Industrial Water-soluble packaging

PVA film has good water solubility and it can dissolve at different temperatures with different dissolving pace. PVA film has been widely used in the packaging of fertilizers, pesticide, dyestuffs, detergent, water-sewer additives, mineral additives, cement additives etc.

Water-soluble packaging bag of fertilizers and pesticide

Chemicals, used in agriculture are usually highly toxic and cause severe pollution, endanger to our health. Therefore people have been paying more and more attention to the materials of agricultural packaging.

Although being used for a long time, the chemicals of regular agricultural packaging have three main disadvantages. Firstly, liquid agriculture chemical is packed in glass bottles, which are easily broken, and causes leakage of toxic chemical. Secondly, a lot of leftover in the packaging produce large amount of chemical waste. Thirdly, if the agriculture chemical packaging with leftover were discarded in rivers, rivulet, farm or terra etc., it would pollute the soil and water source and would be invisibly killing us, the human beings and our environment in long term.

As PVA packaging film and bag have unique physical property and biodegradability, they have been more and more popularly used in the packaging of fertilizer and pesticide in recent years.

Water-soluble packaging bag for chemicals

Dyeing industry

1. In Normal operation, when the workers drop the dyestuff into the dye vat by using plastic buckets or regular plastic bags, the following problems happen:
2. The used plastic bags become a lot of chemical wastes and large amount disposal cost incurred.
3. It requires large space to place such plastic buckets and large amount of cleaning cost incurred;
4. It affects accuracy of the requested weight of dyestuff due to the residue in buckets and PE bags.

**The advantage of using water-soluble bags**
1. Improve the working environment to be clean and tidy.
2. Reduce the cost of labour and cleaning.
4. Increase production efficiency by simplifying the process.
5. Suitable for automatic operation process.

**Water-soluble packaging for cement additives**
Cement additive has natures of alkali, acidity and high concentration. It is normally used outdoors and easily getting into operators’ eyes and skin and pollute the environment. In the past operators have to put on appropriative overall to avoid the pollution of cement additive, which is very costly and inconvenient.

In recent years, water-soluble bags have been widely used for packaging of cement additives in some western developed countries to avoid environmental pollution. By adding the cement additives directly into the mixing bucket with water-soluble packaging, operation becomes simple and accurate dosage is achieved. It is safer and more convenient to mix the cement additives without opening the packaging.

**Cleanser and detergent packaging**
PVA film with water-soluble and biodegradable Characteristics has been widely used in the packaging of cleanser, detergent and disinfector.

**Advantages of water-soluble packaging bag:**
1. Avoid breakage of liquid pesticide / chemical / detergent bottles packaging, effectively reduce the transport costs of bottle weight and efficiently solve the risks of leakage and the problems of recycling and environmental pollution;
2. Avoid the use of regular plastic bags (non-water-soluble packaging), which generate large amount of chemical residues.
3. Reduce the chemical pollution caused by pesticide / chemical / detergent residues left in the regular plastic bags and avoid contamination to soil and water.
4. Greatly reduce the infection from toxic or irritative materials such as pesticide and industrial chemicals.
5. Act as is excellent container of oil, fat and other organic solvent.
6. Increase dosage accuracy by simplifying the process and avoid the wastage in packaging.

**Type of bags**
- Type Z: Dissolving temp: above 5 degree Celsius,
- Type C: Dissolving temp: above 15 degree Celsius,
- Type W: Dissolving temp: above 25 degree Celsius,
- Type M: Dissolving temp: above 45 degree Celsius,
- Type H: Dissolving temp: above 65 degree Celsius.

*The above temperatures are recommended dissolving temperatures.

**Colour**
Natural, red, blue, yellow and white

*Multi-colours and specifications are available upon customer requirements