

## HUANGYAN ZHEDONG RUBBER AUXILIARY IMP. & EXP.CO.,LTD.

#### Rubber Accelerator MBTS(DM)

Chemical Name	Dibenzothiazole Disulfid	
Molecular Formula	$\mathbf{C_{14}H_{8}N_{2}S_{4}}$	
Molecular Weight	332.46	
CAS No.	120-78-5	
Chemical Structure	$\bigcirc_{-S}^{-N} \bigcirc C - S - S - C \bigcirc_{S}^{N} - \bigcirc$	

#### Specification:

ITEMS	Data
Appearance	White or light yellow powder
Initial melting point % ≤	165.0
Heating Loss % ≤	0.30
Ash Content %	0.30
Residue on 100mesh (150 µ m) sieve %≤	0.10

 $<sup>\</sup>ensuremath{^*}$  The product could be oiled and pelleted upon customer request.

Properties: A little bitter taste. Specific gravity: 1.45–1.54. Soluble in chloroform, slightly soluble in benzene, ethyl alcohol and carbon tetrachloride, insoluble in gasoline, water and ethyl acetate, stable in storage.

Application: Give flat, moderately fast cures in NR, IR, SBR, NBR, EPDM, IIR. Can be used alone as delayed action accelerator, normally with accelerators of guanidines & thiurams. Mainly used in manufacture of tires, tubes, shoes, rubber cloth and other technical rubber goods, especially those special-shaped products demanding high intensity. Exhibits better scorch safety than MBT, non-staining/ non-discoloring in light-color or colorfull stocks. However, because of the bitterness of the product after vulcanization, it is not recommended to apply it to beverage and food containers. This product can also be acted as a plasticiser/ retarder in CR.

Package: 25kg N.W./bag, in plastic fabric laminated kraft bags lined with plastic bags.

Storage: Keep container tightly closed in a cool, well-ventiated place.



## HUANGYAN ZHEDONG RUBBER AUXILIARY IMP. & EXP.CO.,LTD.

#### Rubber Antioxidant 4020(6PPD)

Chemical Name	N-(1,3-dimethyl-buty)-N'- phenyl-P-Phenylenediamine
Molecular Formula	$C_{18}H_{24}N_2$
Molecular Weight	
CAS No.	793-24-8
Chemical Structure	NH-CH-CH-CH-CH-CHs CHs CHs

**Specification:** 

ITEMS	Data
Appearance	Dark purple granules
Heating Loss %≤	0.5
Ash Content %≤	0.3
Assay %≽	95.0
Freezing Point ℃≥	44.0

Properties: Blackish brown solid(Specific gravity:1.1), soluble in gasoline, benzene, acetone and etc, insoluble in water. It will become black in exposure to air, but there is no effect on its properties. Due to low melting point, it should be stored away from high temperature.

Application: An antioxidant used for rubber products withhigh efficiency, low psison and low solvent—extraction amunt, also used as stabilizer in synthetic rubber, which is widely applied in many kinds of rubber products.

Package: 25kg N.W./bag, in plastic fabric laminated kraft bags lined with plastic bags.

Storage: Do not store the product in bulk above 50/122°, F for prolonged perod of time, to avoid oxidation and loss of ativity. Use a nitrogen blanket when bulk storage time at maximum temperature will be greater than one month. In sealed drums the product has excellent storage stability at storage temperatures below 35/95°, F. Storage area should be dry and protected from excessive heat and excessive exposure to air, to prevent degradation. Keep partially used containers closed. Shelf life is dependant of temperature of storage and extent of exposure to air.



# HUANGYAN ZHEDONG RUBBER AUXILIARY IMP. & EXP.CO.,LTD.

### Rubber Antioxidant TMQ(RD)

Chemical Name	Polymerized 2,2,4-trimethy-1 2-dihydroquinoline(TMQ,RD)	
Molecular Formula	$(\mathbf{C_{12}H_{15}N)_n}$	
Molecular Weight	173.26	
CAS No.	26780-96-1	
Chemical Structure	- CH <sub>2</sub> N- C- S- ZN - CH <sub>2</sub> S	

Specification:

ITEMS	Data
Appearanle	Amber to brown flakes
Softening Point %≤	80-100
Heating Loss %≤	0.50
Ash %≤	0.50

Properties: Amber to brown flake. Gravity 1.05, soluble in benzene, chloroform and acetone, non-soluble in water, but little soluble in petroleum hydrocarbon.

Applications: The product is particularly excellent kind of general-purpose ammonia anti-ageing agent. It particularly suit to full-steel, semisteel radial tire and it apply to many kinds of the tires, rubber tube, gummed tape, rubber overshoes and general industrial rubber products and also suits to emuilsion products.

Package: 25kg N.W./bag, in plastic fabric laminated kraft bags lined with plastic bags.

Storage: It should be stored in a cool well-ventilated area.