

FILTER AND SIDESEAM ADHESIVES

MODULE 1

SUBSTANCE INFORMATION SHEET

FILTER AND SIDESEAM ADHESIVES

General Information

Uses and Exposure

In the cigarette manufacturing, adhesives are used in both the tobacco rod and the filter. In the tobacco rod, adhesives are used to secure the cigarette paper around the tobacco. These adhesives are commonly called sideseam adhesives. Within the filter, there are three different places that adhesives are used during cigarette manufacturing. The anchor adhesive is used to secure the plug wrap to the filter. Filter lap seam adhesives adhere plug wrap to plug wrap. Tipping adhesives adhere the tipping paper to the plug wrap.

Composition

A number of various filter and sideseam adhesives have been evaluated. Table 1 summarizes the various ingredients from adhesives that were disclosed by the vendors.

Table 1

INGREDIENT	CAS	E-number
Boric acid	10043-35-3	E284
Boric acid complex with polyvinyl alcohol	68610-88-8	n/a
Carboxymethyl-cellulose and its sodium salt	9004-32-4	E466
Diethyleneglycol dibenzoate	120-55-8	n/a
Dipropyleneglycol dibenzoate	27138-31-4	n/a
Ethylene-vinyl acetate copolymer	24937-78-8	n/a
Hydrocarbon resin	68132-00-3; 172776-93-1	n/a
Hydroxyethylcellulose	9004-62-0	n/a
Hydroxyethylene-vinyl acetate copolymer	25213-24-5	n/a
Methyl hydroxy ethyl cellulose	9032-42-2	n/a
Methylcellulose	9004-67-5	E461
Paraffin	8002-74-2	E905c
Polyethylene wax	9002-88-4; 68441-17-8	n/a
Polyisobutylene	9003-29-6	n/a

Polypropylene	9003-07-0; 25322-69-4	n/a
Polyvinyl acetate	9003-20-7	n/a
Polyvinol	25213-24-5 9002-89-5 54626-91-4	E1203
Starch and/or modified starches	65996-63-6 9005-25-8	n/a
Styrene-alpha-methylstyrene resin	9011-11-4	n/a
Terpolymer	n/a	n/a
Terpolymer of vinyl acetate/ethylene/maleic anhydride	28064-24-6	n/a
Triacetin	102-76-1	E1518

Summary of the Toxicological Investigations on the Use of the Substance in Tobacco Products

Smoke Chemistry

Internal Studies	Level Tested ppm	Comment
Philip Morris	N/A	The effects of cigarette smoke produced by burning various adhesives on smoke chemistry have been evaluated.

Neutral Red Uptake Assay (NRU)

Internal Studies	Level Tested ppm	Comment
Philip Morris	N/A	The effects of cigarette smoke produced by burning various adhesives on cytotoxicity have been evaluated by the Neutral Red Uptake assay.

AMES Assay

Internal Studies	Level Tested ppm	Comment
Philip Morris	N/A	The effects of cigarette smoke produced by burning various adhesives on the mutagenic response have been evaluated by the Salmonella reverse mutation assay.

Mouse Lymphoma Assay (MLA)

Internal Studies	Level Tested ppm	Comment
Philip Morris	N/A	The effects of cigarette smoke produced by burning various adhesives on the mutagenic response have been evaluated by the Mouse Lymphoma Assay

In vivo Micronucleus

Internal Studies	Level Tested ppm	Comment
N/A	N/A	N/A

Inhalation studies

Internal Studies	Level Tested ppm	Comment
Philip Morris	N/A	The toxic effects of cigarette smoke produced by burning various adhesives have been evaluated in a 90-day inhalation study

