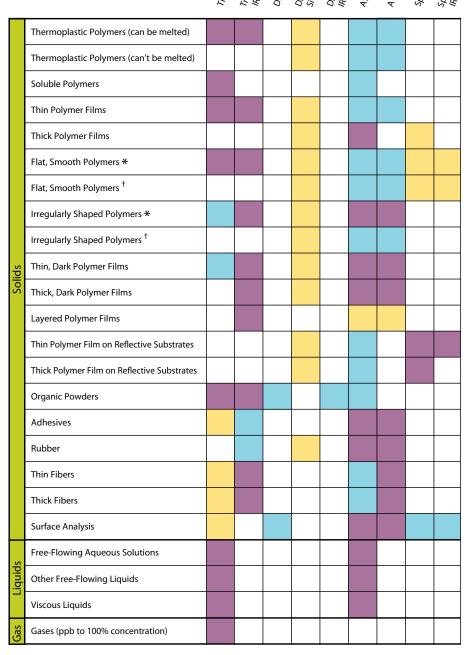


FT-IR Sample Handling

Sample Types Index, Methods, and Ratings



incapable of being ground



particle size); Examples: chemicals, pharmaceuticals, crystalline materials, pigments,

Index of Sample Types

THERMOPLASTIC POLYMERS – polymers that can be pressed into free-standing thin

POWDERS – organic and inorganic solids that can be ground into a powder (2–5 micron

SOLUBLE POLYMERS – polymers that can be dissolved in a solvent or cast as a thin film

THIN POLYMER FILMS – free-standing polymer films that are not thermoplastic or soluble and are less than 50 microns thick

THICK POLYMER FILMS – free-standing polymer films that are not thermoplastic or soluble and are more than 50 microns thick

REGULARLY SHAPED POLYMERS – polymers, films, and plaques that are hard or soft with a smooth surface, capable of being ground, not thermoplastic or soluble and regularly shaped

REGULARLY SHAPED POLYMERS – polymers, films, and plaques that are hard or soft with a smooth surface, incapable of being ground, not thermoplastic or soluble and regularly

IRREGULARLY SHAPED POLYMERS – polymers that are hard or soft with a rough or uneven surface, capable of being ground, not thermoplastic, or soluble and irregularly shaped; Examples: formed polymers, polymer beads and pellets

IRREGULARLY SHAPED POLYMERS – polymers that are hard or soft with a rough or uneven surface, incapable of being ground, not thermoplastic or soluble and irregularly

THIN, DARK POLYMERS – carbon-filled polymers high in inorganic content that are not thermoplastic or soluble and less than 10 microns thick, such as carbon black

THICK, DARK POLYMERS - carbon-filled polymers high in inorganic content that are not thermoplastic or soluble and more than 10 microns thick

LAYERED POLYMER FILMS – polymers that contain two or more layers or thin or thick films; Examples: layered paints and packaging materials

THIN POLYMER FILM ON REFLECTIVE SUBSTRATE - polymer film on any kind of surface that reflects IR energy (usually metal) that is less than 15 microns thick; Examples: lubricants on hard disk media and layers on silicon wafers

THICK POLYMER FILM ON REFLECTIVE SUBSTRATE - polymer film on any kind of surface that reflects IR energy (usually metal) that is more than 15 microns thick; Examples: coatings on containers (such as soda cans)

ADHESIVES - solid adhesives like tapes and solid glues

RUBBERS - irregular-shaped rubber items that are not thermoplastic or soluble; Examples: o-rings, gaskets, and fittings

THIN FIBERS – thin and bundled fibers

THICK FIBERS - thick and bundled fibers

SURFACE ANALYSIS – for qualitative analysis of the outermost layer of any solid or film

FREE-FLOWING AQUEOUS SOLUTIONS - liquids that contain any amount of water; Examples: inks, dyes, solvents, and paints

OTHER FREE-FLOWING LIQUIDS - liquids that do not contain water

VISCOUS LIQUIDS - thick liquids, pastes, and emulsions; Examples: polyols, greases, and

GASES (PPB TO 100% CONCENTRATION) - any sample that is a gas at room temperature or slightly above room temperature



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