

# PAINT 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.

12 Locations

50+

500+

**Suppliers Products** 

400+

**Clients** 

## **Titanium Dioxide**

Titanium dioxide, also known as Titanium(IV) or Titania, is a simple inorganic compound produced as a pure white powder with the chemical formula  $TiO_2$ . Generally, it is available in two main crystal forms, which are rutile and anatase. Anatase is economical, easily dispersed in water-based systems, and a perfect opacifyer. Untreated titanium dioxide (anatase) has  $TiO_2$  with a refractive index of 2.55. However, it is not commonly used in exterior (weather exposed) paint applications except for highway paints.



HS Code : 3206.11.10 CAS No. : 13463-67-7

Origin : China

Packaging : 80 @ 25 kg PP bag,

22 MT/20'FCL



#### **Specifications:**

Property	Value		
Appearance	White powder		
Odor	Odorless		
рН	5 - 8.5 (10% slurry)		
Melting Point	3326 - 3362 °F (1830 - 1850 °C)		
Boiling Point	4532 - 5432 °F (2500 - 3000 °C)		
Specific Gravity	4.1 approx. (@20 °C)		
Bulk Density	600 kg/m³ approx. (@20 °C)		
Solubility in Water	Insoluble		

#### **Applications:**



Paint & Coating Industry

Titanium dioxide is one of the most widely used white pigments because of its brightness and very high refractive index (n=2.7), in which only a few other materials surpass it.



**Paper Industry** 

Titanium dioxide is an effective opacifier in powder form in paper industry. It is employed as a pigment to provide whiteness and opacity of paper products.



Waste-water Treatment

Heterogeneous photocatalysis using the semiconductor titanium dioxide (TiO<sub>2</sub>) has proven to be a promising treatment technology for water purification.



Plastic Industry

This pigment is used extensively in plastics and other applications for its UV resistant properties where it acts as a UV absorber, efficiently transforming destructive UV light energy into heat.



## **Formic Acid**

Formic acid is the simplest carboxylic acid and has a formula of HCOOH. Formic acid can be found in the venom of ants. 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.

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 <sup>-</sup>	%	≤0.0060
SO <sub>4</sub> <sup>2-</sup>	%	≤0.020
Fe³+	%	≤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.



Leather Industry

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



Paint & Coatings Industry

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



Other Applications

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.

## **Calcium Carbonate**

Calcium carbonate is known by the formula CaCO<sub>3</sub>. It comprises 4 % of the earth's total crust and is found in egg shells, snails, mineral rocks, pearls, shells of marine organisms and so on. It is an odourless, tasteless powder used in health supplements, agricultural industry, for environmental applications and more

HS Code : 2836.50.00 CAS No. : 471-34-1 Origin : China

Packaging : • 1000 @ 25 kg PP bag

without pallet, 25 MT / 20' FCL

• 1080 @ 25kg PP/PE bags,

27 MT / 20' FCL



Property	Unit	Value
Appearance		White Powder
Purity	%	99.0
Density at 25°C	g/mL	2.93
Melting Point	°C	1339
Boiling Point		Decomposes
Solubility in Water		Insoluble
Storage Condition	°C	25

#### **Applications:**



**Paint Industry** 

Typically, PCC (Precipitated Calcium Carbonate) is used as an extender in paints, particularly in the matte emulsion paint which has chalked or marble typically 30% by weight in the paint.



**Construction Industry** 

Ground Calcium Carbonate or GCC is used in the construction industry, as building material by itself, such as marble, or as an aggregate of limestone for road building.



**Plastics Industry** 

Coated PCC is used as filler in plastics to improve mechanical properties such as tensile strength and elongation and electrical properties such as volume resistivity.



**Ceramics Industry** 

Calcium carbonate is known as whiting, and it is commonly used for many glazes in its white powdered form. The whiting acts as a flux material in the glaze when the glaze is fired in a kiln.

# **Calcined Clay**

Kaolin, or china clay, is defined as a white, claylike material composed mainly of kaolinite, a hydrated aluminum silicate (Al2O3·2SiO2·2H2O), and other kaolin-group minerals. Kaolin has a wide variety of industrial applications including paper coating and filling, refractories, fiberglass and insulation, rubber, paint, ceramics, and chemicals.

HS Code : 2507.00.10 CAS No. : 1332-58-7 Origin : China

Packaging : 25kg/Woven Bag with PE Inner Lining



#### **Specifications:**

- p							
Property	Unit	JX-1	JX-2	JX-3	JX-4	JX-5	JX-6
Appearance		White to yellowish or grayish powder					
$Al_2O_3$	%	45 - 48	45 - 48	44 - 47	43 - 46	42 - 45	40 - 45
Fe <sub>2</sub> 0 <sub>3</sub>	%	≤1.0	≤1.3	≤1.5	≤1.8	≤2.2	≤3.0
Density	g/cm³	2.58	2.53	2.52	2.50	2.45	2.40
Refractoriness	°C	1780	1770	1760	1750	1730	1710
Size		0-1MM, 1-3MM, 3-5MM, 5-8MM, 8-15MM, 100MESH, 180MESH, 200MESH, 325MESH or as per customer's requirements.					

#### **Applications:**



**Paint Industry**Kaolin is widely used widely used in paint industry due to its consistency, performance and costs.



Paper Industry
Calcined kaolin supports papermakers
in their thermal, packaging and
graphical applications.



The bonds between the kaolin and the polymers provide enhanced mechanical strength, improved impact and flex strength, and a high degree of hydrophobicity.



Agriculture Industry
Kaolin is used in a variety of agricultural applications including seed coatings and pesticide formulations.

## **Talcum**



Talc, also known as Talcum, is mainly comprised of hydrated magnesium silicate. Due to its platy structure, it is the softest material present across the globe which drives its popularity in the talcum powder industry. It is chemically inert, and thus neither explosive nor flammable. Talc is obtained from an open pit mine where it involves drilling, blasting and partial crushing of the talc rock

HS Code : 2526.22.00 CAS No. : 14807-96-6

Origin : China

Packaging : • 840 @ 25 kg bag, 21 MT / 20'FCL

• 940 @ 25 kg bag, 21 MT / 20'FCL

#### **Specifications:**

Property	Unit	Value
Appearance		White Powder
Density	g/cm³	2.75
Melting Temperature	°C	1250 - 1350
рН		9 (Suspension 10% talc in water)
Solubility in Water	%	>0.2
SiO <sub>2</sub>	%	63.02
MgO	%	32.22
$Al_2O_3$	%	0.147
Loss in Ignition		4.36

#### **Applications:**



**Paint Industry** 

In the paint industry, talc is the most widely used extender mineral. Talc increases smoothness, stability, improves coverage properties and fluidity of paint.



Soap & Detergent Industry

Talc powder acts as a carrier and filler to reduce the cost of detergents. It is also used in soap, occupying 5 to 40% of its composition by a binding agent to give the desired hardness.



**Plastic Industry** 

Talcum is used to stiffen thermoplastics, mainly polypropylene but also polyethylene and polyamide (nylon).



**Paper Industry** 

In the paper industry, talc plays an important role in three stages of papermaking: as a filler, to control pitch and stickles and in paper coating.

# **Barium Sulphate**

Barium sulphate has the chemical formula BaSO4 and it is a barium salt of sulphuric acid. It is an odor-less white crystalline powder in physical appearance. Barium sulphate is insoluble in water, dilute acids and alcohol and concentrated sulphuric acid. It can be discovered as the main commercial source of barium and materials prepared from it.



HS Code : 2511.10.10 CAS No. : 7727-43-7

Origin : China

Packaging : 800 @ 25 kg Plastic Woven Bag

with PE Liner, 20 MT/ 20 FCL

#### **Specifications:**

Property	Unit	Value
Appearance		White crystalline
Purity	%	93 - 98
Density at 25°C	g/cm³	4.5
Solubility at 20°C	g/100mL	0.0002448
Melting Point	°C	1345
Boiling Point	°C	1600
Refractive Index at 20°C		1.64

#### **Applications:**



**Paper Industry** 

Barium sulphate is used as a white pigment for paper pigment due to its white appearance. In ink-jet printing, barium sulfate is employed to improve the brightness and whiteness of the paper. For photographic paper, a thin layered coating of barium sulfate would help to increase the reflectiveness of the image.



Paint & Coatings Industry

Barium sulfate serves a white pigment in paints, modifying consistency in paints. In addition, as a coating agent it is useful in the casting of copper anode plates as well.



# **Turpentine**

Turpentine, also called spirit of turpentine, oil of turpentine, wood turpentine or gum turpentine is a fluid obtained by the distillation of resin obtained from trees, mainly pine trees. It is composed of terpenes, mainly monoterpenes alpha-pinene and beta-pinene. It has a paint-like odour.

HS Code : 3805.10.20 CAS No. : 8006-64-2 Origin : China

Packaging : 175 kg Galvanized Iron Drum

#### **Specifications:**

Property	Unit	Value
Appearance		Colorless liquid with paint-like odour
Typical Constituents	%	α-Pinene: 40–55 β-Pinene: 30–40 Other Terpenes: 3–10
Boiling Point	°C	153 - 175
Melting Point	°C	-55
Density	g/cm³	0.86
Heavy Metals (Pb)	%	≤0.0002
Non-Volatile Matter	%	≤1.0

#### **Applications:**



**Paint Industry** 

Gum turpentine or spirits of gum turpentine is recommended for artists' painting or varnish applications over other turpentine products, such as wood turpentine. Wood turpentine can be used as a solvent for oil paint, but gum turpentine is more suitable for natural varnishes.



Chemical Intermediates

Turpentine is also used as a source of raw materials in the synthesis of fragrant chemical commercial compounds such as camphor, linalool, alpha-terpineol, and geraniol. These products are usually produced from alpha-pinene and beta-pinene, two of the chief chemical components of turpentine.



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