Preferred Design Recognition Review Program

Complete Label Constructions that Employ an Adhesive on PET Packaging Subject Application Instructions

Introduction

Application Instructions are specific to each application (design feature and container type) that are within the scope of the Preferred Design Recognition Review Program, the PDR Program. Application Instructions detail the information that must be submitted to the APR in application for an PDR Recognition Review. Information must be submitted on the Submission Portal found on the APR website.

The following printed film label styles for PET packaging, that employ an adhesive, are candidates for PDR review:

- Olefin based film pressure sensitive labels that float in water
- Olefin based films that float in water, or are employed for wrap-around labels, and are tested with an adhesive

The information given below is applicable to companies that produce finished printed film labels who wish to apply for PDR Recognition. The information can also apply to those who want to confirm that a wrap-around label and adhesive combination Preferred Design Recognition.

Please note:

- Labels that employ adhesives are addressed in other sections of PDR review.
- Inks, independent of labels, are considered in other sections of PDR review.
- Applicants with labels constructed with a floating label film but which sinks in water because of printing inks should contact the program administrator for special instructions.
- Paper labels of any kind are not within the scope of this review because the APR Design® Guide categorizes paper as detrimental to PET recycling.

Preparation for the application

APR will not ask for, nor require, any confidential composition or end customer information from the applicant.

To complete an application on the <u>Submission Portal</u>, the applicant will need to be prepared to supply all the information listed below that is necessary for the PDR Review. Some information will be entered into text boxes, other information will be submitted by uploading documents or files to the APR web site.

- Company name, address, and logo you will be asked to enter the address to be used for any written communications concerning PDR Review. You have the option to upload your company's logo for use in program materials.
- Person responsible for this submission Name, phone number and email address
- Signed copy of the Program Agreement and Manufacturing Change and Records Agreement for the subject. Applicants can download the Agreement from the Submission Portal.
- **Document the un-printed substrate** the information bulleted below is required:
 - 1. Type of substrate; give some general information about the nature of the un-printed film. Comment on whether the film is clear, cavitated, or pigmented. Comment on whether a vacuum metalized coating might be used.
 - 2. A designation, code name/number, a brand name, or a product number that can be traced by the supplier, back to the specific film employed. In the case of printing directly onto PET containers or thermoforms, the designation will trace back to the PET resin and manufacturing process used to make the molded item that receives printing.
- Provide a designation for the printed label This designation might be a product family, trade
 name, or product number that will be used in marketing labels or printed packages that meet
 criteria of PDR Review and which can be used to trace the combination of ink and label used in
 the PDR Review.
- Confirmation that the un-printed label film and adhesive meet criteria of PET-CG-02 this is the critical guidance test for labels Acceptable submissions:
 - 1. APR Recognition letter from a pressure sensitive label supplier confirming the unprinted label has already received APR Critical Guidance Recognition.
 - 2. APR Recognition letter from an adhesive supplier confirming that an adhesive has APR Critical Guidance Recognition.
 - 3. Technical report showing that the film and adhesive meets the criteria of the PET-CG-02 Critical Guidance test.

- Technical report demonstrating that printed materials meet testing criteria The printed label film should meet the criteria given in either PET-B-02 or PET-CG-02 when used to evaluate the impact of ink and films on PET recycling. This testing can be conducted at any laboratory and will include the following:
 - 1. The film designation identified above.
 - 2. The name designated for the printed label identified above.
 - 3. Data demonstrating that the inks meet the criteria of PET-B-02 employing a "generic" printed label as described in APR Practice PET-P-02. Data for an "intended" printed label can be submitted for a specific application.

It is important that the film designation as well as the printed label designation given in the application match those given in the testing report to link them together and confirm the materials tested match with the rest of the information in the application.

- Some applications may require a supplemental laboratory report When testing was conducted at a laboratory that is new to the APR, a supplemental report is necessary. In other words, any new laboratory generating data for the APR's Preferred Design Recognition Review must provide a supplemental report. This supplemental report details in writing and with photographs the testing practices, procedures and equipment that were employed. The review committee will use this supplemental report to confirm testing was completed as detailed in the required APR Practices and Test Methods. The PDR Program Administrator can confirm whether a supplemental report is required should there be any question.
- NIR and Color sorting documentation If the supplier would like to market labels that exceed the surface area guidance criteria given in the APR Design® Guide as Meeting Preferred Guidance, it is necessary to submit two technical reports for each un-printed label film designation demonstrating that the printed labels meet both NIR and color sorting criteria. Tests will be conducted with film thickness at the upper end of what will be marketed commercially. NIR and color sorting tests can be impacted by whether the film is clear, pigmented or cavitated. Film thickness can impact results. There will be a test report for each of the sorting tests bulleted immediately below:
 - 1. Test report employing SORT-B-01 for NIR
 - 2. Test report employing SORT-B-04 for color

Note: the current APR Guidance for surface area coverage where no testing is required is that:

- For containers with a brimful volume of 550 ml or less, the surface area coverage of the label is no more than 55%, and no metal decoration is employed on the label.
- For containers with a brimful volume of over 550 ml, the surface area coverage is no more than 70%, and no metal decoration is employed on the label.

For the case of labels intended for use on thermoforms that are marketed as Preferred Design Recognition, the surface area of labels should not exceed 70% surface area coverage on any one side of the thermoformed container.

- Metal decoration documentation The applicant's intentions concerning use of metal
 decoration on labels must be documented. Metal decoration on a label suitable for Preferred
 Design Recognition is the use of vacuum deposited metal films or inks with metal flake
 pigments. The supplier must submit one of the following:
 - Confirm the following statement (your online confirmation will constitute a signed letter): I hereby certify and understand that labels associated with this application will not employ metal decoration. Labels with metal decoration will not be marketed as Preferred Design Recognition.
 - 2. A laboratory report showing that intended designs meet the "preferred" category presented in SORT-B-03 test used to assess impact of metals on metal detectors.
 - 3. In anticipation of change in guidance for metal containing labels: A letter specifying how the applicant label meets current guidance.
- Documentation of float/sink performance for labels intended to float For the case of label films intended to float in water only, the supplier will provide documentation that the supplier can measure the float and sink performance of printed labels and will use this test to confirm the ability of individual label designs marketed as Preferred Design Recognition to float in water. Reason for this is that the initial "generic" printed olefin label presented in the PDR Application may float. But new labels made in the future may employ levels of inks that make the label have a high density and so not float. The application will include a signed letter stating that "I confirm that each individual label design marketed as Preferred Design Recognition will be tested using PET-S-05, a sink/float screening test, prior to initial sales and confirmed to float in water. Records of these test results will be maintained for inspection."
- **Documentation of a quality control procedure** Applicants will provide a written QC procedure they will employ to confirm that inks, any clear over-varnish, and any clear laminating film on individual new labels are constructed to match the performance of the initial product offering described in the test data provided with this application. Two documents shall be submitted:
 - 1. Label supplier will submit a quality control procedure that they will use to confirm that individual labels that they produce and market as meeting Preferred guidance will provide either the expected hot caustic resistance or wash-off performance required for the ink. There is no specific test that APR requires. A test or process control program proposed by the label supplier can usually be accepted. The gist of two example tests might be:
 - Expose a sample of production printed label to a solution of 1% NaOH at 85° C on a hot plate. Employ guidance in APR's PET-S=01 to evaluate results.
 - Conduct a solvent rub test to demonstrate that an ink has been adequately cured to provide hot caustic resistance.
 - Label producers will confirm the following statement (your online confirmation will
 constitute a signed letter): "I confirm that the quality control procedure submitted with
 this application will be employed for any labels marketed as Preferred Design
 Recognition, and that records of testing will be maintained for inspection."