Company Profile

Heze Great Bridge Chemical Co., Ltd. is a professional supplier of rubber chemicals in China with ISO 9001:2015 certificate. We mainly supply Rubber Accelerators, Rubber Antioxidants, Rubber Vulcanizing Agent and Rubber Anti-scorching Agent with powder, oiled and granule form. Meanwhile supplying CR, IIR, CIIR, Insoluble Sulfur, Masterbatch, Silica, etc.We have established long-term stable and strategic cooperative relationship with many major rubber products companies. Over the past 10 years, our products have been exported to more than 20 countries and regions. Stable quality and reasonable price made us win the good reputation from our global customers.

Over the years, we have been trying our best to do better with the advanced ideas, high quality products and good service. Honesty and Mutual Benefits is our Business philosophy.

Heze Great Bridge Chemical Co., Ltd. is committed to provide stable products and outstanding service. As your business partner, we hope we'll grow up together with the rubber industry developing in the future.

质 量 管 理 体 系 认 证 证 书

证书编号：10422Q00674R0S

兹证明

菏泽开发区大桥化工有限公司

（地址：菏泽市丹阳办事处牡丹区在水一方小区商业 7 幢 01 单元 11013 室
统一社会信用代码：91371700494947834 邮编：274000）

质量管理体系符合标准：

GB/T 19001-2016/ISO 9001:2015

通过认证范围如下：

* 橡胶促进剂、橡胶防老剂、橡胶粘合剂、橡胶防焦剂、橡胶防护蜡、交联剂、氯丁橡胶、酚醛树脂、丁苯吡胶乳、氟橡胶、硅橡胶、母胶粒、均匀剂、二硫化烷基酚、锦纶 6 工业丝 、硼酰化钴、硅烷偶联剂 、 塑解剂 DBD 、石油树脂 、不溶性硫磺、白炭黑 、三羟甲基丙烷三甲基丙烯酸酯、硬脂酸、氧化锌的销售（不含危化品，不含仓储） *

涉及本证书的范围和 GB/T 19001-2016/ISO 9001:2015 要求的适用性问题，可通过向本机构咨询而得到进一步的澄清。证书在国家规定的行政许可、资质、强制性产品认证有效期内，定期接受监督审核并经审核合格情况下继续有效。证书信息可在本机构及国家认证认可监督管理委员会官方网站（www.cnca.gov.cn）上查询。

发证日期：2022 年 04 月 25 日　　有效期：2022 年 04 月 25 日至 2025 年 04 月 24 日

签发人：

山东世通国际认证有限公司

IAF　CNAS　中国认可 国际互认 管理体系 MANAGEMENT SYSTEM CNAS C104-M

CERTIFICATE OF CONFORMITY
QUALITY MANAGEMENT SYSTEM CERTIFICATION

NO. 10422Q00674R0S

This is to certify that the Quality Management System of

HEZE GREAT BRIDGE CHEMICAL CO.,LTD.

(Address：Room 1103, Park Mansion, 1679 Renmin Road, Heze City, Shandong Province, China
Unity Social Credit Code:91371700494947834 Postal Code:274000)

is in conformity with:

GB/T 19001-2016/ISO 9001:2015

This system is valid to:

* RUBBER ACCELERATOR, RUBBER ANTIOXIDANT, RUBBER ADHESIVE, RUBBER ANTISCORCHING AGENT, RUBBER PROTECTIVE WAX, CROSS-LINKING AGENT, POLYCHLOROPRENE RUBBER, PHENOLIC RESIN, VP LATEX (BUTADIENE-STYRENE-VINYL PYRIDINE LATEX), FKM, SILICONE, MASTERBATCH, HOMOGENIZING AGENT, VULCANISATION AGENT BUTYL PHENOL DISULFIDE, NYLON 6 YARN, COBALT BOROACYLATE, SILANE COUPLING AGENT, PEPTIZER DBD, PETROLEUM RESIN, INSOLUBLE SULFUR, SILICA, TRIMETHYLOLPROPANE TRIMETHACRYLATE (TMPTMA), STEARIC ACID, ZNO SALES (EXCLUDING DANGEROUS CHEMICALS AND STORAGE) *

Further clarifications regarding the scope of this certificate and the applicability of GB/T 19001-2016/ISO 9001:2015 requirements may be obtained by this body organization. Certificate in the state regulations administrative license, qualification, mandatory product certification received within the validity period, the regular supervision review of the case effectively. This certificate information is available on the official website of the agency and Certification & Accreditation Administration of the People's Republic of China (www.cnca.gov.cn).

Issue date :04-25-2022　　Term of validity: 04-25-2022 TO 04-24-2025

Representative of the company (Director):

S.p. chun

SHANDONG SEATONE INTERNATIONAL CERTIFICATION CO.,LTD.

IAF　CNAS　中国认可 国际互认 管理体系 MANAGEMENT SYSTEM CNAS C104-M

Heze Great Bridge Chemical Co., Ltd.

Contents

Rubber Accelerators

Product Name	Chemical Name	Product Index	Application/ Package/ Validity
CBS(CZ) CAS NO.: 95–33–0	N-Cyclohexyl-2-benzothiazole sulfenamide C13H16N2S2	Appearance: Grayish-white or yellowish powder Initial melting point≥98.0℃ Heating loss≤0.30% Ash content≤0.30% Residue(150μm)≤0.05% Free amine≤0.50% Insoluble in Methanol≤0.50%	Application: CBS is an accelerator with high activity and has greatly delayed action, high anti-scorching quality, processing safety, short cure time. Its activity can be reinforced by thiuram and dithiocarbamate type alkaline accelerators. Mainly used in manufacture of tires, rubber shoes, rubber tube, cable and other technical rubber goods. Package: 25kgs/bag Validity: 12 months
NOBS (MBS/ OBTS/ MOR) CAS NO.: 102–77–2	N-Oxydiethylene-2-benzothiazole sulfenamide C11H12N2S2O	Appearance: Light yellow granule Initial melting point≥80.0℃ Heating loss≤0.50% Ash content≤0.30% Free amine≤0.50% Insoluble in Methanol≤0.50%	Application: NOBS is a vulcanization accelerator with delayed action, short cure time, has high anti-scorching quality and processing safety. It is suitable for NR and SR. Mainly used in manufacture of tires, rubber tubes, rubber shoes, rubber tape and other technical rubber goods. Package: 25kgs/bag Validity: 12 months
TBBS(NS) CAS NO.: 95–31–8	N-Tertiarybutyl-2-benzothiazole sulfenamide C11H14N2S2	Appearance: white or yellowish powder Initial melting point≥104.0℃ Heating loss≤0.40% Ash content≤0.30% Residue(150μm)≤0.10% Free amine≤0.50% Insoluble in Methanol≤1.0%	Application: NS is a Vulcanization accelerator with delayed action, short cure time, has high anti-scorching quality, processing safety. Widely used in all sorts of rubber products and tires, especially the meridian tires. The product is an excellent delayed accelerator with more delayed action and great curing rate and other advantages. Package: 25kgs/bag Validity: 12 months
DCBS(DZ) CAS NO.: 4979–32–2	N,N'-Dicyclohexyl-2-benzothiazole sulfenamide C19H26N2S2	Appearance: Light yellow to light pink powder Initial melting point≥97.0℃ Heating loss≤0.40% Ash content≤0.40% Free amine≤0.40% Insoluble in Cyclohexane≤0.50% Purity≥98.0%	Application: The product possess the best antiscorching quality of sulfenamide type accelerators. Its antiscorching quality and processing safety in natural rubber are better than that of DIBS. Mainly used in manufacture of tires, rubber belts and shock absorber. Package: 25kgs/bag Validity: 12 months

Rubber Accelerators

Product Name	Chemical Name	Product Index	Application/ Package/ Validity
TBSI CAS NO. : 3741–80–8	N-t-butyl-di-(2-benzothiazole) Sulfenimide C18H17N3S4	Appearance: White to grey powder Initial melting point≥128.0℃ Heating loss≤0.50% Ash content≤0.50% Residue(150μm)≤0.10%	Application: TBSI show longer scorch safety, better antireversion curing, lower curing speed, higher modulus and lower HBU of NR and diene rubbers than TBBS. TBSI can increase the heat stability and durability of bonding compounds of tire rubber to steel cord. The physical performance of vulcanizates is almost same with TBBS and DCBS. Suitable for the more thick section rubber products, e.g. TBR, OTR and GOTR tires. Package: 20kgs/bag Validity: 12 months
MBT(M) CAS NO.: 149–30–4	2-Mercaptobenzothiazole C7H5NS	Appearance: Light yellow or grayish-white powder Initial melting point≥170.0℃ Heating loss≤0.30% Ash content≤0.30% Residue(150μm)≤0.10%	Application: Accelerator M is a hemi-ultra accelerator of NR and SR, has wide range of vulcanization. It can be applied alone and together with dithioarbamates, thiuram type, guanidine and other alkaline accelerators. Mainly used in manufacture of rubber tires, belts, rubber shoes and other technical rubber goods. Package: 25kgs/bag Validity: 24 months
MBTS(DM) CAS NO.: 120–78–5	Dibenzothiazole Disulfide C14H8N2S4	Appearance: Light yellow or grayish-white powder Initial melting point≥164.0℃ Heating loss≤0.40% Ash content≤0.50% Residue(150μm)≤0.10% Free MBT≤1.0%	Application: The product is an accelerator of NR and SR. It has level and middle cure rate and higher Vulcanization temperature. It operates safely, disperses easily and does not contaminate. It is aging resistant. Mainly used in manufacture of tires, rubber tubes, rubber shoes, rubber cloth and other technical rubber goods. MBTS works as plasticizer and delayed action activator in polychoroprene. Package: 20 or 25kgs/bag Validity: 24 months
Na.MBT CAS No.: 2492–26–4	Sodium salt of 2-Mercaptobenzothiazole C7H4NNaS2	Appearance: Pale yellow transparent liquid Active content≥50.0% Density (20℃)≥1.20g/cm3 pH (1% solution)9.0-11.5	Application: Na.MBT can be used as the copper corrosion inhibitor in circulating cool water system. The mechanism is due to the chemical absorption of Na•MBT on copper surface, or chelation reaction between them. This product can also be used as plasticizer and photometer for acid copper plating. Package: 200L plastic drum, IBC (1000L) Validity: 6 month

Rubber Accelerators

Product Name	Chemical Name	Product Index	Application/ Package/ Validity
ZMBT(MZ) CAS NO.: 155–04–4	Zinc 2-mercaptobenzothiazole C14H8N2S4Zn	Appearance: Light yellow powder Initial melting point≥200.0℃ Heating loss≤0.30% Zinc content15.0%-22.0% Free MBT≤0.20% Residue(150μm)≤0.10% Residue(63μm)≤0.50%	Application: Used for NR, IR, SBR, NBR, EPDM and latex. Mainly used in the manufacture of latex products, foam rubber, latex coating gloves, etc. Package: 25kgs/bag Validity: 24 months
TMTM (TS) CAS NO.: 97–74–5	Tetramethyl thiuram monosulfide C6H12N2S3	Appearance: yellow powder Initial melting point≥105.0℃ Heating loss≤0.30% Ash content≤0.30% Residue(150μm)≤0.10%	Application: Used as a secondary accelerator or as a booster for sulphenamides to achieve faster cure rate. An excellent accelerator for polychloroprene in association with DPG and Sulphur. Its critical temperature is 121℃. Package: 25kgs/bag Validity: 24 months
TMTD(TT) CAS NO.: 137–26–8	Tetramethyl thiuram disulfide C6H12N2S4	Appearance: White or grayish powder Initial melting point≥142.0℃ Heating loss≤0.30% Ash content≤0.30% Residue(150μm)≤0.10% Purity≥96.0%	Application: TMTD is used as a Vulcanization accelerator in the rubber industry, It is suitable for NR and SR .Mainly used in the manufacture of tires, rubber shoes, cable and other technical rubber goods. Used as germicide and insecticide in agriculture, also as lubricant additive. Package: 25kgs/bag Validity: 24 months
TBzTD CAS NO.: 10591–85–2	Tetrabenzylthiuram disulfide C30H28S4N2	Appearance: light yellow powder Initial melting point≥128.0℃ Heating loss≤0.30% Ash content≤0.30% Residue(150μm)≤0.10%	Application: Developed to replace thiurams such as TMTD where the presence of nitrosamines is of concern The dibenzylnitrosamine is not carcinogenic according to published literature. A fast curing primary secondary accelerator in NR, SBR and NBR applications. Be safer to progress, providing longer scorch times than TMTD. Sometime used as retarder in the vulcanization of PVC rubber. Package: 25kgs/bag Validity: 12 months
TETD CAS NO.: 97–77–8	Tetraethyl thiuram disulfide C10H20N2S4	Appearance: Light yellow powder Initial melting point≥66.0℃ Heating loss≤0.30% Ash content≤0.30% Residue(840μm)≤0.00%	Application: Fast-curing primary or secondary accelerator for NR, SBR, Nitrile and EPDM. Less scorch, blooming and good processing safety. Can be used in CR as an anti-scorching agent. The efficiency sulphur content is 11 %. It is also be used as raw material for germicide, pesticide and medicine. Package: 25kgs/bag Validity: 24 months

Rubber Accelerators

Product Name	Chemical Name	Product Index	Application/ Package/ Validity
DPTT(TRA) CAS NO.: 120–54–7	Dipentamethylene thiuramtetrasulfide	Appearance: Light yellow powder Initial M.P. oC ≥110.0 Loss on drying % ≤0.30 Ash % ≤0.30 Residues on 150μm sieve, % ≤0.10	Application: Secondary accelerator for NR, SBR, EPDM, and NBR. For rich sulphur content of 28%, it could be used as cure agent. In the system of SBR and NBR, it could be used the primary cure agent. No poison and no pollution. Easily dispersed in rubber system and water. Package: 25kgs/bag Validity: 24 months
DPG(D) CAS NO.: 102–06–7	Diphenyl guanidine C13H13N3	Appearance: White or grayish white powder Initial melting point≥144.0℃ Heating loss≤0.30% Ash content≤0.30% Residue(150μm)≤0.10% Purity≥97.0%	Application: Generally used for natural and synthetic rubbers. Mainly used in manufacture of tires, slab rubber, rubber shoes and other technical rubber products. Package: 25kgs/bag Validity: 24 months
DOTG CAS NO.: 97–39–2	Diorthotolyl guanidine C15H17N3	Appearance: Gray-white powder Initial melting point≥170.0℃ Heating loss≤0.30% Ash content≤0.30% Residue(150μm)≤0.10%	Application: Suitable in NR, SNR, IIR, IR, SBR, NBR and CR. Seldom use alone, commonly with thiazoles, thiurams, dithiocarbamales and sulphenmides to promote its activity. Its critical temperature is 141℃. This product is a plastic-decomposing agent in CR. However, this product is not suitable for food-related products or medical products Package: 20kgs/bag Validity: 24 months
ZDEC (EZ) CAS NO.: 14324–55–1	Zinc diethyl dithiocarbamate C10H20N2S4Zn	Appearance: white powder Initial melting point≥174.0℃ Heating loss≤0.30% Zinc content 17.0%-19.0% Residue(150μm)≤0.10% Soluble Zinc Content≤0.01%	Application: Used for NR, IR, SR, SBR, NBR, EPDM and their latexes. A fast curing primary or secondary effective ultra-accelerator for natural and synthetic latex form compounds. Can be used advantageously for dipped, spread, and cast goods. Package: 25kgs/bag Validity: 24 months
ZDBC (BZ) CAS NO.: 136–23–2	Zinc dibutyl dithiocarbamate C18H36N2S4Zn	Appearance: white powder Initial melting point≥104.0℃ Heating loss≤0.30% Zinc content 13.0%-15.0% Residue(150μm)≤0.10% Soluble Zinc Content≤0.01%	Application: Used for primary or secondary ultra-accelerator in NR. IR, BR, SBR, NBR, HR. EPDM, and their latexes. Effectively used in both natural and synthetic latexes for faster curing at normal (low) temperature than with PZ and EZ, and less scorching and blooming. Package: 25kgs/bag Validity: 24 months

Rubber Accelerators

Product Name	Chemical Name	Product Index	Application/ Package/ Validity
ZBEC (ZTC) CAS NO.: 14726–36–4	Zinc dibenzyl dithiocarbamate C30H28N2S4Zn	Appearance: white powder Initial melting point≥180.0℃ Heating loss≤0.30% Zinc content 10.0%-12.0% Residue(150μm)≤0.10%	Application: Safe-processing secondary accelerator. Can be used as primary in latex. High resistance to hydrolysis, low solubility in rubbers. Fast at higher vulcanisation temperatures. It has longest anti-scorching capability in the dithiocarbamates. Recognised to have low nitrosamine potential Used in sheeting, extrusions and latex. Used in NR, IIR, SBR, and EPDM. Package: 25kgs/bag Validity: 24 months
ZDMC (PZ) CAS NO.: 137–30–4	Zinc dimethyl dithiocarbamate C6H12N2S4Zn	Appearance: white powder Initial melting point≥240.0℃ Heating loss≤0.30% Zinc content 20.0%-23.0% Residue(150μm)≤0.10%	Application: Used for NR, IR, BR, SBR, NBR, HR, EPDM and natural & synthetic latexes. Stronger accelerating power than TMTD. Strong resistance to scorching. Used for rubber coated fabrics, latex products and rubber cement, etc. Package: 25kgs/bag Validity: 24 months
DETU CAS NO.: 105–55–5	N,N,-Diethyl thiourea C5H17N2S	Appearance: White crystal powder Initial melting point≥74.0℃ Heating loss≤0.30% Ash content≤0.30% Residue(840μm)≤0.00%	Application: Generally used for manufacturing industrial products. Special wires, sponge products. Package: 25kgs/bag Validity: 24 months
DBTU CAS NO.: 109–46–6	N,N-Dibutyl thiourea C9H20N2S	Appearance: White crystal powder Initial melting point≥60.0℃ Heating loss≤0.30% Ash content≤0.30% Residue(840μm)≤0.00%	Application: DBTU is an ultra-accelerator for mercaptan-modified CR (1-3phr). It has a vulcanization behavior similar to that of ETU and DETU. It is also used as a secondary accelerator for NR and synthetic rubbers. Package: 25kgs/bag Validity: 24 months
DPTU (CA) CAS NO.: 102–08–9	N-N'-Diphenyl thiourea C13H12N2S	Appearance: White powder Initial melting point≥148.0℃ Heating loss≤0.30% Ash content≤0.30% Residue(150μm)≤0.10%	Application: Medium-speed vulcanization accelerator. Used as secondary accelerator in CR vulcanization and EPDR vulcanization system. Used in latex products, cables and general industrial products. Package: 25kgs/bag Validity: 24 months

Rubber Accelerators/ Vulcanizing Agent

Product Name	Chemical Name	Product Index	Application/ Package/ Validity
ETU (Na–22) CAS NO.: 96–45–7	1,3-Ethylene thiourea C3H6N2S	Appearance: white powder Initial melting point≥195.0℃ Heating loss≤0.30% Ash content≤0.30% Residue(150μm)≤0.10%	Application: ETU has little tendency to scorch, a high degree of processing safety and enables proper vulcanization to be attained speedily at normal vulcanizing temperatures. Presents characteristics vulcanization kinetics and gives the vulcanization with excellent physical properties. Package: 25kgs/bag Validity: 24 months
PDM (HVA–2) CAS NO. : 3006–93–7	N,N-m-phenylene bismaleimide	Appearance: Yellow or brown powder Initial Melting Point℃≥198.0 Loss on Drying≤0.50% Ash≤0.50% Residue on 150μm Sieve≤0.10% Density at 20℃(kg/m)3: 950	Application: PDM as a function of rubber chemicals in rubber processing for the curing agent can also help the system can be used for peroxide curing agent, also can be used as anti-scorching agent and tackifier, both for general-purpose rubber, also applies to special rubber and rubber and use system. In natural rubber, and sulfur coordination to prevent reversion to improve the heat resistance, reduce heat, anti-aging, improve adhesion of the rubber and tire cord and the vulcanized rubber modulus. Package: 20kg/bag Validity: 12 months
DTDM CAS NO.: 103–34–4	4,4'-dithiodimorpholine C8H16N2O2S2	Appearance: White crystal powder Initial melting point≥120.0℃ Heating loss≤0.30% Ash content≤0.30% Residue(840μm)≤0.00%	Application: Sulphur donor vulcanizing agent for efficient vulcanization and semi-efficient vulcanization cure system; provide heat/reversion/aging resistance in NR and synthetic rubbers; non-blooming; excellent storage safety. Package: 25kgs/bag Validity: 12 months
DTDC (CLD) CAS NO.: 23847–08–7	Composition: Dithiocaprolactame	Appearance: White to light yellow powder Melting Point,range≥120℃ Ash, Max 0.5 % Sulfur content, 21-24 % Loss on heating, Max 0.5 % Residue on sieve(100mesh), Min 0.1	Application: This product is mainly used for curing agent of natural rubber, styrene butadiene rubber, acrylonitrile butadiene rubber, which can partially or completely replace the sulfur. Thanks to the characteristic of no blooming, long scorching time, fast curing,etc, it's a best candidate for tire, heat-resistant rubber products, health and color rubber products, and could replace of DTDM due to there is none nitrosamines release. Package: 25kgs/bag Validity: 12 months
HMT CAS No.: 100–97–0	Hexamethylenetetramine C6H12N4	Appearance: White or Colorless Crystal Powder Purity≥90.0% Heating loss≤0.50% Ash content 2.0%-3.0%	Application: Used as resin and plastic cruing agent, rubber accelerator, textile sanforoizing agent. Can be also used for the bactericide and detonator. Package: 25kgs/bag Validity: 12 months

Rubber Antioxidants

Product Name	Chemical Name	Product Index	Application/ Package/ Validity
IPPD (4010NA) CAS No.: 101–72–4	N-Isopropyl-N'-phenyl -1,4-phenylenediamine C15H18N2	Appearance: Grayish purple to purple brown granule Purity≥ 95.0% Initial melting point≥70.0℃ Heating loss≤0.30% Ash content≤0.20%	Application: Mainly used in manufacture of tires, rubber shoes and other rubber products. Package: 25kgs/bag Validity: 12 months
TMQ (RD) CAS NO.: 26780–96–1	Polymerized 2,2,4-trimethyl-1,2-Dihydroquinoline (C12H15N)n n=2-4	Appearance: Amber to brown granule Softening point 80.0℃-100.0℃ Heating loss≤0.30% Ash content≤0.30% Insoluble in Ethanol≤0.20% Dimer, trimer, tetramer content≥40.0%	Application: RD is a very important category rubber antioxidant. It has a good protective effect for heat, oxygen and fatigue aging, and stronger inhibitory effect for metal catalytic oxidation, no spray cream phenomenon, widely used in the manufacture of tyres, motorcycles births, bicycles births, rubber, plastic, adhesive tape, wires, cables and other rubber products. Package: 25kgs/bag Validity: 12 months
6PPD (4020) CAS NO.: 793–24–8	N-(1,3-dimethylbutyl)-N'-phenyl-p–phenylenediamine C18H24N2	Appearance: Purple brown to dark brown granule Assay≥96.0% Heating loss≤0.50% Ash content≤0.10% Freezing point≥45.0℃	Application: Applicable to all types of synthetic rubber and natural rubber. With good dispensability in sizing material and little effect on vulcanization, It can soften sizing material, so can be used for tires and other kinds of rubber products, and also can be used as heat oxygen stabilizer for polyethylene, polypropylene and acrylic resin. Package: 25kgs/bag Validity: 12 months
ODPA CAS NO.: 4175–37–5	Octylated diphenylamine C20H27N	Appearance: Light brown or off white powder Melting point≥87.0℃ Residue on ignition≤0.30% Heating Loss≤0.50%	Application: ODPA is antioxidant for NR, SBR, NBR and CR. It has good protective character to heat, oxygen, flexing and crazing, and is efficient to rubber whether used together with carbon black. It has obvious thermal brittleness resistance in CR, and can increase its protective character to ozone aging. It is mainly used in tyres, tube tyres, cables, rubber tapes, rubber pipes, filling rings, etc. Package: 25kgs/bag Validity: 12 months
DTPD (3100) CAS No.: 27417–40–9	N,N'-Bis(methylphenyl)-1,4-benzenediamine C20H20N2	Appearance: Brownish grey grain Initial melting point 90℃-100℃ Heating loss≤0.50% Ash content≤0.30%	Application: DTPD (3100), which can be classified in p-phenlene antioxidant groups, is excellent antiozonant to chloprene rubber. It is the effective antioxidant used in the tyre industry and also widely used for rubber products. Package: 25kgs/bag Validity: 12 months

Rubber Antioxidants

Product Name	Chemical Name	Product Index	Application/ Package/ Validity
MB CAS NO.: 583–39–1	2-Mercaptobenzimi 3-dazole C7H6N2S	Appearance: White powder Initial melting point≥290.0℃ Heating loss≤0.30% Ash content≤0.30% Residue(150μm)≤0.50%	Application: A non-staining secondary antioxidant for natural rubber, CR, SBR, NBR and EPR etc. Especially effective against heat oxidation in combination with amine. Package: 25kgs/bag Validity: 24 months
MMB CAS No.: 53988–10–6	Methyl-2-Mercaptobenzimi dazoleC6H8N2S	Appearance: Gray-white powder Initial melting point≥270.0℃ Heating loss≤0.50% Ash content≤0.50% Residue(150μm)≤0.10%	Application: The product can be used for natural and synthetic rubbers. As it is secondary antioxidant, ever better effects can be developed when used together with other antioxidants. Package: 25kgs/bag Validity: 24 months
MBZ CAS NO: 3030–80–6	Zinc salt of 2-mercaptobenzimidazol eC14H10N4S2Zn	Appearance: White powder Initial melting point≥240.0℃ Heating loss≤0.50% Zinc content 18.0%-20.0% Residue(150μm)≤0.10%	Application: A non-staining secondary antioxidant for NR, CR, EPR, SBR, NBR, etc. Especially effective against heat oxidation in combination with amine. Package: 25kgs/bag Validity: 24 months
SP CAS NO.: 61788–44–1	Styrenated phenol C22H22O(n=2)	Appearance: faint yellow thick liquid Dioptre(n25d) 1.5990-1.6015 viscosity, pa`s 3.0-5.0 Density(p)g/cm3(20℃) 1.065-1.088 Heating Loss≤1.5% Ash≤ 0.05%	Application: This is for butylbenzenc, chlorine ding, the second grade or third grade synthetic rubber and the natural rubber stabilizer, has the line anti-aged function in the rubber and the emulsion product, can enhance the product the heat-resisting oxygen aging performance, non-toxic, does not have the pollution. Package: 200kgs/drum Validity: 24 months
BHT(264) CAS No.: 128–30–7	2,6 Di-tert-buty1 -4-methylphenol C15H24O	Appearance: White crystals or crystalline powder Purity≥ 95.0% Initial melting point≥69.0℃ Heating loss≤0.50% Ash content≤0.01%	Application: This product is a very important variety among non-pollutant antioxidants and it has a certain protecting effects against the heated oxidantion of the natural rubber, and synthetic rubbers. It can be applied to the manufacturing of white, multi-colored, light, and transparent rubber products. It can be easily dispersed in rubber materials. Because of its low toxicity, it can also be applied the manufacturing of pharmaceutical or sanitary products and to food processing. Package: 25kgs/bag Validity: 12 months

Rubber Antioxidants/ Antiscorching Agent/ Insoluble Sulfur

Product Name	Chemical Name	Product Index	Application/ Package/ Validity
Antioxidant MMBZ (ZMTI) CAS No.: 61617–00–3	Zinc 2-Mercaptomethyl benzimidazole	Appearance: Off-white powder Initial Melting Point ≥ 270.0℃ Loss on Drying ≤)1.5 % Zinc Content 15.0%-22.0% Residue on 63μm Sieve≤ 0.5 % Residue on 150μm Sieve ≤ 0.1%	Application: It is one of the non-polluting antioxidant, similar performance with MBZ, used for NR, SBR, BR, NBR, etc. Heat aging resistance effect of MMBZ is obvious, and it has the synergistic effect with amine, and phenolic antioxidant, to improve the heat aging resistance.MMBZ can be used for NBR. When used together with MBT, MBTS, MMBZ has the role of suppressing the accelerated aging effect of harmful metal. Usually it is used for transparent rubber products, light and bright color rubber products Package: 20kgs/bag Validity: 24 months
Antioxidant NDBC (NBC) CAS No.: 13927–77–0	Nickel dibutyldithiocar bamate	Appearance: Olive-green powder Initial Melting Point ℃ (≥) 84.0 Loss on Drying % (≤) 0.5 Nickel Content % 11.5-13.5 Residue on 150μm Sieve % (≤) 0.4	Application: It is an effective antiozonant in SBR, BR, CR, NBR and IIR compounds for products used in dynamic applications where a wax film might break down and therefore not be efficient. It offers antioxidant protection in CR, CSM, CO, ECO and EPDM. Furthermore it is used for EPDM and CSM vulcanizates requiring high heat resistance, and in colored CR articles where it improves the resistance against sunlight exposure. Package: 25kgs/bag Validity: 24 months
Antiscorching Agent PVI(CTP) CAS NO.: 17796–82–6	N-(cyclhexyl thio) phthalimide C14H15O2NS	Appearance: White or light yellow crystal powder Initial melting point≥89.0℃ Heating loss≤0.50% Ash content≤0.10% Insoluble in Toluene≤0.50% Purity≥96.0%	Application: The product may be used in natural rubber and synthetic rubber. It may protect effectively the rubber material from scorching during processing, so that to make it possible for extruder and calender to be running at a high temperature and high speed and improve the production capacity of vulcanizer. The product also can improve the storage stabilization of the rubber material, protect natural vulcanization during storage. Package: 25kgs/bag Validity: 12 months
Insoluble Sulfur HS OT20 CAS NO.: 9035–99–8	Insoluble Sulfur HS OT20	Appearance: Yellow powder Sulfur Content:79.0±81.0%% Insoluble Sulfur Content≥90.0% Oil Content 18.5%-21.5% Acidity(H2SO4)≤0.05% Heating Loss（60℃）≤0.40% Ash≤0.30% Residue(150μm)≤0.30% High thermal Stability (105℃/15minute)≥75.0%	Application: mainly used as a super accelerators and vulcanizing agent in rubber industry, and is widely used in the production of tires and other rubber compounds. Such as in the materials made of rubber and frameworks, like casing, buffer layer, white wall tires and renewed tires, hose and conveyor belt; materials of light color with big consumption of sulfur in production. Because its excellent performance in the adherence between radial cord/steel wire and rubber, and effective prevention of blooming, as well as reinforcing tire's endurance to heat and wear. Package: 25kgs/bag Validity: 12 months

Insoluble Sulfur/ Silane Coupling Agent

Product Name	Chemical Name	Product Index	Application/ Package/ Validity
Insoluble Sulfur HD OT20 CAS NO.: 9035–99–8	Insoluble Sulfur HD OT20	Appearance: Yellow powder Sulfur Content:79.0±81.0%% Insoluble Sulfur Content≥90.0% Oil Content 18.5%-21.5% Acidity(H2SO4)≤0.05% Heating Loss（60℃）≤0.40% Ash≤0.30% Residue(150μm)≤0.30% High thermal stability(105℃/15minute)≥75.0%	Application: mainly used as a super accelerators and vulcanizing agent in rubber industry, and is widely used in the production of tires and other rubber compounds. Such as in the materials made of rubber and frameworks, like casing, buffer layer, white wall tires and renewed tires, hose and conveyor belt; materials of light color with big consumption of sulfur in production. Because its excellent performance in the adherence between radial cord/steel wire and rubber, and effective prevention of blooming, as well as reinforcing tire's endurance to heat and wear, Insoluble Sulfur is the essential material in the tire industry. Package: 25kgs/bag Validity: 12 months
Silane Coupling Agent Si–69 CAS NO.: 40372–72–3	Bis-[3-(triethoxysilyl)-propyl]-tetrasulfide	Appearance: Light yellow clear liquid Alcohol Content≤ 0.5% Heating loss(105℃、2Hrs) ≤ 3.0% Other Impurities Contentβ≤ 3.0% Viscosity 25℃ (cps) ≤ 19.0 Sulfur Content 21-23 Density: 1.07-1.09	Application: Si-69 is a kind of multifunctional silane coupling agent that has been used successfully in the rubber industry. It is used to improve physical and mechanical properties of vulcanizates. It is able to markedly improve tensile strength, tearing strength and abrasive resistance and reduce compression set of vulcanizates. In addition, it can reduce the viscosity and improve the processability of rubber products. Package: 25kg or 200 kg/drum Validity: 24 months
Silane Coupling Agent Si– 75 CAS NO.: 56706–10–6	Bis[3-(triethoxysilyl)propyl] disulfise	Appearance: Light yellow transparent liquid Density(25℃),g/cm3：1.020-1.060 Total Sulfur,%：15.3 Boiling Point ：250℃ Flash Point：129℃ Refractive Index(nD20):1.4500-1.4900	Application: Si75 is a kind of silane coupling agent with multiple functional groups successfully used in rubber industry to improve modulus and tensile strength of rubber, reduce compound viscosity and save process energy consumption. It is especially applicable for polymers with double bond or rubber formulation with hydroxyl fillers. The suitable fillers include silica, silicate, clay, etc. The suitable rubber include natural rubber (NR), Butadiene styrene rubber (SBR), Isoprene rubber (IR), Butadiene rubber (BR), acrylonitrile butadiene rubber (NBR), Ethylene propylene diene rubber (EPDM), etc. Comparing with Si69, the low-active disulfane group in Si75 provides more reliable scorch safty. Package: 25kg or 200 kg/drum Validity: 12 months

Crosslinking agent/Peptizer/ Resorcinol/Rubber adhesive

Product Name	Description	Product Index	Application/ Package/ Validity
Crosslinking agent TAC CAS NO.: 101–37–1	Triallyl cyanurate; 2, 4, 6-triallyloxy-1, 3, 5-triazine	Appearance: White Crystal or white liquid Purity≥99% Hue ≤30 Freezing Point ℃ 26-28	Application: It could be used as aid of vulcanization or sensitizer of radiation cross liking of rubber and plastics. Package: 200kg iron drum or 25kg plastic drum. Validity: 12 months
Crosslinking agent TAIC CAS NO.: 1025–15–6	Triallyl Isocyanurate	Appearance: colorless liquid or crystal Hue(Pt-Co) <30 Active Content≥99.0 Acid Value (mgKOH/g) ≤0.2	Application: TAIC is widely used as the corss-linking agent, modifier and assistant vulcanizer of thermoplastics, ionexchange resin and special rubber. It is also an intermediate(additive) of photoassimilating coating, photoresists and flameretardant Packing: 200kg or 25kg metal drum. Validity: 12 months
Peptizer DBD CAS NO.: 135–57–9	2, 2'-Dibenzamido diphphenyl disulfide C26H20N2O2S2	Melting Range 136℃-142℃ DBD content ≥95.0% Heating loss (60℃)≤0.50% Ash≤0.50% Residue (150μm)≤0.50%	Application: The peptizer of the natural rubber or styrene-butadiene rubber. Should be used in temperatures above 120 ℃, especially for high temperature mixing process and should be added at the beginning of the mixing. Not blooming. Package: 25kgs/bag Validity: 12 months
Peptizer A86	Blend of di(o-benzamidopheny) disulfide(DBD), organo-metalcomplexes, And inorganic dispersing agent.	Appearance: blue gray to dark green granules Ash content/%: 16.0~18.0 Melting point/℃: 50.0~60.0 Desity(g/cm 3 /20℃): ~1.26	Application: Can be used in the processing of tires and other rubber products. Application: 25kg/bag Validity: 12 months
Resorcinol CAS NO.: 108–46–3	1, 3-dihydroxybenzene C6H6O2S3	Appearance: White flakes Melting point108℃-110℃ Content≥99.0%	Application: An important organic raw material of dyestuff, plastic, rubber etc. Package: 25kgs/bag Validity: 1 years
Rubber adhesive HMMM	Rubber adhesive	Appearance: white powder Ash(850℃): 29-35 Moisture content(boiling evaporation method)≤4.5 % Sieve residue(325 mesh wet-method) ≤0.3% Free formaldehyde≤0.1%	Application: Adhesive HMMM leads to the adhesion action via reaction with the methylene receptor, such as RS, adhesive RE etc. In conjunction with methylene receptor, it can effectively promote the adhesion between rubber and steel reinforcing material. Package: 25 kg/bag Validity: 12 months

Resin

Product Name	Description	Product Index	Application/ Package/ Validity
Tackifying Resin 1101	novolac P-Tert-Octyl Phenol-Formaldehyde Tackifying Resin	Appearance: Light Yellow to Yellow Pastilles Softening point, ℃: 92-102 Ash content≤0.5% Acid value, mgKOH/g: 30-45 Loss on heating≤1%	Application: With excellent initial stickness,1101 is tackifying accelerant for natural rubber and kinds of synthetic rubber, especially for :cis-1,4-polybutadiene rubber (BR), Styrene-butadiene rubber (SBR), EPDM, butylrubber(IIR); A tertiary carbon on the resin alkyl make the alkyl become a branched structure. Package: 25kgs or 40 kg craft paper bags Validity: 12 months
Tackifying Resin 2201	Tackifying Resin 2201 is a CNSL modified thermoplastic phenol formaldehyde resin.	Appearance: Brown pastille Soften point, ℃: 90-100 Free phenol≤1.0 % Ash ≤0.5 % Loss on heating≤0.5%	Application: Resin 2202 is mainly used as fortifier of natural and various synthetic rubber. It is applicable to bead of semi-steel tire, shoe sole, seal for car window, rubber tube, rubber covers for floor and other areas. Package: 25kgs or 40 kg craft paper bags Validity: 12 months
Phenolic Reinforcing Resin	Tall oil modified thermoplastic phenol-formaldehyde resin without (HMT)	Appearance: red brown pastille Softening Point(Ring & Ball)90℃-100℃ Weight Loss (at 65℃) ≤0.50% Ashes (550±25℃) ≤0.50%	Application: This product can be used in the manufacture of tires, rubber coated rollers, window sealants of automobiles, etc. The recommended dosage should be 5-15 phr. Package: 25kgs/bag Validity: 12 months
Phenolic Resin R–50D	R-50D is a high-activity resorcinol-phenol-formaldehyde resin	Appearance: Red-brown liquid Solid content: 49-51 (%/135℃/1h) Viscosity (mPa·s/25℃): 120-160 PH value: 8.0-9.0	Application: Phenolic Resin for cord fabrics Package: It is 200kg plastic barrel packaging or 1 tons of barrel packaging. Validity: 3 months
C5 hydrocarbon resin	C5 hydrocarbon resin is an aliphatic resin with an excellent compatibility with SIS, SIBS, and SBS block copolymers and EVA copolymers.	Appearance: Yellowish Granule Color: Gardner in 50% toluene 5.0 max Softening Point℃: 96-104 Ash Content(wt.%) 0.01max Acid No(KOHmg/g)1.0max Melt Viscosity (cps@ 160℃): 180 Specific Gravity(20/20 ℃): 0.97 Heat Resistance(180℃ 3h): Gardner7.0 max	Application: Hot Melt Adhesives, Adhesives, Pressure Sensitive Adhesives, Rubbers, Paints Package: Packed in kraft paper bags laminated with PE bags, 25kg/bag Validity: 12 months

Resin/Rubber Protective Wax/ Homogenizing Agent/ VP latex

Product Name	Description	Product Index	Application/ Package/ Validity
C9 hydrocarbon resin	C9 hydrocarbon resin is an aromatic tackifier resins with an excellent compatibility with SIS, SIBS, and SBS block copolymers and EVA copolymers.	Appearance:D-Yellow Granule Color(Gardner in 50% toluene) 10.0 max Softening Point℃: 91-100 Ash Content (wt.%):0.03 max Acid No (KOHmg/g): 0.5max Flash Point (cps@ 200℃):245 min Specific Gravity(℃):1.08 Heat Resistance 20/20℃: 12.0 max (180℃ 3h)Gardner	Application: Hot Melt Adhesives, Paints, Rubber Tire, Sole and so on Package: craft paper bags laminated with PE bags, 25kg/bag. Validity: 12 months
Rubber Protective Wax H654	Composition: Mixture of fully refined paraffine wax and microwax with medium wide MWD	Appearance: white to yellowish flakes Density,20℃: approx. 0,92 g/cm3 Congealing point: 61 - 67℃	Application: Tyres, conveyor belts, cable coverings as well as technical moulded and extruded articles (profiles) which are used at higher service temperatures. Package: 25 kg/bag Validity: 3 years
Rubber Protective Wax H3241	blend of selected paraffins and micro-waxes with broad molecular weight distribution	Appearance: light green flakes Density,20℃: approx. 0,92 g/cm3 Congealing point: 63 - 68℃	Application: Tyres and conveyor belts as well as technical rubber articles of all kinds which are used at higher service temperatures. Package: 20 kg/bag Validity: 3 years
Homogenizing Agent H40MSF	Composition: High temperature copolymerization of paraffines, aromatics and naphathenics.	Appearance: Dark brown to black flakes Specification characteristics: 96 - 106℃ Ash (DIN 52005): max.2 %	Application: Truck tires, passenger car tires, industrial and bicycle tires, retreads, conveyor belts and other technical rubber goods. Due to its colour H40MS is used in dark compounds. Package: 25 kg carton box Validity: 12 months
Butadiene vinyl–pyridine Latex (VP latex)	The VP latex is a terpolymer of Styrene, Butadiene and 2-Vinyl Pyridine monomer with better adhesion	Appearance: Milky white emulsion Total solids content 40.0±1 % PH 25℃ :10.0-12.0 Mechanical stability≤ 0.10 % Brookfield Viscosity (25℃) (mPa.s): 20-45 Density (20℃) g/cm3: 0.98-0.99 Chemical Stability≤0.005 %	Application: Dipping of fabric for tire, conveyor belt and other textile reinforced rubber based products. Package: 200kg plastic drums, 1000kg IBC, 20000kg Flexible Tank. Validity: 6 months

Titanium Dioxide/ Environmental aromatic oil/ Antimony Trioxide/ Tetrahydrofuran

Product Name	Description	Product Index	Application/ Package/ Validity
Titanium Dioxide TiO2 2195	Titanium Dioxide	Inorganic treatment: Si、Al Organic treatment: Yes L*/Lightness: 95.4 B value: 1.8±0.2 Oil absorption (g/100g) : 20	Application: R-2195 has good hiding power and generality, mainly used in coating, profile, laminated paper and other fields. Package: 25kg plastic and paper bag,500kg and 1000kg ton bag Validity: 12 months
Titanium Dioxide TiO2 2295	Titanium Dioxide	Inorganic treatment: Zr、Al Organic treatment: Yes L*/Lightness: 95.5 B value: 1.7±0.2 Oil absorption (g/100g) : 20	Application: R-2295 has good whiteness, blue and white background, mainly used in coating, profile, laminated paper and other fields. Package: 25kg plastic and paper bag, 500kg and 1000kg ton bag Validity: 12 months
Environmental aromatic oil TDAE CAS NO.: 68783–04–0	Environmental aromatic oil (TDAE)	Appearance: Black green Viscosity CST@ 100℃: 16.0-25.0 Flash Point ℃: ≥200 Specific Gravity@15℃: 0.94-0.97 Refractive Index@20℃: 1.52-1.54 Aniline Point ℃: 60.0-80.0 V.G.C. : 0.860-0.930 PCA≤3% CA 18-28% CN 30-40% CP 40-50% PAHs ppm≤10 BAP ppm≤1	Application: During the processing of rubber, TDAE can increase the rubber's plasticity and fluidity, adhesion. Besides it can help to reduce the mixing temperature and reduce the viscosity of rubber. And It can reduce the viscous flow temperature and glass temperature to improve the low temperature resistance of rubber products. Package: Tanker, liquid bag, packing barrel. Validity: 12 months
Antimony Trioxide	Antimony Trioxide is made by antimony metal as raw material.	$Sb_2O_3 > 99.8$ $As_2O_3 < 0.05$ $PbO < 0.05$ $Fe_2O_3 < 0.003$ $CuO < 0.003$ $Se < 0.002$ Whiteness > 96 Particle size 0.5-1.2	Application: More than 80% of antimony trioxide is used as a flame retardant additive for various type of plastics, rubbers, and fiber. It is also used for polyester polymerization catalysts, variable resistors, decolorizing and fining of optical lenses, and as pigments. Package: 25kg/bag, 1000kg/pallet
Tetrahydrofuran(THF) CAS NO.: 109–99–9	Tetrahydrofuran(THF) Molecular Formula: C4H8O	Purity≥99.9% Water content ≤ 100PPM Color(Hazen) ≤5 APHA Peroxide 0.005%	Application: It is widely used as a reaction solvent, as "universal solvent". As a common solvent, tetrahydrofuran has been widely used in the surface treatment of surface coatings, protective coatings, inks, extractants and artificial leather. Package: 180kg metal pail Validity: 12 months

Cobalt Boroacylate/ Cobalt Neodecanoate/ Cobalt Naphthenate/ Cobalt Stearate/ FKM

Product Name	Grade	Product Index	Application/ Package/ Validity
Cobalt Boroacylate	GB-B23	Appearance: Bluish violet granule Cobalt content 22.5±0.5% Heating loss(105℃)≤1.2% Heptane insoluble 8.0±1.0% Boron (qualitative): Qualitative	Application: Industrial products, like tire, conveyor belt, tire retreading material, fabricated rubber, seal gasket, roller and so on. Package: Carton lined with plastic bag, 25kg/ carton Validity: 12 months
Cobalt Neodecanoate	GB-D20	Appearance:Bluish violet granules Cobalt Content （%） 20.5±0.5 Heating Loss （105℃,%） ≤1.0 Softening Point （℃） 80-100 Infrared Spectrum: Comparable	Application: It is used for the manufacture of wire radial tires, can also be used for the manufacture of steel wire reinforced transport tapes, steel braided hoses and other rubber products with metal frame materials. Package: 25kg/carton Validity: 12 months
Cobalt Naphthenate	GB-N10	Appearance: Purple Brown Granules Cobalt Content （%） 10.0±0.5 Heating Loss （105℃,%） ≤1.5 Softening Point （℃） ≤1.5 Heptane Insoluble Substances （%） ≤0.2 Acid Indicator （mgKOH/g） ≥80 Naphthenic Acid Content （%） ≥80 Infrared Spectrum: Comparable	Application: It is mainly used in the wirecord fabric of radial tires and tire bead steel wire glue of bias tires, and can also be used in steel wire reinforced conveyer belts, steel wire braiding and other rubber. Package：25kg/carton Validity：12 months
Cobalt Stearate	GB-S10	Appearance: Bluish Violet Granules Cobalt Content （%）：9.6±0.22 Heating Loss （105±2℃,%） ≤1.5 Final Melting Point /℃ 80—100 Ash （700±25℃,%） ≤13.4 Density （g/cm3） 1.05±0.22	Application: It is used for the manufacture of steel wire radial tires, also is used for the manufacture of steel wire reinforced conveyor belts, steel braided hoses and other rubber products with metal frame materials. Package：25kg/carton Validity：12 months
FKM (FT70B081H)	FT70B081H	ML （1+10） @121C：92 Florine content （%）：66 Density：1.86 Color：Black Soluble solvent: Ketones and Esters	Application: FKM(FT70B081H) is bisphenol curable FKM compound. Raw gum is FKM copolymer of VDF and HFP with 66% fluorine content. Suitable for O-ring and complex structure sealing parts, etc. Package: FKM(FT70B081H) is wrapped with PE film, 25kg/reel.

Synthetic styrene-butadiene rubber

Test Item	SBR 1502		SBR 1712		Test method
	Superior	Qualified	Superior	Qualified	
Volatile matter content (%, wt)	⩽0.60	⩽0.90	⩽0.60	⩽0.80	GB/T 24131
Ash content (%, wt)	⩽0.40		⩽0.40		GB/T 4498
Organic-acid content (%, wt)	4.50~6.75		3.90~5.70	3.65~5.85	GB/T 8657
Soap content (%, wt)	⩽0.40		⩽0.50		GB/T 8657
Oil content (%, wt)	----------		25.3~29.3	24.3~30.3	SH/T 1718
Bound styrene content (%,wt)	22.50~24.50		22.50~24.50		GB/T 8658
Mooney Viscosity Raw Rubber, ML(1+4)100℃	45~55	44~56	44~54	43~55	GB/T 1232
Mooney Viscosity Compound Rubber, ML(1+4)100℃	⩽93		⩽70		GB/T 1232
Modulus at 300% 145 ℃, 35min (MPa)	16.6~20.6	16.1~21.1	8.8~12.8	8.3~13.3	GB/T 8656, GB/T 528
Tensile Strength 145℃,35min (MPa)	⩾24.5	⩾23.5	⩾19.4	⩾18.4	GB/T 8656, GB/T 528
Elongation at break 145℃, 35min (%)	⩾350	⩾340	⩾460		GB/T 8656, GB/T 528
Appearance	Non-pollutionlight yellow rubber		Pollution dark rubber		Visual

Package: Rubber is wrapped with PE film. Package outside is a separate paper-plastic bag or a big PE bag.
Validity: 12 months

Butyl Rubber IIR-532

Composition: Copolymer rubber of isobutylene and isoprene

Basic Properties	Unit	Standard	Test Method
Product Form	/	Off-white bales	Visual
Mooney Viscosity (ML1+8,125℃)	MU	51±5	GB/T1232.1
Volatiles	wt%	≤ 0.3	GB/T 24131.2
Unsaturation	mol%	1.7±2	Q/XH-FX 029
Total Ash	wt%	≤ 0.3	GB/T 4498.1
Antioxidant (Non-staining)	Wt%	≥0.03	Q/XH-FX 030-
Cure Characteristics	**Unit**	**Standard**	**Test Method**
FL	dN·m	3.3±0.9	GB/T16584 Moving Die Rheometer (MDR) 160℃ x 40min, 0.5° arc
FH	dN·m	16.8±1.4	
ts1	min	2.0±1.0	
tc50	min	5.3±2.0	
tc90	min	20.4±3.3	
Test Formulation (phr) IIR-532 100, IRB#8 50, ZnO 3, TMTD 1, Sulfur 1.75			

Application: Regular Butyl Rubber IIR-532 has superior air impermeability, outstanding performance of heat-resistance, chemical corrosion-resistance, thermal aging resistance, and good curing performance. It can be widely used for inner tubes of tires, tire envelopes, medical stoppers, sealing materials, ball bladders, building sealants, electrical condensers, etc.

Packaging: 25 ± 0.5 kg/bale & 34 ± 0.5 kg/bale in modified PE film

Validity: Three years

Chlorobutyl Rubber CIIR-1301

Composition: Copolymer rubber of chlorinated isobutylene-isoprene with low Mooney viscosity

Basic Properties	Unit	Standard	Test Method
Product Form	/	Off-white bales	Visual
Mooney Viscosity (ML1+8,125℃)	MU	38±4	GB/T1232.1
Volatiles	wt%	≤ 0.5	GB/T 24131.2
Chlorine Content	mol%	1.25±0.10	Q/XH-FX 100
Total Ash	wt%	≤ 0.5	GB/T 4498.1
Antioxidant (Non-staining)	Wt%	≥0.02	Q/XH-FX 030
Cure Characteristics	**Unit**	**Standard**	**Test Method**
	dN·m	2.5±0.9	GB/T16584 Moving Die Rheometer (MDR) 160℃ x 40min, 0.5° arc
	dN·m	8.0±1.5	
ts1	min	1.2±0.9	
tc50	min	3.0±2.0	
tc90	min	8.5±3.3	
Test Formulation (phr) GB/T32676 : CIIR-1301 100, IRB#8 40, ZnO 5, St.A 1			

Application: Chlorobutyl Rubber CIIR-1301 has superior air impermeability, outstanding performance of heat-resistance, chemical corrosion-resistance, thermal aging resistance, good curing performance and compatibility. It can be widely used for tire inner liners, medical stoppers, corrosion-resistance lining, protective clothing, shoe soles, TPV industry, etc.

Package: Bale Weight (KG/Bale) Pallet Pallet Weight (KG) Wrapping Film
34±0.34 Metal / Plywood Box 1224 (36 Bales) EVA

Validity: Two years

Pre-dispersion Rubber Masterbatches

Vulcanizing Agent				
S-80	IS90-65	IS60-80	TCY-70	DTDM-80
Accelerator				
MBT-80	MBTS-75	MBTS-80	CBS-80	TBBS-80
DCBS-80	OTOS-80	NOBS-80	DPTT-80	TMTD-80
TMTM-80	TETD-80	TBzTD-80	DPG-80	DOTG-80
DETU-80	ETU-80	DPTU-80	TDEC-75	ZDEC-80
ZDBC-80	ZDMC-80	ZBEC-80	ZEPC-80	ZDTP-80
Metal Oxide				
ZnO-80	MgO-80		TiO2-80	
Scorch Retarder/Antioxidant				
CTP-80	MMBI-70	MBI-80	NDBC-70	
Adhesion Agent				
R-80	HMT-80		Si69-50	

Note: We can supply master batch especially according to customer's requirement or specifications, with different polymer binder (EPDM, SBR, and NBR etc.), different content (50-80%) or different appearance (Granules or Slabs).

Silica for Tires

Model	G-356	G-135	G-160	G-185
BET specific surface area (m2/g)	160-180	135±15	160±15	185±15
Silica content (dry goods)%	≥ 96.7	≥ 98	≥ 98	≥ 98
Heating loss (%)	6.0-7.2	6.0-7.2	6.0-7.2	6.0-7.2
PH value	6.9±0.3	6.9±0.3	6.9±0.3	6.0-7.0
DBP oil absorption (cm3/g)	2.33-2.60	1.80-2.50	2.00-2.50	1.80-2.50
Sulfate content (%)	≤ 1.5	≤ 1.5	≤ 1.5	≤ 1.5
The total iron content (mg/kg)	≤ 750	≤ 150	≤ 150	≤ 150
Exterior		According to customer requirements, can be supplied in powder, beads, and flaky particles.		

Applications: tire industry.

Nylon 6 Industrial Yarn

Item	Unit	2100dtex/315f (1890D/315F)	1870dtex/280f (1680D/280F)	1400dtex/210f (1260D/210F)	930dtex/140f (840D/140F)
Tolerance of Liner Density	dtex	2100±30	1870±30	1400±30	930±30
Variation Coefficient Of Liner Density	%	≤ 0.64	≤ 0.64	≤ 0.64	≤ 0.64
beaking Strength	N	≥ 170	≥ 150	≥ 113	≥ 73
Elongation At Break	%	19-24	19-24	19-24	19-24
Elongation At Standard Load (4.7cN/dtex)	%	12±1.5	12±1.5	12±1.5	12±1.5
CV of breaking strength	%	≤ 3.5	≤ 3.5	≤ 3.5	≤ 3.5
CV of elongation at break	%	≤ 5.5	≤ 5.5	≤ 5.5	≤ 5.5
Oil Content	%	1.1±0.2	1.1±0.2	1.1±0.2	1.1±0.2
Heat shrinkage (160℃, 2 Min)	%	≤ 8	≤ 8	≤ 8	≤ 8
Thermao stability 180℃, 4H	%	≥ 90	≥ 90	≥ 90	≥ 90
Paper tube siz	mm	Φ75xΦ89x300	Φ75xΦ89x300	Φ75xΦ89x300	Φ94xΦ108x225 Φ94xΦ106x300
Bobbing weight	Kg/P	7-9	7-9	7-9	6-7.5

Application: Nylon 6 yarn is mainly used for nylon fabric, nylon canvas, nylon geocloth, ropes, fishing net etc.