

## **Highly Efficient Fire Retard**

Technical Data Sheet SZ0325-2022-15 V2

## **GreenThinking® FR76RP**

**Description:** FR76RP is highly efficient compounded flame retardant researched and produced by SaneZen Group.

## Fire-retardant mechanism:

When heated: FR76RP breaks down on the surface of the product to produce a thick coating barrier that isolates oxygen, heat and small molecule diffusion during combustion. In addition, decomposition of free radicals and H⋅ and OH⋅ reactions to promote combustion terminate the chain reaction of combustion, and release water and carbon dioxide at the same time, and effectively absorb a large amount of heat generated, play a role in flame suppression, so as to achieve the purpose of efficient flame retardant.

#### **Applications:**

- FR76RP is wildly used for mechanical rubber goods with smooth surface and relatively low specific gravity which are required to meet not only V0 class fire-retardant grade but also Rohs & WEEE regulation.
- FR76RP is wildly used in rubber goods with fire retardant requirements made of EPDM ,NBR,HCR,NR,SBR,CR IIR,ACM etc.
- FR76RP is wildly used in fire retardant rubber and plastic parts, such as railway transportation parts, electronic parts, automobile, oil and coal mining parts and so on. It is in line with EU RoHS and WEEE regulation, because it does contain polybrominated biphenyl, polybrominated diphenyl ethers, chlorine, fluorine, antimony trioxide and other halogen flame retardants.

#### Key benefits:

- > Efficient synergetic flame retardant, easily to reach V0 grade.
- Good dispersibility in the compound.
- Good fluidity of compound with stable size, easy to extrude.
- ➤ Low energy consumption during mixing, shorten the curing time.
- > Sheet structure with surface treatment.
- ➤ High BET and purity with reasonable and small particle distribution
- Excellent chemical stability, Non-toxic and odorless, halogen-free.

## **Typical properties:**

Item	Date	Date	Data
Residual content, 10µm wet sieving(ISO	<0.22 %	Average density [g/cm3]	2.35
787/7)			
Color (brightness [L*])	> 92.5	рН	9.8
Heat loss [1 hr, 105°C]	< 1.0 %	BET [m2/g]	15
D50 [µm]	1-2	Oil absorption [ml/100g]	25
Mg (MgO )	39		

**Common-usage Level:** Its general usage is from 60 to 130phr according to different hardness, physical properties, grade of flame retardant, processing, etc. Generally adding 6-8 Phr will increase one degree of hardness; adding 3-5phr will increase one unit of oxygen index.



# Enterprising Efficient Win-Win

Packaging: 25 KG/ Bag, 1000 KG/Pallet.

For More Product Information, Please Visit Our Website: www.sanezen.com

#### Contact:

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