

VulcaPellet® Active ZnO-80

台翔药胶® Active ZnO-80

PRE-DISPERSED POLYMER BOUND

PRODUCT DESCRIPTION (产品特性)

VulcaPellet® Active ZnO-80 pre-dispersed Foundry Chemical's proprietary wet process active zinc oxide in elastomeric binder. Foundry's active ZnO has been used to replace French process zinc oxide for less cost while provides comparable cure characteristics and vulcanizates physical properties. The polymer bound pre-dispersed masterbatch offers good dispersion and improved handling form for a dustless work environment.

台翔药胶® Active ZnO-80 是预分散台翔化工专利湿法生产的活性氧化锌于橡胶弹性载体。品牌鞋底大厂使用台翔活性氧化锌取代间接法(法国法)氧化锌以节省成本。使用与间接法等剂量的台翔活性氧化锌可以达到相等于间接法氧化锌的活化效果。预分散的台翔药胶® Active ZnO-80 无粉尘污染，提供橡胶生产的良好分散性及操作性。

ADVANTAGES (产品优势)

PBPD VulcaPellet® 台翔药胶®

- Better affinity to rubber, rapid incorporation, and homogeneous dispersion
- Free flowing, non-dusting, and better handling.
- Energy consumption reduced during the mixing process
- No granules caking or agglomerates during normal storage conditions
- 胶体亲和力好、快速混炼及良好的分散性
- 操作时流动性好，无尘埃污染
- 有效节省混炼能源
- 运送及储存产品不结团成块

ACTIVE ZNO (台翔活性氧化锌)

- Wet process active ZnO with finer particle size and higher surface area, which demands less
ZnO content for full activation development during vulcanization
- Readily replace French process ZnO with comparable cure characteristics and vulcanizates
physical properties
- Low heavy metal contents, good aging and color stability rubber articles

- Production of colored and semi-transparent products of any desired color at a reduced level of colorants dosage
- Not suitable for EVA application to provide cost saving as in vulcanization
- 活性氧化锌粒径小,比表面积大;可以在较低的氧化锌含量下达到相等于间接法氧化锌的活化效果
- 在橡胶配方中具有极高的价格竞争优势取代间接法氧化锌
- 重金属含量低,硫化胶老化性能佳,色泽稳定
- 粒径小具有较高的透光率。使用在艳色及半透明的橡胶制品中可节省色料
- 不适用在 EVA 的应用中降低发泡剂分解温度

PROPERTIES (物性)

Appearance 外观	White granules 白色颗粒
Chemical Analysis 化学成份 ZnO 氧化锌	% Exclusive 台翔自有专利
Pb 铅	< 0.05
Cd 镉	< 0.025

Cu 铜	< 0.006
Fe 铁	< 0.006
Specific Gravity 比重	Approx. 2.45
Moisture Content (of active ZnO) 含水量	< 0.20
Storage Stability 储存期	Over two year under normal storage condition. 二年于良好保存环境
Packing 包装	25 kg in paper bag. 25 公斤纸袋

RECOMMENDATIONS AND APPLICATIONS (应用范围及效果)

VulcaPellet® Active ZnO-80 is a polymer bound pre-dispersed masterbatch offers good dispersion and improved handling form for a dustless work environment. The state-of-art binder development provides better compatibility and suitable Mooney viscosity with rubber formulation. Its granulate shape maintains tack-free without caking or agglomerating during transportation and storage.

预分散的台翔药胶® Active ZnO-80 无粉尘污染，提供橡胶生产的良好分散性及操作性。

先进的药胶载体具有适当的门尼黏度与胶料兼容性，可提高分散性。足够的载体机械强度可保持药胶的立体感不因运输储存而结团成块。

The active ingredient of VulcaPellet® Active ZnO-80 is from our proprietary wet process active zinc oxide. It provides finer particle size (higher surface area) and easier way to disperse in rubber than French process zinc oxide. Due to its low heavy metal contents, rubber cured with VulcaPellet® Active ZnO-80 maintains good aging and color stability. It has replaced French process zinc oxide for less cost while provides comparable cure characteristics and vulcanizes physical properties.

台翔药胶® Active ZnO-80 的有效成份为台翔专利湿法生产的活性氧化锌。台翔活性氧化锌®粒径小，比表面积大，因此较间接法(法国法)氧化锌容易在橡胶中分散。重金属含量低、硫化胶老化性能佳、色泽稳定。品牌鞋底大厂使用台翔活性氧化锌取代间接法(法国法)氧化锌以节省成本。使用与间接法等剂量的台翔活性氧化锌可以达到相等于间接法氧化锌的活化效果。

Various grades of French process zinc oxide are well-known additives for rubber. They are used primarily as activators or accelerators. One of the problems inherent with their use, however, is that only a relatively small percentage of the zinc oxide is effective and actually undergoes reaction with other components of the compounding mixture. This is due to the fact that the reactions take place principally at the surface of the zinc oxide particles. In effect, the zinc oxide below the surface is wasted since it does not react nor activate the rubber compounds.

橡胶配方中传统使用各种不同等级的法国法（间接法）氧化锌做为硫化的活化促进剂。

然而在硫化中，只有极小部分的间接法氧化锌参与实际的活化反应。这是由于活化反应主要发生在氧化锌的表面，表面以下的氧化锌由于无法接触硫化反应中的其它药品，因此不能参与活化反应，造成大部分间接法氧化锌物料的浪费。

Active zinc oxide overcomes these problems by providing a relatively high surface area of excess of 10 m²/gram. It demands less zinc oxide in providing relatively high amount of zinc oxide contacting reactant and permits the use of less zinc oxide without loss in quality. Consequently, it can offer the same or improved physical properties on cured rubber for less cost.

活性氧化锌是一种藉由较高的比表面积提高实际参与硫化反应的氧化锌粒子。使用与间接法等剂量的活性氧化锌，可以在较低的氧化锌含量下，达到相等于甚至超过间接法氧化锌的活化效果，因此在橡胶配方中具有极高的价格竞争优势。

On the EVA application, where zinc oxide acts to lower the decomposition temperature of the blowing agents, zinc oxide content and its thermal conductivity rather than surface catalytic activity determines the efficiency. Therefore, active zinc oxide with lower zinc oxide content does not provide cost saving as in vulcanization.

在 EVA 的应用中,使用氧化锌以降低发泡剂分解温度。氧化锌含量及其相对应的热导系数决定降温的效率。因此不适用含氧化锌含量低的活性氧化锌。

The smaller size of the active ZnO particles provides another advantage in that these particles are essentially transparent to visible light. This allows for production of colored and semi-transparent products of any desired color at a reduced level of colorants dosage. On the other hand, French ZnO having larger particles will require higher colorants dosage to correct its opacity on the cured rubber. There will be savings with the application of active ZnO in the light colored rubber formulation.

活性氧化锌粒径小具有较高的透光率。使用在艳色及半透明的橡胶制品中可节省色料。法国法(间接法)氧化锌由于粒径较大,透光率低,无法制造半透明橡胶制品。同时在艳色配方中必须追加色料以遮闭白雾本色。

DOSAGE (使用剂量)

We recommend trying initially VulcaPellet® Active ZnO-80 by weight in weight substitution of French process ZnO powder. Dosage can be 3-6phr.

使用台翔活性氧化锌®取代间接法(法国法)氧化锌粉末时,建议先沿用粉末使用剂量,视效果再酌量增减。使用量应介于 3.0 到 6.0phr.

MANUFACTURER (生产厂商)

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IMPORTANT NOTE (备注)

Tai Xiang has sought to correct the above information, The information and data for reference purposes only. Concrete information please keep the standard of testing the kinds.

台翔公司对上述资料已力求正确，各项资料数据仅供参考，具体以实物检测为准。