



## Rubber Antioxidant & Adhesion agent F-2818

### Compositions:

F-2818 agent consists of antioxidant new material, triaxial-fiber grafted polymer, low molecular polymer with the hydroxyl and carboxyl, nonmetallic oxides and interface bonding material. The agent is a new functional auxiliary produced by in-situ and step reaction technologies. It can increase adhesion and anti-ageing property of rubber products.

### Properties:

It is non-toxic, harmless to human and no environmental pollution.

Item	Specification	Test Method
Appearance	Taupe powder	visual inspection
Heating loss (105°CX2h) ,%	≤2.5	HG/T3065
Ignition loss (800°CX2h),%	≤20.0	HG/T3066
pH Value	7.0~10.0	HG/T3067

### Advantages:

1. Due to F-2818 contains phenolic hydroxyl group and methoxy group, there will be form a hindered phenol structure between the two group, the hindered phenol structure can capture and consume free radical in rubber system, then terminate the chain reaction, therefore F-2818 can improve ageing resistance and fatigue resistance of rubber products.
2. Bonding material in F-2818 is very easy to permeate and diffuse to bonded materials and surface of framework material. After crosslinking and chemical reaction of the bonding materials, thereby form physical and chemical bonding on the bonding interface.
3. Comparative experiments show that F-2818 agent can significantly improve the adhesion force between rubber and steel cord, nylon and polyester fiber.
4. F-2818 is widely used for medium-high grade tire carcass and sidewall formulation, it can improve the durability and safety of tire.

### Usage and Dosage:

- 1) Add F-2818 agent together with Zinc Oxide to internal mixer when mixing rubber mater-batch.
- 2) 3-5phr for tire carcass and sidewall formulation, other materials is constant, or 6phr instead of 3phr high dispersive silica.

### Packing and Storage:

It is packed in Kraft paper bags lined with plastic film, net weight is 25kg/bag.

It should be stored in a cool, dry warehouse.

The shelf life is 24 months.