Proper Handling – AVantage® Liquid Resins and Chemicals

Safety hazards associated with processing liquid photopolymer resins and the chemicals used can be minimized by utilizing the proper Personal Protective Equipment (PPE) and following recommendations in the SDS literature.

Eye and skin irritation and/or allergic skin sensitization may still occur when working with liquid photopolymers, detergents, and processing solutions. Employers should be aware that individual precautions may be required as some workers could be more sensitive than others and have allergic reactions to either photopolymer resins or processing chemicals.

**Safe Work Practices:** General guidelines for good industrial hygiene and safe work practices should be implemented and is advised when using liquid photopolymer resins and associated chemicals.

**Skin Protection:** Chemical contact with hands is best avoided by wearing protective gloves. Disposable gloves work very well. Seamless and vinyl gloves also offer good protection for short usage as long as they are cleaned between reusing. It must be understood gloves do not last forever and should be replaced when necessary. Clean hands are important so not to spread chemicals to other body parts. Hands should be washed after removing gloves and especially before leaving the plate room area.

**Clothing:** Contaminated clothing should be removed and laundered before reuse. If cleaned at home, these clothes should be washed separate from other laundry to prevent any cross contamination. If irritation occurs despite following this practice, the incident should be reported promptly to medical or first aid personnel.

**Eye Protection:** Special care needs to be taken to prevent chemicals from splashing into someone’s eyes as they can be easily irritated or damaged. Safety glasses should be worn at all times when using chemicals or liquid photopolymer resins to prevent chemical contact with eyes. AVantage® photopolymer resins are processed using UV light exposure units. UV light exposure to the eyes can cause photokeratitis. Symptoms include increased tears and a feeling of pain likened to having sand in the eyes. UV protective glasses should be worn during testing and maintenance of the UV light source.

**Inhalation:** Adequate ventilation is required in areas where AVantage® photopolymers and chemicals are being used. Inhalation of dust, mist, fumes, and/or vapors can occur from exposure to these elements. Any exposure must be kept below the levels as prescribed by the Occupational Safety and Health Administration (OSHA). See the OSHA venting requirements for their standards.

**Ingestion:** Beverages and food should never be stored, prepared, or consumed in areas where they may be exposed to any industrial processing chemicals.
Good Housecleaning & Common Sense: Maintain good housekeeping practices throughout your facility. Use common sense and eliminate handling problems, abuses, and carelessness in the work area. A clean operation will help prevent chemical exposures. If a spill occurs, clean the area right away using the proper Personal Protective Equipment.

Summary: AVantage® chemicals and liquid photopolymer resins should be given the same consideration provided other industrial chemicals. SDS literature should be reviewed and followed prior to chemical usage. Safe work practices and operation should always be used. Waste chemicals should be disposed of properly in accordance with local, state and federal regulations. Specific information on handling and disposal can be found in the product’s SDS sheets.