

Pope Scientific Wiped-Film Molecular Distillation Process and Product Applications



Oils & Fats

- Deodorization of Triglycerides
- Decolorization of Oils & Derivatives
- Separation of Esters from Fatty Acids & Oils
- Separation of Free Fatty Acids from Vegetable & Edible Oil
- Fractionation of Tall Oil
- Concentration of Glycerol
- Isolation of Monoglyceride, Diglyceride, Glycerine
- Purification & Deodorization of Fish Oil
- Elimination of Pesticides from Natural Oils
- Concentration of Natural Carotin
- Concentration of Omega-3 – Fatty Acids Distilled from Fish Oil
- Distillation of Fatty Acid Amides
- Distillation of Dimeric Fatty Acids
- Deodorization of Emu Oil
- Isolation of DHA & EPA
- Removal of Pesticides from Lanolin
- Isolation of Carotene, Vitamins, Sterols
- Separation of Cosmetic Compounds
- Distillation of Coconut Oils, Other Medium Chain Triglycerides
- Purification of Cannabinoids from Hemp and Cannabis Extracts

Chemical & Specialty

- Purification of Polyphenyl Compounds
- Separation of Aromatic Amines from Oxidized Components & By-products
- Separation of Long Chain Acid Chlorides from Impurities & Free Acids
- Solvent Separation from Silicon Oils
- Concentration & Purification of Esters
- Concentration of Herbicides & Insecticides
- Purification of Sorbitanic Esters
- Purification of Candelilla Wax & Other Natural Waxes
- Elimination of Solvents & Improvement of Color of Montan Wax
- Removal of Pesticides, PCB's and Heavy Metals
- Deodorization, Separation of Pesticides
- Decolorization of Lanolin
- Distillation of Acrylic Acid
- Distillation of Acid Amides
- Distillation of Pharmaceutical Active Substances (e.g. Pentoxifyllin)

Pharmaceutical

- Purification of Synthetic Intermediates
- Evaporation of Solvents from Process Chromatography
- Purification Operations
- Distillation of Components from Extracts
- Fractionation of Heat-Sensitive Compounds
- Separation of Fermentation Derived Intermediates

Petrochemical

- Separation of Microcrystalline Wax from Crude Oil High Vacuum Residues
- Fractionation of Synthetic & Petrochemical Waxes to Soft & Hard Waxes
- Removal of Heavy Hydrocarbons from Asphalts, Tars, Residues

Polymers

- Devolatilization of Prepolymers, Biopolymers
- Removal of cyclic siloxanes from silicones
- Purification & Concentration of Monomers
- Purification & Concentration of Polymers, Plasticizers, UV Inhibitors
- Stripping Monomers from Polymers
- Purification of Epoxy Resins, Latexes, Isocyanates, Urethanes, Silicones, Acrylics and others
- Purification of Adhesives

Nutraceuticals, Foods, Flavors, Fragrances

- Elimination of Terpenes & Concentration of Oils
- Separation of Solvents from Flavors
- Concentration of Juices or Extracts
- Concentration of Tocopherols, Tocotrienols, Antioxidants
- Derivatives from Palm, Rice Bran, Soybean, Flax, Sunflower, Other Oils
- Distillation of Annatto Seed Oil Derivatives
- Concentration & Isolation of Lactic Acid
- Concentration of Capsicum
- Fractionation of Mint & Peppermint Oil
- Concentration of Nootkatone & Valencene from Citrus Oil
- Purification of Patchouli, Sandlewood, Vetiver, Cedarwood, Agarwood (Oud), Hempseed, and many other Oils
- Concentration of Lycopene
- Devolatilization of Botanical Extracts
- Isolation of Cholesterol, Sterols

Recycling

- Purification of Spent Lubricants, Brake fluids, Glycerol, Refrigerant
- Recovery of Thermal, Frying, Vacuum, & Transformer Oils
- Recycling of Dimethylsulfoxid (DMSO) Mother Liquors
- Recycling of Polyethylene Glycols
- Processing of Pharmaceutical Industry Mother Liquors
- Advanced Organic Intermediates
- Recycling of Monochloric Acids from Mother Liquors