

[www.yongjinfc.com](http://www.yongjinfc.com)

# YONGJIN

Rubber Chemicals

**Yongjin Fine Chemical Co., Ltd.**

**Yongjin Chemical Co., Ltd.**

Headquarters & Ulsan Plant : #215-84, Yeocheon-ro, Nam-gu, Ulsan, Korea  
Tel : +82-52-228-9600-1 / Fax : +82-52-269-0276

**Qingdao Jinxian Chemical Co., Ltd.**

Qingdao Plant : Binhe RD, The Economic & Technical Development Zone, Laixi, Qingdao, Shandong Province, China  
Tel : +86-532-8849-3483-8 / Fax : +86-532-8849-3481

**Yongjin Vina Co., Ltd.**

D-4U-CN, D-4W-CN, Myphuoc Industrial Park 3, Ben Cat District, Binh Duong Province, Vietnam  
Tel : +84-650-357-7188 / Fax : +84-650-357-7181

[www.yongjinfc.com](http://www.yongjinfc.com)

Design & Print by IQV TEL. 051626-4002 2014.9



# CONTENTS

## RUBBER ADDITIVE

SUNPRAX  
R-WAX  
DISPER-212  
SDA-21G  
SDA-260  
SDA-450K  
HIMIX-40  
HISTAR  
HISTAR-90

## RELEASE AGENT

YOP-2000  
YOP-GR1000  
GIP-2001  
JIP-1000  
DIPSON-530  
YND-102  
YND-301  
YNS-100  
YBC-K  
YRR  
YBR-500  
YBC-RTV  
YEM

## PAINT

TU-500  
BP-1700  
YF-1000

## POLISH

YPP-3000

## CAR SHAMPOO

YES-3000

## MASTERBATCH

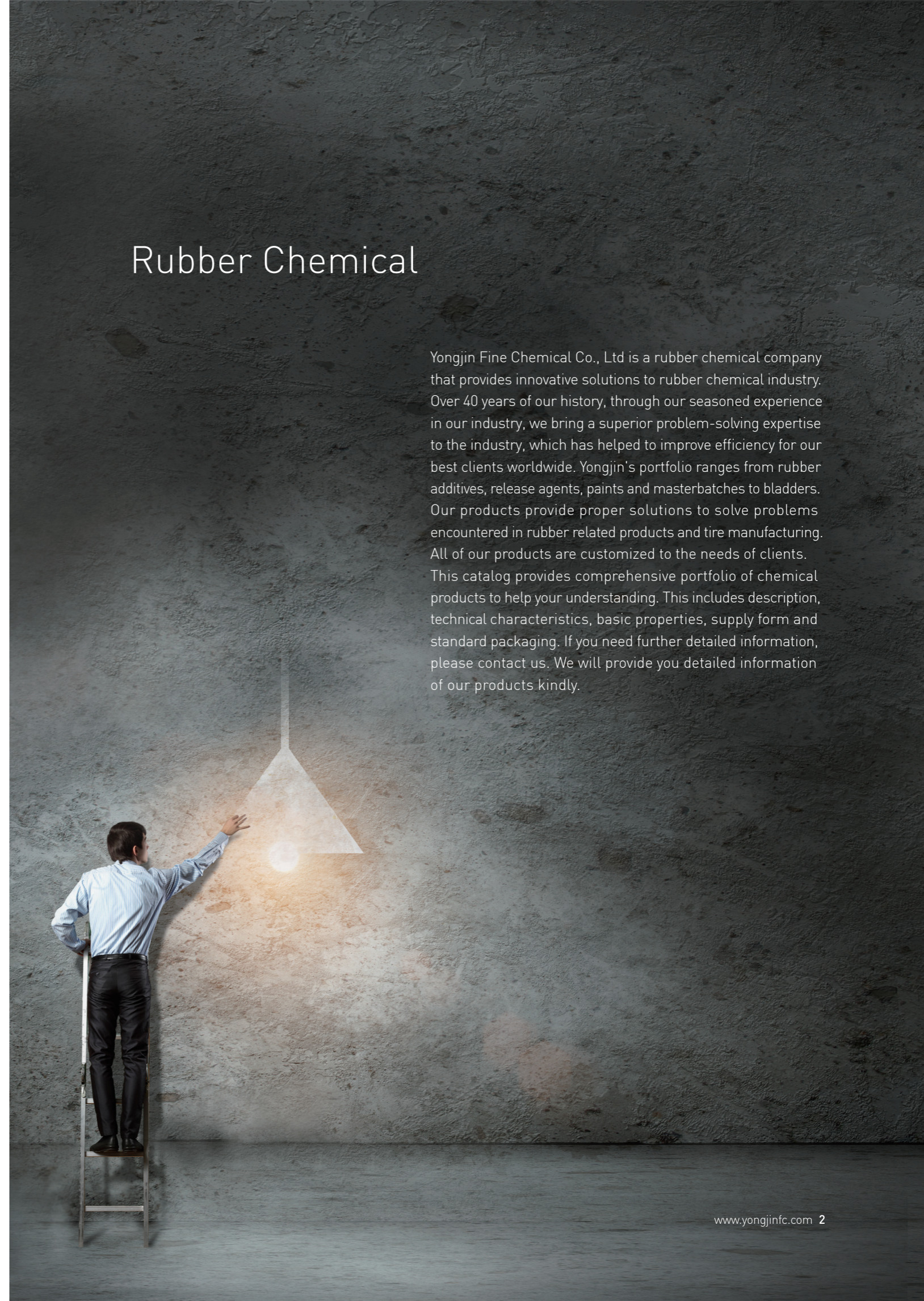
BLOWING AGENT  
ACCELATOR  
CURING AGENT  
RETARDER  
METAL OXIDE

## CURING BLADDER

BOM  
AFV  
NRM  
HYDRAULIC  
JR

# Rubber Chemical

Yongjin Fine Chemical Co., Ltd is a rubber chemical company that provides innovative solutions to rubber chemical industry. Over 40 years of our history, through our seasoned experience in our industry, we bring a superior problem-solving expertise to the industry, which has helped to improve efficiency for our best clients worldwide. Yongjin's portfolio ranges from rubber additives, release agents, paints and masterbatches to bladders. Our products provide proper solutions to solve problems encountered in rubber related products and tire manufacturing. All of our products are customized to the needs of clients. This catalog provides comprehensive portfolio of chemical products to help your understanding. This includes description, technical characteristics, basic properties, supply form and standard packaging. If you need further detailed information, please contact us. We will provide you detailed information of our products kindly.



# SUNPRAX

## Anti-ozonant

Sunprax is used to protect tire against ozone cracks. Ozone reacting with the carbon of a tire causes the polymer chain to break, causing rubber to crack. When Sunprax is blended into a rubber compound, it migrates towards the surface and forms a fine film that provides coating that protects tire against ozone cracks.

### Advantages

- Sunprax is less soluble than paraffin waxes under normal temperature which allows immediate and continuous protection for the rubber surface
- Coating will not break or crack at moderate elongation due to the flexible and closely-packed bloomed layer
- As a non-staining and non-coloring agent, Sunprax can be freely used for white and lightly colored compounds

### Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames

### Shelf life

- 12 months

Sunprax用于保护轮胎不被臭氧氧化引起开裂。臭氧与轮胎橡胶中的碳反应，使碳链断裂，由此引起橡胶开裂。如果在胶料中混入Sunprax，那么在轮胎使用过程中，Sunprax就会迁移到轮胎表面形成很好的保护层，从而阻止碳与臭氧的反应。

### 优点及特征

- 由于在正常温度下具有比普通石蜡更低的溶解性，因此Sunprax能快速而持续地在橡胶表面形成保护层
- 位于橡胶表面的这种柔韧而严密的覆盖层，在橡胶受到一定程度的拉伸时也不会发生断裂或破碎
- 作为非污染、不变色添加剂，Sunprax能被应用在白色或者浅色制品中

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花

### 保质期

- 12个月

Identification	602N	652	672	682H	710	Test Method
Appearance	White bead					
Specific Gravity (25°C)	0.93 ± 0.02	0.90 ± 0.05	0.93 ± 0.02	0.92 ± 0.05	0.92 ± 0.03	ASTM D 1963
Melting Point (°C)	60.5 ± 2.5	65.0 ± 3.0	67.5 ± 2.5	66.0 ± 3.0	69.0 ± 3.0	ASTM D 87
Heat Loss (%)	Max. 0.2					ASTM D 2974
Ash (%)	Max. 0.3					ASTM D 2974
Application	Low temperature	Medium high temperature	Medium high temperature	High temperature	High temperature	-

# SUNPRAX

## Anti-ozonant

### Carbon distributions of each grades

#### Sunprax-602N

C-Max.	ISO Content (%)	C25-C27 (%)	C28-C29 (%)	C30-C32 (%)
C28-C29	30.0 ± 5.0	19.0 ± 5.0	20.0 ± 5.0	29.0 ± 5.0

#### Sunprax-682H

C-Max.	C-M ISO Content (%)	Below C27 (%)	C28-C30 (%)	C31-C33 (%)	Above C34 (%)
C30-C32	35.0 ± 40.0	15.0 ± 5.0	21.0 ± 4.0	29.0 ± 4.0	35.0 ± 5.0

#### Sunprax-682H

C-Max.	ISO Content (%)	C30-C34 (%)	C35-C38 (%)
C31-C32	35.0 ± 5.0	41.0 ± 5.0	26.0 ± 5.0

#### Sunprax-682H

C-Max.	ISO Content (%)	C27-C29 (%)	C30-C32 (%)	C33-C35 (%)
C30-C32	35.0 ± 5.0	18.0 ± 5.0	27.0 ± 5.0	19.0 ± 5.0

#### Sunprax-710

Below 27	C28-30 (%)	C31-C33 (%)	C34-C36 (%)	Above 37 (%)
20.0 ± 4.0				

# R-Wax

## Function

- R-wax is an anti-ozonant for latex application

## Advantages

- High quality emulsion type wax
- Stable in hard water, used in wide range of pH
- Helps a cured latex product to release better from mold
- Improves product appearance and anti ozone effect

## Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames

## Shelf life

- 3 months

## 功能

- R-WAX适用于LATEX 的防护蜡

## 优点及特征

- 含有特殊添加剂的高性能液体石蜡, 稳定在 HARD WATER
- 可以用很多范围的PH
- 提高加硫LATEX的磨具隔离性
- 改善外观, 防止臭氧的反应

## 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花

## 保存限期

- 3个月

Identification	R-WAX	Test Method
Appearance	Yellowish-white emulsion	-
Specific Gravity (25°C)	0.95 ~ 1.00	ASTM D 1168
pH	8 ~ 11	ASTM D 1067
Solid contents (%)	20 ~ 40 %	ASTM D 2974-2.1
Viscosity (mpa.s)	15 ~ 100	VT-03 Viscometer
Application	Latex processing	-
Dosage (phr)	0.5 ~ 1.5	-

# DISPER-212

## Dispersant

## Function

- Disperses filler thoroughly in rubber compounds

## Advantages

- Reduces temperature and time during mixing process
- Reduces pre-scorch
- Reduces compound viscosity and allows smoother flow
- Enhances plasticity

## Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames

## Shelf life

- 3 months

## 功能

- 使填料在胶料中充分混合

## 优点及特征

- 降低混合温度和混合时间
- 降低各种胶料的焦烧危险
- 降低混合物的粘度提高流动性
- 提高可塑性

## 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花

## 保存限期

- 3个月

Identification	Disper-212	Test Method
Appearance	Light yellow bead	-
Specific Gravity (25°C)	1.15 ± 0.05	ASTM D 1963
Softening Point (°C)	102.5 ± 2.5	ASTM D 3104
Heat Loss (%)	Max. 10.0	ASTM D 2974
Ash (%)	Max. 10.0	ASTM D 2974
Application	Dispersant	-

# SDA-21G

## Silica Dispersant

### Function

- Disperses silica thoroughly in a rubber compound
- Reduces viscosity of rubber compound

### Advantages

- Reduction of compound viscosity enables smoother flow of rubber in a mold
- Reduces scorching risks
- Decreases mixing time and mixing temperature
- Enhances plasticity

### Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames

### Shelf life

- 6 months

### 功能

- 使白炭黑在胶料中分散完全
- 降低橡胶混合物的粘度

### 优点及特征

- 降低混合物的粘度，使橡胶在模具中有更好的流动性
- 降低装运混合物时较高的焦烧危险
- 降低混合温度和混合时间
- 提高可塑性

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花

### 保存限期

- 6个月

Identification	SDA-21G	Test Method
Appearance	Light yellow bead	-
Specific Gravity (25°C)	1.00 ± 0.20	ASTM D 1963
Melting Point (°C)	104.00 ± 5.0	ASTM D 87
Heat Loss (%)	Max. 0.5	ASTM D 2974
Ash (%)	14.5 ± 2.0	ASTM D 2974
Application	Silica dispersant	-

# SDA-260

## Silica Dispersant

### Function

- Dispersant applied to rubber compound containing silica

### Advantages

- Decreases viscosity for better flow of rubber compound
- Applied to soft rubber compound
- Applied to low temperature mixing

### Storage

- Avoid direct sunlight and keep in cool place with good ventilation
- Keep away from moisture
- Keep away from heat, fire and sparks

### Shelf life

- 6 months

### 功能

- 使用在橡胶混合物的白炭黑分散剂

### 优点及特征

- 提高橡胶混合物的流动性
- 适合于柔软的橡胶混合物
- 适合于在低温下混合的橡胶混合物

### 保管方法

- 避开直射光线，放置在阴凉、通风良好的地方
- 避开潮湿或温度高的地方保管
- 保管在没有火灾、爆炸危险性的地方

### 保存限期

- 约6个月

Identification	SDA-260	Test Method
Iodine Value	60.0 ~ 80.0	ASTM D 1959
Zinc Content	7.0 ~ 9.0	ASTM D 1959
Ash (%)	18.5 ~ 21.5	ASTM D 5185
Softening Point (°C)	78.5 ~ 91.5	ASTM D 3104

# SDA-450K

## Silica Dispersant

### Function

- Zn-free silica dispersant applied to rubber compound containing high levels of silica

### Advantages

- Assists higher loading of silica in rubber compound
- Decreases viscosity for better flow
- Shortens mixing period and extruding time

### Storage

- Avoid direct sunlight and keep in cool place with good ventilation
- Keep away from moisture
- Keep away from heat, fire and sparks

### Shelf life

- 6 months

### 功能

- 使用在橡胶混合物的 Zn-free白炭黑分散剂

### 优点 及 特征

- 高负荷 白炭黑混合物上有效
- 降低黏度提高制品加工性
- 改善 Roll设备作业性及挤出性

### 保管方法

- 避开直射光线，放置在阴凉、通风良好的地方
- 避开潮湿或温度高的地方保管
- 保管在没有火灾、爆炸危险性的地方

### 保存限期

- 约6个月

Identification	SDA-450K	Test Method
Specific Gravity (25°C)	0.8 ~ 1.2	ASTM D 1963
Heat Loss (%)	Max. 0.5	ASTM D 2974
Ash (%)	5.5 ~ 9.5	ASTM D 2974
Melting Point (°C)	58.0 ~ 72.0	ASTM D 87

# HIMIX-40

## Homogenizer

### Function

- Himix-40 homogenizes mixture of different rubber compounds with differing polarity
- Himix-40 improves the physical property of the final compound by thorough mixing

### Advantages

- Provides excellent solubility to wide range of polymers
- Enhances adhesion among differing rubber compounds
- Enhances resistance to bending, aging and calendaring
- Faster cure rate provides cost savings
- Lower viscosity provides energy efficiency by easy mastication

### Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames

### Shelf life

- 6 months

### 功能

- Himix-40 使具有不同极性的各种胶料混合均匀
- Himix-40 能够提高经过完全混合的最终产物的物理性能

### 优点 及 特征

- 为各种聚合物提供了良好的可溶性
- 加强不同胶料的粘附
- 提高抗弯曲，抗老化，抗压制性
- 更快的硫化速率节省开支
- 低粘度更容易操作提供高能效

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花

### 保存限期

- 6个月

Identification	HIMIX-40	Test Method
Appearance	Black flake	-
Specific Gravity (25°C)	1.10 ± 0.10	ASTM D 1963
Softening Point (°C)	98.0 ± 8.0	ASTM D 3104
Heat Loss (%)	Max. 1.0	ASTM D 2974
Ash (%)	Max. 5.0	ASTM D 2974
Application	Homogenizer	-

# HISTAR

## Tackifier

### Function

- Histar provides tack property for mixture of different rubber compounds with differing polarity
- Histar provides adhesion between carcass and inner-liner

### Advantages

- Compatible with wide range of polymers
- Faster cure rate
- Stable scorch time
- Lowers viscosity for better flow during extrusion
- Tack between natural rubber and Isoprenelsobutene rubber

### Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames

### Shelf life

- 6 months

### 功能

- Histar 为具有不同极性的胶料提供粘性
- Histar 为气密层和胎体的接合提供粘附

### 优点及特征

- 广泛适用于各种聚合物
- 加快硫化速度
- 稳定焦烧时间
- 低粘度使在挤出时有更好的流动性
- 粘合天然橡胶和丁基橡胶

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花

### 保存限期

- 6个月

Identification	HISTAR	Test Method
Appearance	Light brown flake	-
Specific Gravity (25°C)	1.09 ± 0.05	ASTM D 1963
Softening Point (°C)	100.0 ± 5.0	ASTM D 87
Acid Value	Max. 0.3	ASTM D 1980
Heat Loss (%)	Max. 0.5	ASTM D 2974
Application	Tackifier	-

# HISTAR-90

## Tackifier

### Function

- Applied to rubber compound for better adhesiveness

### Advantages

- Assists better mix of different polymers and provides adhesiveness
- Applicable to various types of rubber compounds
- Improves compound extrudability
- Stabilizes scorch time

### Storage

- Avoid direct sunlight and keep in cool place with good ventilation
- Keep away from moisture
- Keep away from heat, fire and sparks

### Shelf life

- 6 months

### 功能

- 用在橡胶混合物粘合剂

### 优点及特征

- 提高橡胶混合物的混合性,赋予粘性
- 橡胶混合物及聚合物除外可适用于多种领域
- 提高制品挤出性
- 焦烧时间稳定化

### 保管方法

- 避开直射光线, 放置在阴凉、通风良好的地方
- 避开潮湿或温度高的地方保管
- 保管在没有火灾、爆炸危险性的地方

### 保存限期

- 约6个月

Identification	HISTAR-90	Test Method
Softening Point (°C)	80.0 ~ 100.0	ISO 4625
Acid Number (mg KOH/gr)	Max. 80.0	ASTM D 974
Insol. In Cyclohexane (%)	Max. 0.3	ASTM D 4934

# YOP-2000

## Greencase Outside Release

### Function

- Enables trapped air between greencase and mold to escape quickly during vulcanization
- Helps a cured tire to release better from mold

### Advantages

- YOP-2000 is a water-based product
- YOP-2000 enables easy flow of rubber during vulcanization
- YOP-2000 does not contain hazardous material

### Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames

### Shelf life

- 3 months

### 功能

- 产品在硫化过程中有利于生胎和模具间的残留空气迅速排出
- 使硫化好的轮胎更易从模具中脱离

### 优点及特征

- YOP-2000 水性产品
- YOP-2000 使橡胶在硫化过程中具有良好的流动性
- YOP-2000 不含有毒物质

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花

### 保存限期

- 3个月

Identification	YOP-2000	Test Method
Appearance	Black emulsion	-
Specific Gravity (25°C)	1.05 ± 0.10	ASTM D 1963
pH	9.0 ± 1.0	ASTM D 87
Solid contents (%)	12.0 ± 3.0	ASTM D 2974
Viscosity (Sec.)	8.0 ± 1.0	Zahn Cup #3
Ash (%)	6.5 ± 2.0	ASTM D 2974
Application	Greencase outside paint	-

# YOP-GR1000

## Greencase Outside Release

### Function

- Enables trapped air between greencase and mold to escape quickly during vulcanization
- Helps a cured tire to release better from mold
- Colorless solution allows a scanner to read the barcode on the tires

### Advantages

- YOP-GR1000 does not contaminate the mold as much as other similar products
- YOP-GR1000 does not contain hazardous material
- YOP-GR1000 helps to maintain vivid color of tread lines after spraying
- YOP-GR1000 will not contaminate the barcode

### Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames

### Shelf life

- 3 months

Identification	YOP-GR1000	Test Method
Appearance	Black emulsion	-
Specific Gravity (25°C)	1.10 ± 0.05	ASTM D 1963
pH	10.0 ± 1.0	ASTM D 87
Solid contents (%)	10.0 ± 3.0	ASTM D 2974
Viscosity (Sec.)	8.00 ± 1.0	Zahn Cup #3
Ash (%)	0.5 ± 0.5	ASTM D 2974
Application	Greencase outside paint	-

### 功能

- 产品在硫化过程中有利于生胎和模具间的残留空气迅速排出
- 使硫化好的轮胎更易从模具中脱离
- 本产品无色透明，因此胎面上的条形码能被扫描仪读取

### 优点及特征

- YOP-GR1000与同类产品的一个重要区别是它对模具的影响较小
- YOP-GR1000不含有毒物质
- YOP-GR1000喷涂后有助于保持胎面色线的鲜艳色彩
- YOP-GR1000不会污染条形码

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花

### 保存限期

- 3个月



# GIP-2001

## Greencase Inside Release

### Function

- Release agent applied on inner side of greencase for better release from bladder during tire curing process

### Advantages

- Less friction between a greencase and a bladder
- Easy flow of trapped air between a greencase and a bladder
- Quicker release from a bladder

### Storage

- Avoid direct sunlight and keep in cool place with good ventilation
- Keep away from moisture
- Keep away from heat, fire and sparks

### Shelf life

- 2 months

### 功能

- 轮胎成型时作用于生胎内表面和胶囊间的离型剂

### 优点及特征

- 提高橡胶流动性
- 提高生胎内部和胶囊间空气排气性
- 提高轮胎成型品和胶囊离型效果

### 保管方法

- 避开直射光线，放置在阴凉、通风良好的地方
- 避开潮湿或温度高的地方保管
- 保管在没有火灾、爆炸危险性的地方

### 保存限期

- 约2个月

Identification	GIP-2001	Test Method
Appearance	Gray or Black liquid	-
Specific Gravity (25°C)	1.1 ± 0.1	At 25°C
Viscosity (cP)	950 ± 350	B.F #4.30rpm
pH	8.5 ± 1.0	At 25°C
Solid contents (%)	38.0 ± 3.0	105°C X 2hrs.
Ash (%)	25.0 ± 3.0	550°C X 2hrs.

# JIP-1000

## Greencase Inside Release

### Function

- JIP-1000 provides lubrication between inner liner and bladder during vulcanization process
- JIP-1000 helps trapped air between greencase and bladder to escape during vulcanization process

### Advantages

- Ready-to-use emulsion-type product formulated with proper viscosity that increases productivity
- JIP-1000 adheres to inner liner and does not transfer to bladder after curing
- JIP-1000 provides evenly coated layer that enhances appearance after curing
- Air permeability reduces defects caused by trapped air

### Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames

### Shelf life

- 3 months

### 功能

- 硫化过程中，JIP-1000 产品在生胎内表面与胶囊间起润滑作用
- 硫化过程中，JIP-1000 产品有利于充分排出生胎和胶囊间的气体

### 优点及特征

- 调配好粘度的乳液成品能够提高使用时的生产效率
- JIP-1000 产品附着在胎内侧，硫化后不会脱落
- JIP-1000 产品能提供均匀的涂层，硫化后使胎内美观
- 良好的透气性降低了残留气体引起的缺陷

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花

### 保存限期

- 3个月

Identification	JIP-1000	Test Method
Appearance	Dark gray liquid	-
Specific Gravity (25°C)	1.2 ± 0.2	ASTM D 1963
pH	8.5 ± 1.0	ASTM D 87
Solid contents (%)	38.0 ± 3.0	ASTM D 2974
Ash (%)	25.0 ± 3.0	ASTM D 2974
Viscosity (cps)	950 ± 350	B.F#4.30rpm
Application	Greencase inside paint	-

# DIPSON-530

## Anti-Adhesive for Uncured Compound (Powder)

### Function

- Forms a thin layer of coating to prevent rubber compound from adhesion
- Sludge is minimized, therefore frequency of regular cleaning may be reduced

### Advantages

- Does not affect adhesiveness where needed
- Thoroughly spreads and coats the compound
- During use, dilution can easily be altered
- Does not form foams and dusts

### Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames
- Avoid oxidizing and reducing agents

### Shelf life

- 12 months

### 功能

- 在橡胶表面形成很薄的一层保护膜，避免胶片粘连
- 沉淀物控制到最小程度，有效降低清洗频率

### 优点及特征

- 对胶料粘性无不良影响
- 涂敷覆盖彻底
- 使用过程中，稀释可以灵活控制
- 使用后不会在胶料表面形成泡沫或粉尘

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花
- 避免接触氧化剂或还原剂

### 保存限期

- 12个月

Identification	DIPSON-530	Test Method
Appearance	Yellow gray powder	-
Specific Gravity (25°C)	1.5 ± 0.3	ASTM D 1963
Heat Loss (%)	Max. 10.0	ASTM D 2974
Ash (%)	80.0 ± 5.0	ASTM D 2974
Application	Anti-adhesive agent	-

# YND-102

## Anti-Adhesive for Uncured Compound (Emulsion)

### Function

- Forms a thin layer of coating to prevent rubber compound from adhesion
- Sludge is minimized, therefore frequency of regular cleaning may be reduced

### Advantages

- Does not affect adhesiveness where needed
- Thoroughly spreads and coats the compound
- During use, dilution can easily be altered
- Does not form foams and dusts

### Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames
- Avoid oxidizing and reducing agents

### Shelf life

- 2 months

### 功能

- 在橡胶表面形成很薄的一层保护膜，使胶片间不粘连
- 沉淀物控制到最小程度，确保容器槽不需经常清理

### 优点及特征

- 防粘剂与橡胶的相容性良好
- 对橡胶与钢丝的结合力无影响
- 能够彻底的涂敷覆盖
- 使用过程中，稀释可以灵活控制
- 使用过程中无大量泡沫产生，并且干燥后无粉尘

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花
- 避免接触氧化剂或还原剂

### 保存限期

- 2个月

Identification	YND-102	Test Method
Appearance	Yellow gray emulsion	-
Specific Gravity (25°C)	1.0 ± 0.15	ASTM D 1963
Solid Content (%)	20.0 ± 3.0	ASTM D 2974
Ash (%)	19.0 ± 3.0	ASTM D 2974
pH	9.0 ± 1.5	ASTM D 87

# YND-301

## Anti-Adhesive for Uncured Compound

### Function

- Anti-adhesive applied on sheets of uncured rubber during aging and storage

### 功能

- 轮胎制造工程中，作用于未加硫橡胶片间的防粘剂

### Advantages

- Does not generate dust and keeps work environment clean and dust free
- Minimizes sludge through excellent dispersibility
- Does not affect properties of rubber compound

### 优点及特征

- 预防粉尘发生，改善作业环境
- 具有优秀的分散性，最小化污泥产生
- 均匀涂抹及优秀的附着性
- 不会影响橡胶物性

### Storage

- Avoid direct sunlight and keep in cool place with good ventilation
- Keep away from moisture
- Keep away from heat, fire and sparks

### 保管方法

- 避开直射光线，放置在阴凉、通风良好的地方
- 避开潮湿或温度高的地方保管
- 保管在没有火灾、爆炸危险性的地方

### Shelf life

- 3 months

### 保存限期

- 约3个月

Identification	YND-301	Test Method
Appearance	White emulsion	-
Specific Gravity (25°C)	0.95 ± 0.1	At 25°C
pH	10.0 ± 1.5	At 25°C
Solid contents (%)	11.5 ± 3.0	105°C X 2hrs.
Ash (%)	1.0 ± 0.5	550°C X 2hrs.

# YNS-100

## Anti-Adhesive for Uncured Compound

### Function

- Anti-adhesive applied on sheets of uncured rubber during aging and storage

### 功能

- 未加硫橡胶Compound的装载及保管时，对胶片间粘着加强隔离性，确保后期工程上的作业性

### Advantages

- Does not affect adhesiveness where needed
- Thoroughly spreads and coats the compound
- During use, dilution can easily be altered
- Does not form foams and dusts
- Soluble with water

### 优点及特征

- 防粘剂与橡胶的相容性良好
- 对橡胶与钢丝的结合力无影响
- 能够彻底的涂敷覆盖
- 使用过程中，稀释可以灵活控制
- 使用过程中无大量泡沫产生，并且干燥后无粉尘
- 亲水性

### Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames
- Avoid oxidizing and reducing agents

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花
- 避免接触氧化剂或还原剂

### Shelf life

- 2 months

### 保存限期

- 2个月

Identification	YNS-100	Test Method
Appearance	Gray emulsion	-
Solid (%)	25 ± 3.0	ASTM D 2974-2.1
Ash (%)	2.5 ± 0.5	ASTM D 2974-2.3
Sp.Gr	0.85 ± 0.15	ASTM D 1188
pH	9.0 ± 1.5	ASTM D 1067

# YBC-K

## Bladder Coating Agent

### Function

- YBC-K forms a thin film-like coating to work as a lubricant
- YBC-K protects bladder from continuous abrasion from greencases

### Advantages

- Prevents the bladder from aging
- Increases life-cycle of bladders
- Film will not chip off and contaminate tires or working area
- Only need to apply once to coat a bladder
- Easy to apply by spraying on a bladder

### Storage

- Keep the storage area well ventilated
- Avoid direct sunlight
- Store at room temperature

### Shelf life

- 1 months

### 功能

- YBC-K 在胶囊外表面形成一层薄膜起到润滑作用
- 降低胶囊和生胎之间持续的磨损

### 优点及特征

- 阻止胶囊老化
- 延长胶囊使用寿命
- 薄膜不会脱落而影响轮胎或者工作区域
- 只需要在胶囊表面喷涂一次
- 喷涂在胶囊表面应用十分方便

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花

### 保存限期

- 1个月

Identification	YBC-K	Test Method
Appearance	Clear emulsion	-
Specific Gravity (25°C)	0.75 ± 0.05	Zahn cup #3
Solid Conten (%)	15.0 ± 3.0	ASTM D 2974
Ash (%)	7.0 ± 2.0	ASTM D 2974
Application	Bladder surface protecting agent	-

# YRR

## Rim Lubricant

### Function

- YRR allows effortless placement and displacement of a tire
- YRR is a rim release agent applied on a bead of final product before uniformity test

### Advantages

- Does not contaminate tire
- Does not oxidize rim of a tester

### Storage

- Keep the storage area well ventilated
- Avoid direct sunlight
- Store at room temperature

### Shelf life

- 3 months

### 功能

- YRR 使轮胎的拆装变得非常简便
- YRR 是轮胎动平衡实验时使用的隔离剂

### 优点及特征

- 不会污染轮胎
- 对轮胎的外观无任何影响

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花

### 保存限期

- 3个月

Identification	YRR	Test Method
Appearance	Clear emulsion	-
Specific Gravity (25°C)	1.02 ± 0.10	ASTM D 1963
pH	9.5 ± 1.0	ASTM D 1067
Application	Lubricates the bead of a tire	-

# YBR-500

## Bladder Release Agent

### Function

- Semi-permanent release agent applied on a bladder for better release from a greencase during tire curing process

### Advantages

- Coating lasts semi-permanently to cure multiple times until next application
- Quicker release of a bladder from a cured tire
- Better flow of trapped air between a greencase and a bladder
- Does not contain solvent

### Storage

- Avoid direct sunlight and keep in cool place with good ventilation
- Keep away from moisture
- Keep away from heat, fire and sparks

### Shelf life

- 2 months

### 功能

- 轮胎成型时作用于生胎内表面和胶囊间的水溶性硅离型剂

### 优点及特征

- 喷涂1回干燥后，可持续作业的 Multi Type 离型剂
- 提高橡胶流动性
- 提高生胎内部和胶囊间空气排气性
- 提高轮胎成型品和胶囊离型效果
- 不含有机溶剂

### 保管方法

- 避开直射光线，放置在阴凉、通风良好的地方
- 避开潮湿或温度高的地方保管
- 保管在没有火灾、爆炸危险性的地方

### 保存限期

- 约 2 个月

Identification	YBR-500	Test Method
Appearance	White emulsion	-
Specific Gravity (25°C)	1.0 ± 0.1	At 25°C
pH	7.0 ± 1.0	At 25°C
Solid contents (%)	19.0 ± 3.0	105°C X 2hrs.

# YBC-RTV

## Primer, Bladder Coating Agent

### Function

- Permanent bladder coating agent

### Advantages

- Coating cured under room temperature
- Applied before bladder installation
- Forms a layer of coating on the Bladder surface for better compatibility with YBR-500
- Coating assists life extension of a bladder by anti-aging

### Storage

- Avoid direct sunlight and keep in cool place with good ventilation
- Keep away from moisture
- Keep away from heat, fire and sparks

### Shelf life

- 1 months

### 功能

- 为使用 YBR(Bladder Release Agent)，所用的1次底漆用油性 coating 剂

### 优点及特征

- 安装模具前喷涂 (1次 coating)
- 在胶囊表面形成 coating 膜，提高 YBR-500 的附着性
- 胶囊表面老化延迟及寿命延长

### 保管方法

- 避开直射光线，放置在阴凉、通风良好的地方
- 避开潮湿或温度高的地方保管
- 保管在没有火灾、爆炸危险性的地方

### 保存限期

- 约 1 个月

Identification	YBC-RTV	Test Method
Appearance	Yellowish clear emulsion	-
Specific Gravity (25°C)	0.7 ± 0.1	At 25°C
Solid contents (%)	14.0 ± 3.0	105°C X 2hrs.

# YEM-1030/1050/1070

## Mold Coating Agent

### Function

- Water-based mold release agent applied on mold for better release of cured tire

### Advantages

- Applicable to various rubber figuration (all kind of vehicle tire and rubber belt)
- Minimizes build-ups on mold
- Superior tire appearance
- Minimize cleaning cycles of mold

### Storage

- Avoid direct sunlight and keep in cool place with good ventilation
- Keep away from moisture
- Keep away from heat, fire and sparks

### Shelf life

- 2 months

### 功能

- 橡胶制品成型时，作用于橡胶和模具间的水性模具离型剂

### 优点及特征

- 可适用于各种各样橡胶成型(汽车、摩托车、自行车轮胎&胶皮带等)
- Mold build-up 最小化
- 生产的轮胎制品外观优秀
- 模具清洗周期最小化
- 提高制品生产性及减少不良率

### 保管方法

- 避开直射光线，放置在阴凉、通风良好的地方
- 避开潮湿或温度高的地方保管
- 保管在没有火灾、爆炸危险性的地方

### 保存限期

- 2个月

Identification	YEM-1030 / 1050 / 1070	Test Method
Appearance	White emulsion	-
pH	5.5 / 7.5 / 8.5	At 25°C
Solid contents [%]	max.5.0	105°C X 2hrs.

# TU-500

## Repair Paint

### Function

- TU-500 is applied after the grinding process to cover the traces of grinding

### Advantages

- Water-based product and odorless
- Uniform coating forms after being sprayed
- Nonflammable
- Protect against rain or water damage

### Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames

### Shelf life

- 3 months

### 功能

- TU-500 是在轮胎瑕疵经过打磨后为了配合良好的外观和颜色而使用

### 优点及特征

- 无味的水性产品
- 喷涂后在橡胶表面形成均匀的涂层
- 不易燃烧

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花

### 保存限期

- 3个月

Identification	TU-500	Test Method
Appearance	Black emulsion	-
Specific Gravity (25°C)	1.05 ± 0.05	ASTM D 1963
Viscosity (cP)	Max. 100cP	B.F.#1,30rpm at 25°C
Solid Content (%)	14.0 ± 3.0	ASTM D 2974
Application	Touch-up paint	-

# BP-1700

## White Sidewall Protectant

### Function

- Protect the white sidewalls and white letterings on a tire
- Protect and cover the white rubber

### Advantages

- Easy to rinse with water
- Does not contaminate the sidewall of a tire

### Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames

### Shelf life

- 2 months

### 功能

- 保护轮胎胎侧和轮胎上的白色字体

### 优点及特征

- 用水容易漂洗
- 不会污染胎侧
- 改变胎侧的颜色对轮胎没有任何影响

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花

### 保存限期

- 2个月

# YF-1000

## Finish Paint

### Function

- Applied on a final product
- Provides better appearance of a tire

### Advantages

- Contamination free, Water proof
- Prevents overblooming on a tire
- May conceal ground area

### Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames

### Shelf life

- 3 months

### 功能

- YF-1000 覆盖在轮胎表面并能产生光泽
- YF-1000 使轮胎看起来很干净

### 优点及特征

- 防水
- 预防和延迟防护蜡渗出
- 覆盖新轮胎的任何划痕

### 保管方法

- 产品处于通风良好的环境
- 避免高温和潮湿
- 远离明火及火花

### 保存限期

- 3个月

Identification	BP-1700	Test Method
Appearance	Blue emulsion	-
Specific Gravity (25°C)	1.10 ± 0.05	ASTM D 1963
Solid Content (%)	17.0 ± 3.0	ASTM D 2974
Viscosity (cP)	1,000 ± 300	B.F #3,30rpm
Application	White rubber protective coating	-

Identification	YF-1000	Test Method
Appearance	Black emulsion	-
Specific Gravity (25°C)	1.0 ± 0.1	ASTM D 1963
Solid Content (%)	18.0 ± 5.0	ASTM D 2974
Viscosity (cP)	7.5 ± 1.0	Zahn Cup #3
pH	8.0 ± 1.0	ASTM D 87

# YPP-3000

## Tire Polish

### Function

- Water-based tire polish for glossy appearance

### Advantages

- Eco-friendly Water-based tire polish
- Prevents from oxidation and aging of rubber
- Excellent durability

### Storage

- Avoid direct sunlight and keep in cool place with good ventilation
- Keep away from moisture
- Keep away from heat, fire and sparks

### Shelf life

- 12 months

### 功能

- 保护轮胎光泽及外观的水性增亮剂

### 优点及特征

- 亲环境水性轮胎增亮剂
- 防止轮胎氧化及老化
- 拥有卓越的光泽性和光泽持续力

### 保管方法

- 避开直射光线，放置在阴凉、通风良好的地方
- 避开潮湿或温度高的地方保管
- 保管在没有火灾、爆炸危险性的地方

### 保存限期

- 约 12 个月

Identification	YPP-3000	Test Method
Appearance	Ivory white emulsion	-
pH	8.09	At 25°C
Solid contents (%)	23.93	105°C X 2hrs.
Viscosity (sec)	7.19	Zahncup #3

# YES-3000

## Car Shampoo

### Function

- Eco-Friendly Car Shampoo (Car Washing Detergent)

### Advantages

- Superior Biodegradability
- Highly concentrated to lower transportation cost [Dillution Ratio 1:300]
- Fast and superior washing capability

### Storage

- Avoid direct sunlight and keep in cool place with good ventilation
- Keep away from moisture
- Keep away from heat, fire and sparks

### Shelf life

- 12 months

### 功能

- 用于汽车涂鸭面、车身清洗的亲环境清洗液

### 优点及特征

- 生物降解性能优秀
- 高浓缩产品 (稀释比 1:300)
- 经济性优秀
- 拥有快速而优秀的洗净力

### 保管方法

- 避开直射光线，放置在阴凉、通风良好的地方
- 避开潮湿或温度高的地方保管
- 保管在没有火灾、爆炸危险性的地方

### 保存限期

- 约 12 个月

Identification	YES-3000	Test Method
Appearance	Orange liquid	-
pH	10.84	At 25°C
Solid contents (%)	21.38	105°C X 2hrs.



# Masterbatch

## Introduction

Masterbatch is a mixture of powdered chemicals and polymer binders dispersed into a rubber. It helps to reduce curing time and increases dispersibility. Masterbatch is easier to handle and use compared to the powdered products.

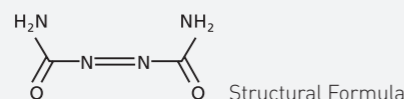
Masterbatch is a custom-made product which we mix as requested by customers. To reduce the hassle of cleaning up and mixing powdered chemicals at a plant, Masterbatch is produced in sheet types and pellet types which users simply need to weigh and add into their mix.

Masterbatch 由粉末状化工原料与橡胶等粘合剂混合制成, 具有比通常使用的粉末状原材料更好的操作性, 并且我们可以根据客户的实际需要定制产品。Masterbatch 被制成片状或粒状, 这可以减少清理车间及混合粉末状原材料所引起的麻烦。

Masterbatch 的使用非常简单, 只要称量所需重量的产品, 然后与其它原料混合。

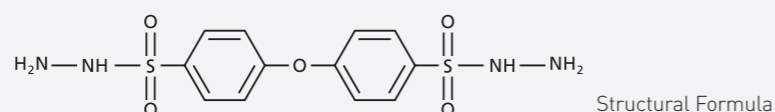
# Blowing Agent

## YMB ADCA(ADC, AC)



Chemical Name	- Azodicarbonamide - Azobisformamide	化学名称	- 偶氮二甲酰胺
Appearance	- Yellow granules	外观	- 黄色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

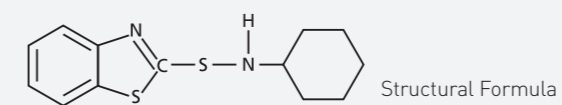
## YMB OBSH



Chemical Name	- 4,4'-Oxybis(benzenesulfonylhydrazide)	化学名称	- 4,4'-氧代双苯磺酰肼
Appearance	- Pale Blue granules	外观	- 白色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

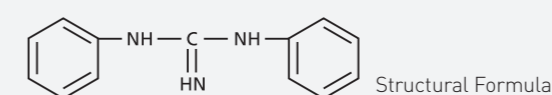
# Accelerator

## YMB CBS(CZ)



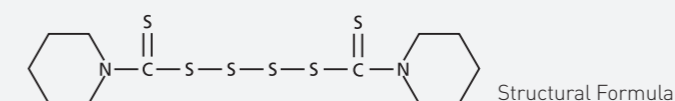
Chemical Name	- N-Cyclohexyl-2-benzothiazole sulfenamide	化学名称	- N-环己基-2-苯并噻唑次磺酰胺
Appearance	- Blue granules	外观	- 灰色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

## YMB DPG(D)



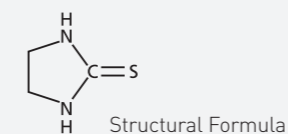
Chemical Name	- Diphenyl guanidine	化学名称	- 二苯胍
Appearance	- Navy granules	外观	- 白色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

## YMB DPTT(TRA)



Chemical Name	- Ethylene thiourea	化学名称	- 四硫化双五亚甲基秋兰姆
Appearance	- Beige granules	外观	- 白色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

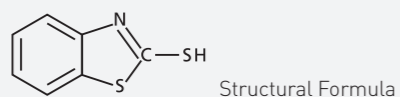
## YMB ETU(NA-22)



Chemical Name	- Dipentamethylene Thiuram tetrasulfide	化学名称	- 1,2-亚乙基硫脲
Appearance	- Light yellow granules	外观	- 白色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

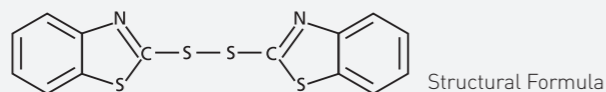
# Accelerator

## YMB MBT(M)



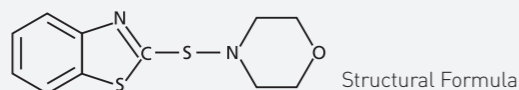
Chemical Name	- 2-Mercaptobenzothiazole	化学名称	- 2-硫醇苯并噻唑
Appearance	- Brown granules	外观	- 黄色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

## YMB MBTS(DM)



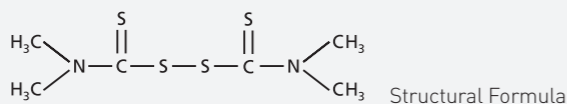
Chemical Name	- Dibenzothiazole Disulfide	化学名称	- 二硫化二苯并噻唑
Appearance	- Green granules	外观	- 黄色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

## YMB NBS(NOBS)



Chemical Name	- N-Cyclohexyl-2-benzothiazole sulfenamide	化学名称	- N-氧二乙撑基-2-苯并噻唑次磺酰胺
Appearance	- Gray granules	外观	- 灰色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

## YMB TMTD (TT)



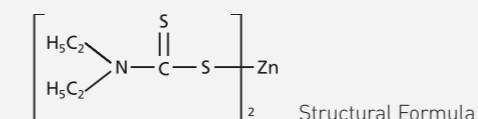
Chemical Name	- Tetramethyl Thiuram	化学名称	- 二硫化四甲基秋兰姆
Appearance	- Orange granules	外观	- 白色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

# Accelerator

## YMB VT

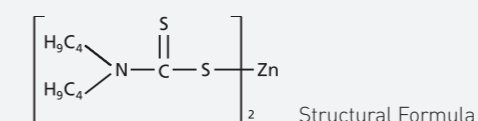
Chemical Name	- Vultac-5	化学名称	- Vultac-5
Appearance	- Dark brown granules	外观	- 暗褐色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 60%	活性成分含量	- 60%

## YMB ZDBC(BZ)



Chemical Name	- Zinc dibutyl dithiocarbamate	化学名称	- 二丁基二硫代氨基甲酸锌
Appearance	- White-Gray granules	外观	- 白色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

## YMB ZDEC(EZ)



Chemical Name	- Zinc diethyl dithiocarbamate	化学名称	- 二乙基二硫代氨基甲酸锌
Appearance	- Gray-Yellow granules	外观	- 白色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

# Curing agent / Retarder

## Curing agent

### YMB IS

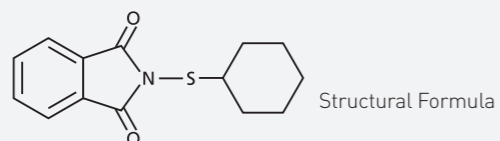
Chemical Name	- Insoluble Sulfur	化学名称	- 不溶性硫
Appearance	- Green yellow granules	外观	- 黄色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

### YMB S

Chemical Name	- Sulfur	化学名称	- 硫磺
Appearance	- Yellow granules	外观	- 黄色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

## Retarder

### YMB CTP(HISCON)



Chemical Name	- N-Cyclohexyl(thio) - phthalimide	化学名称	- N-环己基硫代邻苯二甲酰亚
Appearance	- Violet granules	外观	- 白色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

# Metal Oxide

### YMB Pb304

Chemical Name	- Lead Tetroxide - Red Lead Oxide	化学名称	- 四氧化三铅 - 红丹
Appearance	- Dark brown granules	外观	- 红色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

### YMB Sb203

Chemical Name	- Antimony Trioxide	化学名称	- 三氧化二锑
Appearance	- White granules	外观	- 白色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

### YMB ZnO

Chemical Name	- Zinc Oxide	化学名称	- 氧化锌
Appearance	- White granules	外观	- 白色颗粒
Polymer Binder	- EPM/EVA	所用胶料	- EPM/EVA
Max. Content	- 80%	活性成分含量	- 80%

# BOM / AFV

## Advantages

- Thin bladders allow quick heat transfer
- Reduces curing time
- Saves energy
- Improves production efficiency

## 功能

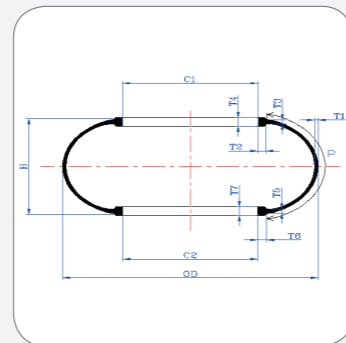
- Y&B 作为锦湖轮胎和固特异轮胎的胶囊供应商
- Y&B 一直以来都在为开发更高质量的胶囊做着不懈努力
- Y&B 胶囊相对来说具有更小的厚度, 这使热传递效率更高

## BOM



Reference Rim Diameter  
参考轮辋直径 (inch)

- Bias  
斜交 : 14, 16, 19, 20, 24
- Radials : 13, 14, 15, 16  
子午

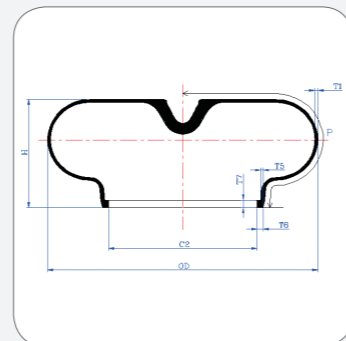


## AFV



Reference Rim Diameter  
参考轮辋直径 (inch)

- Bias  
斜交 : 13, 14, 16, 20, 24
- Radials : 13, 16  
子午



# NRM / Hydraulic / JR

## Storage

- Keep the product at a well-ventilated area
- Store away from heat and moisture
- Keep away from sparks and flames
- Store away from direct sunlight
- Do not alter the shape of the bladder

## 功能

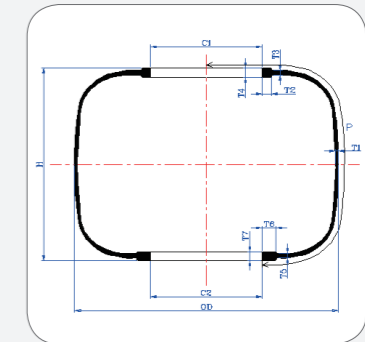
- 通风良好
- 室温防潮
- 远离火源

## NRM



Reference Rim Diameter  
参考轮辋直径 (inch)

- Radials : 20  
子午

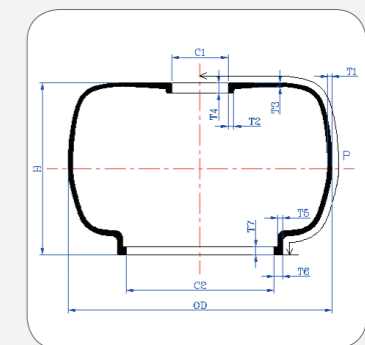


## Hydraulic



Reference Rim Diameter  
参考轮辋直径 (inch)

- Radials : 12, 13, 15, 20  
子午



## JR



Reference Rim Diameter  
参考轮辋直径 (inch)

- Radials : 12, 13

