda ash light is also called anhydrous sodium carbonate and its formula is  $Na_2CO_3$ . It is a white, odorless granular powder that is soluble in water and forms a strong alkaline aqueous solution. 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	: China
Packaging	: • 840 @ 25 kg PP/PE bags, 21 MT/20' FCL
	• 525 @ 40 kg PP/PE bags, 21 MT/20' FCL
	• 20 @ 750 kg PP/PE bags, 15 MT/20' FCL

#### **Specifications:**

Property	Unit	Value
Na <sub>2</sub> CO <sub>3</sub>	%	99.2 (min)
NaCl	%	0.2 (max)
Na <sub>2</sub> SO <sub>4</sub>	%	0.2 (max)
Fe <sub>2</sub> O <sub>3</sub>	%	0.003 (max)
Loss on Heating	%	0.8 (max)
Water Insoluble	%	0.04 (max)

#### **Applications :**



Textile Industry

Soda ash light is used for dyeing and added to ensure proper adhesion of the dyes to the cellulosic fibers. This can be done before dyeing, after dyeing or before mixing with the dye.



Paper Industry

Soda ash light is used as a pH adjuster in the pulping process because of the need for precise and constant pH control to increase efficiency. It also helps neutralize the waste stream and dispose of waste paper.



**Detergent Industry** 

Soda lights are used as water softeners in washing machines. It competes with the magnesium and calcium ions in hard water, preventing them from combining with the detergent used. In addition, it helps to remove grease and wine stains.



**Chemical Intermediates** 

Soda ash light serves as a crucial reactant and is used to manufacture other sodium containing chemicals, such as sodium hydroxide, sodium bicarbonate and sodium silicate.

# **Glacial Acetic Acid**

Glacial Acetic acid is the undiluted form of acetic acid. Acetic acid, also known as ethanoic acid, has a molecular formula CH<sub>3</sub>COOH. It is a weak monoprotic acid which is able to lose a proton from its acid functional group (-COOH) readily and produce a conjugate base, acetate anion. Acetic acid is also a polar protic solvent as it dissolves readily and is miscible in other polar solvents such as water.

HS Code	: 2915.21.00
CAS No.	: 64-19-7
Origin	: China
Packaging	:• 225 @ 80 kg drum,
	18 MT / 20'FCL
	• 700 @ 30 kg drum,

21 MT / 20'FCL



#### **Specifications:**

Property	Unit	Value		
Appearance		Clear, colorless liquid		
Purity	%	≥99.85		
Water	%	≤0.15		
Formic Acid	%	≤0.05		
Acetaldehyde	ppm	≤5		
Chloride (Cl)	ppm	≤1		
Iron (Fe)	%	≤0.00004		
Heavy Metal (Pb)	ppm	≤0.5		
Nonvolatile Matter	%	≤0.005		

#### **Applications :**



In the food industry, acetic acid is used as an acidity regulator and as a condiment. Acetic acid is also used as a main ingredient for vinegar production.



Acetic acid is used as a polar protic organic solvent for recrystallization and the production of purified terephthalic acid (PTA).



In households, dluted glacial acetic acid is used as a descaling agent for cleaning.



In addition, acetic acid is widely used for textile processing and printing.



Sodium bicarbonate, also known as baking soda, sodium acid carbonate, sodium hydrogen carbonate, or bicarbonate of soda is chemical compound that has formula NaHCO<sub>z</sub>. It appears as white crystalline or powder and easily soluble in water or any mineral springs. Sodium bicarbonate occurs in nature in the form of mineral nahcolite or thermokalite.

Sodium Bicarbonate

HS Code	: 2836.30.00
CAS No.	: 144-55-8
Origin	: China
Packaging	: 1000 @ 25 kg PP/PE bags,
	25 MT / 20'FCL

specifications.				
Property	Unit	Value		
NaHCO3	%	99 (min)		
Arsenic (As)	ppm	2 (max)		
Iron (Fe)	ppm	20 (max)		
Heavy Metals (Pb)	ppm	10 (max)		
Sulphate (as SO4)	%	0.03 (max)		
Chloride (Cl)	%	0.01 (max)		

#### **Applications :**



Food Industry In the food industry, sodium bicarbon-

ate is commonly used as a starter. The mixture of sodium bicarbonate and acid can be used as a rising agent as a veast substitute. Another use of sodium bicarbonate is to produce effervescent salt and beverages.



One of the most prominent uses of sodium bicarbonate is the treatment of wool and silk fabrics. Sodium bicarbonate is widely used in the textile industry for dyeing and printing operations. The leather industry also uses sodium bicarbonate as a neutralizing agent in the tanning process.



When sodium bicarbonate is mixed with water, it will produce a basic solution that can be used to neutralize excess stomach acid, as an antacid for the person who suffers from heartburn and decreasing acidity of urine to treat kidney disorder.



Sodium bicarbonate is used in cosmetics to control the balance of acid-base (pH adjuster). Small amount of sodium bicarbonate can be added to shampoo to create shiny hair and removes product residues.

#### Specifications



### **CONTACT US**

133 Cecil Street, #12-03 Keck Seng Tower, Republic of Singapore - 069535

Tel :+65-62276365 Fax :+65-62256286 Email :contact@chemtradeasia.com