

Material Safety Data Sheet (MSDS)

Water Soluble PVA Laundry/Packaging Bags

-----Issued by Extra Packaging, Corp

Section 1: The Product & Manufacturer

- 1、 Name of Product: Water Soluble PVA Laundry/Packaging Bags
- 2、 Characterization: water soluble and biodegradable.
- 3、 Application : laundry bag for hospitals, uniform companies, etc, pesticide/fertilizer mixing or packaging bags, cement mixing bags, or other applications where bags dissolve in water.
- 4、 Manufacturer: **Extra Packaging, Corp.**
24 Seneca Avenue, Rochester, NY 14621
Tel: 888-353-9732 or 800-872-7548
Fax: 585-544-2586 or 561-416-9545

Section 2: Chemical Composition

The product is composed of 75 per cent of polyvinyl alcohol (PVA / PVOH) and 25 percent of compound plasticizers and organic additives. The PVA used is a soluble resin whose polymerization ranges from 1,700 to 1,800 degrees and hydrolyzation degree is from 86 % to 99 %. The plasticizing agent is a compound system which is mainly composed of high boiling polyhydric alcohol. All the substances are biodegradable. Heavy and /or toxic substances are absent.

Section 3: Information of Dangers

There is no particular danger for people or for the environment during storage and handling of the product.

Section 4: First-aid Measures

- 1、 In case of skin contact: harmless, no irritation.
- 2、 In case of eye contact: remove from contact, flush with clean water
- 3、 In case of accidental swallowing: induce vomiting.

Section 5: Firefighting Measures

- 1、 The product is not self-inflammable, but it is combustible.
- 2、 Recommended fire extinguisher: atomized water, foam, dry extinguisher and carbon dioxide.
- 3、 Means of protection: fireproof clothes and respirators.

Section 6: Accident Release Measures

Collect with dry mechanical tools.

Section 7: Handling and Storage

- 1、 Storage condition: store the product in clean, toxic, damp-proof inner packaging. Aluminum foil is recommended as the inner packing material. Keep far from heat sources. Storage temperature: 7℃~30℃, humidity: 20%~70%.
- 2、 Precautions for storage place: natural ventilation.
- 3、 Precautions: avoid accidental contact with water as the product is water soluble.

Section 8: Exposure Control / Individual Protection

Respiratory protection: Not required

Ventilation: Not required, a misting environment may require adequate ventilation.

Protection gloves: Not required.

Eye protection: Not required.

Other protective equipments: Not required.

Section 9: Physical and Chemical Properties

- 1、 Appearance: Form --- solid, translucent
Color --- natural / red / yellow / blue, etc.

Smell --- almost neutral

2、 Physical properties

Fusion point : > 130□

Inflammability : non detectable

Decomposition temperature : > 200□

Self-Ignition : > 400□

Explosion danger : no

PH value : 5~7 (4wt% water solution)

Specific weight : 1.1~1.3g/cm³

Moisture content : the moisture content varies according to the ambient temperature and humidity.

Section 10: Stability and Reactivity

- 1、 The product is stable at normal environmental conditions.
- 2、 Thermal decomposition starts from 240□ ;
- 3、 Avoid contact with flames and strong oxidizing agents.
- 4、 Product decomposition: the product decomposes at environmental temperature. The products resulting from the combustion are similar to those developed by cellulose.

Section 11: Toxicological Information

Acute Oral Toxicity on rats: above 2,000 mg/kg

Skin irritation: Not noticed

Note: With an adequate use, serious damages for health are not foreseen.

Section 12: Ecological Information

- 1、 The product is biodegradable, without any toxic residue.
- 2、 Eco-toxicological: until now, no damage to depuration or treatment plants of biological sewage has been caused.

Section 13: Disposal Consideration

Please refer to local laws and regulations.

Section 14: Transport Information

- 1、 Land transport: Harmless goods.
- 2、 Carriage by sea: Harmless goods.
- 3、 Air freight: Harmless goods.

Section 15: Regulatory Information

According to all National Industrial Product Safety Standards.

Section 16: Other Information

While the information and recommendations set forth herein are believed to be accurate. Extra Packaging, Corp. assumes no liability nor makes any warranty as to completeness or accuracy. Final determination of stability of any material is sole responsibility of the users. All materials may present unknown hazards and should be used with caution.

If you have any questions, please contact the customer service at Extra Packaging, Corp.