

RUBBER RAW MATERIAL 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 set up 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.

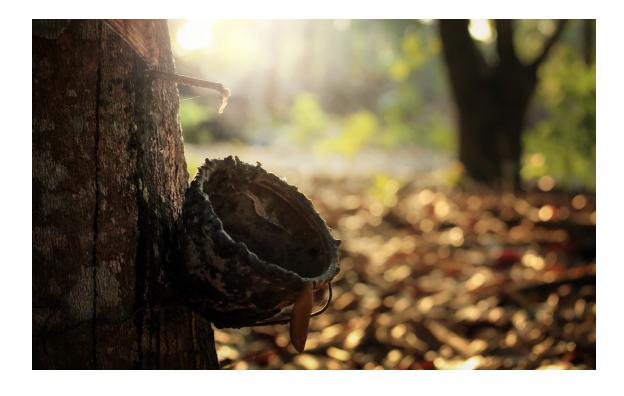


About Rubbertradeasia

Rubbertradeasia is Tradeasia International's rubber raw material marketplace. Our platform provides a wide range of raw materials for the rubber industry across the world. Our goal is to link customers anywhere in the world with top rubber raw material producers for a seamless and secure trade to fulfill our customers' needs.

To be a reliable and trustworthy partner in the global supply chain of rubber raw material, we strive to provide an eligible marketplace to ensure top-quality rubber raw material and services through effective supply chain solutions while providing profitable and sustainable growth to all our customers.

We value trust, integrity, commitment, and partnership through an effective solution-oriented management system.





Category: Natural Rubber

Prevulcanized Latex

Prevulcanized latex manufactured by a special process that produces concentrates particularly suitable for dipping applications. It has some important quality such as high latex stability and long storage life, exceptionally transparent films, high tensile strength, and excellent resistance to ageing.

HS Code : 400110 CAS No. : 9006046

Origin : United Kingdom

Packaging: Flexi bags (20-21 ton), Drums (250 kg), IBC tank (1 ton)



Specifications:

Property	Unit	Value
Appearance		Milky white liquid
рН		10.5
Boiling point/range	°C	100
Odour		Ammoniacal
Solubility (water)		Insoluble

Applications:



Children's Toy

Many varied products could be made from prevulcanized NR latex through various manufacturing processes. Commonly it is used for childern's toys such as foam toys, baby teats, and balloons.



Category: Natural Rubber

Ribbed Smoked Sheet (RSS)

Ribbed smoked sheet is natural rubber that is derived from the latex sap of Hevea brasiliensis. It is processed mechanically and chemically by drying unsmoked sheets using a smokehouse. There are 6 grades of RSS, which are based on the purity, elasticity, and color of the sheet. The grades are RSS 1X, RSS 1, RSS 2, RSS 3, RSS 4, and RSS 5.

HS Code : 4001.21.00
CAS No. : 9006-04-6
Origin : Indonesia
Packaging : 113 kg/bale

Specifications:

RSS1X	Dry, clean, strong, sound, and evenly smoked rubber sheet. Free from blemishes, specks, resinous matter (rust), blisters, sand, dirty packing, and any other foreign matter.
R551	Dry, clean, strong, and sound rubber sheet. Free from blemishes, resinous matter (rust), blisters, sand, dirty packing, and any other foreign matter.
RSS2	Dry, clean, strong, and sound rubber sheet. Free from blemishes, blisters, sand, dirty packing, and any other foreign matter. However, there are slight resinous matter (rust) and slight amounts of dry mold on wrappers, bales surfaces, and interior sheets not more than 5%.
RSS3	Dry and strong rubber sheet. Free from blemishes, blisters, sand, dirty packing, and any other foreign matter. However, there are slight resinous matter (rust) and slight amounts of dry mold on wrappers, bales surfaces, and interior sheets not more than 10%.
RSS4	Dry rubber sheet that is free from blemishes, blisters, sand, dirty packing, and any other foreign matter. However, there are slight resinous matter (rust) and slight amounts of dry mold on wrappers, bales surfaces, and interior sheets not more than 20%.
RSS5	Dry and firm rubber sheet that is free from blisters. There are slight resinous matter (rust) and slight amounts of dry mold on wrappers, bales surfaces, and interior sheets not more than 30%.

Applications:



Ribbed Smoked Sheet can be used as tire raw material.



Ribbed Smoked Sheet can be used as shoe soles.



Ribbed Smoked Sheet can be used as rubber tubes

Category: Natural Rubber

Skim Rubber

Skim Rubber is a material which results from the production of latex concentrate by centrifugation. After the centrifugation process, some 5-10% of the total rubber, together with an enhanced proportion of the non-rubber constituents of the original latex, remain in the serum phase to form 'skim latex'. Neutralization and coagulation of this latex by appropriate methods then gives 'skim rubber'.

HS Code : 40012970 CAS No. : 9006046

Origin: Thailand, Indonesia

Packaging: Wooden pallet crates or shrink-wrapped on pallet bases

Specifications:

Property	Unit	Value
Dirt	%	0.092
Ash	%	0.84
Volatile matter	%	2.74
Nitrogen	%	2.35
Ро		50
Plasticity Retention Index		22.5
Mooney Viscosity, ML (1'+4') 100 °C		77.35

Applications:



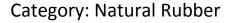
Industry Wheel

Skim rubber is a low-dirt rubber that can be utilized in a variety of applications. It is used to create industrial wheels such as trolley, bicycle, and forklift wheels.



Other Industrial Applications

The elastic properties of skim rubber are also commonly used in shoe soles, playgrounds, and rubber carpets. It also can be used for barriers or bumpers.



Technically Specified Rubber (TSR)

Natural rubber is obtained from rubber plants that can only be found in tropical climes. The coagulated rubber latex is removed, washed, and dried after being treated to eliminate impurities. Following these operations, the dry material is baled and palleted for storage and transportation.

Natural rubber is mostly produced in Asia. Around 72 percent of the world's natural rubber is produced in these three countries: Indonesia, Thailand, and Malaysia.

Technically specified rubber (TSR) is a grading system for natural rubber that is based on guaranteed rubber test specifications. Some standards may differ slightly depending on its origin. Dirt, ash, nitrogen, and volatile matter content; plasticity retention index (a measure of a rubber's thermal stability and aging resistance that is directly related to the cleanliness of the rubber); mooney viscosity of controlled-viscosity (CV) grades; and color of color-controlled grades are the properties that have been tested.

Specifications:

Standard Indonesian Rubber

		TSR	CV	TS	R L	TRS 5	TSF	R 10	TSF	20
Property	Unit	SIR 3CV50	SIR 3CV60	SIR 3L	SIR 3WF	SIR 5	SIR 10	SIR 10VK	SIR 20	SIR 20VK
Dirt	%wt	0.03	0.03	0.03	0.03	0.05	0.10	0.10	0.20	0.20
Ash	%wt	0.50	0.50	0.50	0.50	0.50	0.75	0.75	1.00	1.00
Nitrogen	%wt	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Volatile matter	%wt	0.60	0.60	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Initial Plasticity		30	30	30	30	30	30	30	30	30
Plasticity Retention Index		60	60	75	75	70	60	60	50	50
Mooney Viscosity, ML (1'+4') 100°C		50 +/- 5	60 +/- 5	NA	NA	NA	NA	60 +/- 5*	NA	60 +/- 5*

Standard Thailand Rubber

		TSR CV	TSR L		TRS 5 TSR 10		TSR 20		
Property	Unit	STR 5 CV	STR XL	STR 5L	STR 5	STR 10	STR 10CV	SIR 20	STR 20CV
Dirt	%wt	0.04	0.02	0.04	0.04	0.08	0.08	0.16	0.16
Ash	%wt	0.60	0.40	0.40	0.60	0.60	0.60	0.08	0.08
Nitrogen	%wt	0.60	0.50	0.60	0.60	0.60	0.60	0.60	0.60
Volatile matter	%wt	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Initial Plasticity		NA	35	35	30	30	NA	30	NA
Plasticity Retention Index		60	60	60	60	50	50	40	40
Mooney Viscosity, ML (1'+4') 100°C		60 +7/-5	NA	NA	NA	NA	60 +7/- 5*	NA	65 +7/- 5*

Standard Vietnam Rubber

		TSR CV		TSR L	TRS 5	TSR 10	TSR 20
Property	Unit	SVR CV50	SVR CV60	SVR 3L	SVR 5	SVR 10	SVR 20
Dirt	%wt	0.03	0.03	0.03	0.05	0.80	0.16
Ash	%wt	0.50	0.50	0.50	0.50	0.75	1.00
Nitrogen	%wt	0.60	0.60	0.60	0.60	0.60	0.60
Volatile matter	%wt	0.80	0.80	0.80	0.80	0.80	0.80
Initial Plasticity		NA	NA	35	30	30	30
Plasticity Retention Index		60	60	60	60	50	40
Mooney Viscosity, ML (1'+4') 100°C		50 +/- 5	60 +/- 5	NA	NA	NA	NA



Category: Synthetic Rubber

Ethylene-Propylene-Diene-Monomer Rubber (EPDM)

Ethylene-Propylene-Diene-Monomer Rubber (EPDM) is a synthetic rubber. Its molecular structure has a single bond, chemically saturated backbone, making it extremely resistant to outdoor conditions. The best feature of EPDM is its weatherproofing. In addition, it is the most waterproof rubber available. EPDM is also chemical and steam resistant, working in temperatures up to 392°F (200°C) without air.

HS Code : 40027000 CAS No. : 25037-36-2 Origin : Brazil

Packaging : Cardboard box, supported packaging; LDPE bale wrap; 30 standard

bales (750 kg)



Specifications:

Property	Unit	Value
Appearance		Bales
Colour		White
Decomposition temperature	°C	> 300
Mooney Viscosity ML (1+4) 125 °C	MU	65
Ethylene Content	wt %	48
ENB Content	wt %	9
Molecular Weight Distribution		CLCB
Density	g/cm³	0,86

Applications:



Automotive Industry

EPDM is used for automotive body sealing, radiator hoses, brake parts, and belts or engine mounts, including windshield wipers. It exhibits very low density and is highly resistant against oxygen, ozone, heat, and irradiation.



Construction Industry

Roofing is a major application for EPDM. However, it is also used for sealant, expansion joints, garage door seals, pool and tank liners, and waterproof coating for bitumen roofs.



Other Industrial Applications

EPDM is used in solar panel tubing, tunnel seals, public transport seals, transmission and transport belts via roll covers in the printing and paper industry, also solid and foamed railway pads.

Polybutadiene Rubber (PBR)

Polybutadiene Rubber is a synthetic rubber that is essentially a polymerization product of butadiene in solution. The polymer contains no nitrosamines and substances that may become a source of nitrosamines. The advantages of polybutadiene rubber are high wear due to the low coefficient of friction and strength properties, excellent elastic properties and low hysteresis loss, and resistance to low temperatures.



HS Code : 40022000 CAS No. : 9003-17-2 Origin : Russia

Packaging : PE wrapping film (Vicat softening point ≤95 °C); Metal container

1.26 MT

Specifications:

Property	Unit	Value
Appearance		Bale of white to beige color; weight of a bale — (30 \pm 1) kg
Mooney viscosity UML 1+4 (100 °C)	UM	44 ± 5
Volatile matter	% wt	≤0,8
Ash	% wt	≤0,5
Antioxidant (CAS No. 110553-27-0	% wt	0,2-0,4
Auto-ignition temperature	°C	325 – 355
Decomposition temperature	°C	> 300
Density	g/cm³	0.91 – 0.93

Applications:



Tire Production

Polybutadiene Rubber is widely utilized in tire sidewalls and treads. It has great abrasion resistance and minimal rolling resistance due to its low glass transition temperature.



Golf Balls
Production

Polybutadiene Rubber is also used in golf ball cores due to its outstanding resilience. This application has grown since the golf ball industry used twopiece, solid core construction



Other Industrial Applications

Polybutadiene Rubber is also used in conveyor belts, driving belts, hoses (hose goods), and asbestos-rubber goods.

Acrylonitrile-Butadiene Rubber (NBR)

Acrylonitrile-Butadiene Rubber is usually known as Nitrile Rubber (NBR). Nitrile rubber is most popular for its satisfactory oil resistance, heat resistance, good tensile strength, and good frost resistance. Nitrile rubber is produced in different grades depending on the acrylonitrile (ACN) content. The higher the ACN content in a grade of NBR, the higher the oil resistance will be but then the low-temperature flexibility will get poorer. Typical grades have a working temperature range of -25°C to +100°C.

HS Code : 400259 CAS No. : 9005-98-5 Origin : Russia

Packaging : Plywood 1,26 MT or Plastic Container 0,54 MT



Specifications:

Property	Unit	Value
Appearance		Bales from light-yellow to pink color. Weight of a bale 30 \pm 0,5 kg
Physical state (at 20 °C and 1013 hPa)		Elastic solid (rubber is produced in the form of briquettes)
Colour		Light yellow to brown
Ignition temperature	°C	295 ± 15
Auto-Ignition Temperature	°C	355 ± 15
Density	g/cm³	0.94 – 1.0
Decomposition Temperature	°C	≈ 430
Viscosity (Mooney Viscosity) conv. units (at 100 °C) @ 4 min		30 – 120

Applications:



Automotive Industry

NBR materials can resist temperatures ranging from -25 to +100 °C in automotive applications. It's great for gaskets, oil seals, o-rings, and engine hoses.



Textiles use Nitrile Rubber to waterproof and polish fabrics. In nuclear applications, it is utilized as nitrile safety gloves.



The rubber is used in shoes, floor mats, industrial belting, sponges and molded items. It's also utilized to manufacture ink-spreading rolls in the printing sector.

Styrene-Butadiene Rubber (SBR)



Styrene-Butadiene Rubber (SBR) consists of about 25% styrene, with butadiene making up the rest. It has similar properties like natural rubber. This rubber is a widely used synthetic rubber known for its abrasion resistance, high tensile, impact strength, and resilience. It's flexible in low temperatures has decent heat resistance as well. SBR is water, organic acid, ketone, chemical, alcohol, and aldehyde resistant.

HS Code : 400219 CAS No. : 9003-55-8 Origin : Russia

Packaging : PE wrapping film (Vicat softening point ≤95 °C); Metal or

Plywood Container 1.26 MT, Cardboard Box 0,54 MT

Specifications:

Property	Unit	Value
Appearance		Bale from light-yellow to light-brown color; Weight of a bale 30 ± 1 kg
Mooney viscosity MML 1+4 (100 °C)	UM	51 – 58
Organic acids	% wt	5.0 – 7.0
Organic acids soap	% wt	≤ 0.30
Bound styrene	% wt	23.5 ± 1,0
Volatile matter	% wt	≤ 0.8
Ash	% wt	≤ 0.5

Applications:



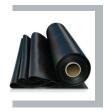
Automotive Industry

SBR is used in light application automotive tires and parts, including drive couplings. It is used in tire products which also includes tread rubber.



Other Applications

SBR is also included in shoe soles, carpet backing adhesive, and in molded rubber goods.



Industrial Applications

In industrial applications, SBR is used to protect wire and cable insulation, haul-off pads, roll covers and hoses. SBR is used in rubber gaskets for metal adhesion and abrasion.

Category: Synthetic Rubber

Butyl Rubber

Butyl rubber is an elastomeric polymer used widely in adhesives and sealants, both as primary binders and as tackifiers and modifiers. Butyl rubber is a copolymer of isobutylene with a small amount of isoprene. These materials have relatively low strength and tend to exhibit creep under load. They are useful in packaging applications where their low permeability to gases, vapors, and moisture can be exploited.



HS Code : 40023100 CAS No. : 9010859 Origin : Chine

Packaging : PE wrapping film (Vicat softening point ≤95 °C);

Metal Containers (1.26 MT)

Specifications:

Property	Unit	Value
Appearance		Bale from white to light amber color; Weight of a bale $30 \pm 1 \text{ kg}$
Color		White to yellow
Flash point	°C	310 ± 15
Density (at 20°C)	g/cm³	0.90 - 0.92
Solubility (water) at 25°C	mg/l	Insoluble
Auto Ignition	°C	425 ± 15

Applications:



Butyl rubber is used in car tires and inner tubes. Butyl rubber can make more durable tubeless tires with an inner liner that is chemically attached to the tire body.



Healthcare

Butyl rubber is extensively used in pharmaceutical rubber items including closures and infusion container seals. Butyl rubber pharmaceutical stoppers and seals are clean and waterproof.



Industrial Applications

Butyl rubber is perfect for hoses and gaskets. Condenser packaging and conveyor belts also use it.



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