

○ Vincent Wang, and Maoqin Wang (Nanjing Gaozheng Agricultural Chemical Co., Ltd)

Paraquat is a representative non-selective herbicide which ranks the second of the global herbicide sales amount, and is prominent because of its excellent weeding effect and wide application. However acute toxicity of Paraquat is high, there's no specific antidote at present, and the oral poisoning mortality rate is as high as 90~100%. Paraquat is formulated in 20% single SL mainly, but it is taken easily and wrongly, and causes poisoning human.

In 2012, Government of China has expressly restricted that the registration of Paraquat is stopped in 2014, and sales of Paraquat SL is prohibited in 2016. Nowadays, more and more countries begin to pay attention to the safety of Paraquat SL to humans and animals.

The 80% Paraquat WSG and its production method is developed by Nanjing Gaozheng Agrochemical Co.,Ltd, and applied for patents. Here we would like to introduce high concentration Paraquat WSG formulation and its production method.

The 80% Paraquat WSG production technology comprises :

Mixing Paraquat dichloride mother solution, special dispersing and wetting agent, water soluble filler and binder ; then the mixture is Spray-Dried by computer controlled, Gas-Solid separator attached Spray-Drier.

Advancements and advantages of the technology comprise:

1. The single conventional Paraquat SL is changed to new WSG. This WSG might prevent peoples impulsive, and/or wrong taking.

2. Compared with the conventional Paraquat SL, the highly concentrated WSG might greatly saves the transportation cost.
3. In conventional Paraquat granulation method, rather dusty Extrusion method is applied, and Paraquat mother solution must be dried first. Our new method overcome these difficulties, it is much safer and cheaper method.
4. The drying and granulation processes are all computer controlled safe processes. The granulation is carried out in an airtight drying tower.
5. Water soluble WSG overcomes completely the disadvantage of incomplete bio-efficacy which is caused by active ingredient adsorption on the water insoluble filler.
6. The double package of water soluble bag with dosage of 1200g~1500g/ha is convenient to be used by farmers, and enhances the safety and convenience of applying the herbicide.
7. The main drying tower is connected with a cyclone separator, an impulse-type bag dust remover and a multivortex collector; the tail gas reaches the standard and is charged after twice gas-solid separations, and is safe to the environment.
8. As the special dispersing and wetting agent is used, the 80% Paraquat WSG can be dissolved into the water quickly and bio-efficacy is significant compared with conventional Paraquat SL.

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Paraquat 80% WSG and its Production.

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Based on safety and Registration problem, high concentration Paraquat WSG formulation has been studied, and established its production method. Also because of safe packaging, this new WSG have many advantages compared with current conventional Paraquat SL.