



# Envelope Window Film®

## EnviroSafe®

### EWF® 20DG

*Degradable Polystyrene*

**Question: What is EnviroSafe EWF 20DG?**

Answer: It is a new generation of polystyrene Envelope Window Film engineered to degrade in common disposal environments. Using catalytic additives, EWF 20DG starts to degrade immediately after manufacture without microbes being present. The degradation will accelerate when exposed to light, oxygen or heat resulting in reduced weight, volume and form.

**Question: What is the life expectancy?**

Answer: Envelope manufacturers are encouraged to process EnviroSafe EWF 20DG within one year of purchase date. Envelopes windowed with EnviroSafe EWF 20DG have a controlled life span of 5 years before degradation will change the physical properties enough to affect processing.

**Question: How is EnviroSafe EWF 20DG making a positive impact on the environment?**

Answer: Degradation assists in landfill reduction

**Question: Is EnviroSafe EWF 20DG biodegradable?**

Answer: The verdict is still out. Tests are currently underway to speed up molecular weight degradation. In theory, when molecular weight reaches a low enough polymer chain length, biodegradation of polymers could start to take place. Once we achieve a molecular weight reduction necessary, exposure tests will be performed according to ASTM / ISO standards. Test results could take up to twelve months to complete.

**Question: Is there an accredited third party substantiation supporting the degradation of EnviroSafe EWF 20DG?**

Answer: Yes, independent labs have confirmed the molecular weight drop through photodegradation and thermal oxidation degradation (ASTM D5296-05, D5208-01, D5510-94(2001))

**Question: Is EnviroSafe EWF 20DG recyclable?**

Answer: Yes, it is fully compatible with existing recycling streams for polystyrene.



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**Question: Is EnviroSafe EWF 20DG an economical alternative to other ecological known choices?**

**Answer:** Absolutely! As a value added alternative, using EWF 20DG will add a nominal percentage increase to the overall cost of 1,000 patches in a #10 envelope. However, the bottom line costs of productivity and ease of processibility will be far lower than other known ecological choices.

**Question: Do I need to make changes in my process before I convert envelopes using EnviroSafe EWF 20DG?**

**Answer:** No process changes are needed! EnviroSafe EWF 20DG will process the same as traditional polystyrene films using the same adhesives as customary.

**Question: Will I lose any of the advantages I currently enjoy using EWF 2001 LDLJ?**

**Answer:** No, EnviroSafe EWF 20DG still maintains the low scratch and low dust characteristics that you have come to depend on.

**Question: Is EnviroSafe EWF 20DG approved by the USPS?**

**Answer:** Yes, EWF 20DG exceeds the United States Postal Service requirements for both gloss and haze as it pertains to envelope automation and processing equipment.

**Question: Is there any special storage required?**

**Answer:** No, it is recommend to store traditional polystyrene film in a cool dry place. However, we recommend keeping EnviroSafe EWF 20DG out of direct sunlight and un-used rolls in their original packaging.

**Question: What is the heat stability of this product?**

**Answer:** This film is heat stable, even under extreme storage and handling situations. While it is suggested to store any polymer films below 100°F, polystyrene film is commonly used in applications up to 190°F without distortion.

**Question: What gauges are available?**

**Answer:** Limited quantities of .00115" & .00125"