

- ***Safety Considerations***
  - Material Safety Data Sheet (MSDS)
  - Fumes during heating.
  - Combustibility.
  - Handling considerations.
  - Air-borne glass fibers.



- ***Material Safety Data Sheets (MSDS)***

- **Section 1**

- Information about pertinent product family.
- Where and who to call with problems and questions.

- **Section 2**

- Major components with possible percentage ranges.
- TLV (Threshold Limit Value) and PEL (Permissible Exposure Level) values.

- **Section 3**

- Physical data and data ranges typical for materials within the product family.

- **Remaining Sections**

- Section 4 – Fire and explosion data.
- Section 5 – Health hazard data.
- Section 6 – Reactivity data.
- Section 7 – Spill or leak procedure.
- Sections 8 & 9 – Special protection and precautions.

- ***Fumes during heating***

**The odor of AZDEL® resin processing fumes, if any, is mild and may vary somewhat with specific resin formulations. In general, the odor is not offensive to most individuals. However, to reduce the effects of possible process fumes, do the following;**

- Ensure adequate ventilation in molding area, especially at exit of oven.
- Use oven exhausts to ventilate fumes from work environment.
- Oven doors should remain closed during processing.
- Use good work procedures as detailed in MSDS.
- Cleaning of fumes, condensates (which may include toxic contaminants), residues and dust from processing and ventilation equipment should also be undertaken in well-ventilated conditions and wearing protective clothing including rubber gloves.

- ***Combustibility***

**Severe overheating of AZDEL® composites can result in auto-ignition. In a sustained fire, self-contained breathing apparatus (SCBA) should be worn.**

- In a sustained fire, resin may decompose releasing hazardous products of combustion. Molding at temperatures above those prescribed releases hazardous decomposition products.
- Stacking of heated blanks retains heat that may allow for spontaneous ignition to occur. **DO NOT** stack and allow these blanks to cool in air.
- Any material heated and not molded should be cooled immediately by emersion in water or by putting the individual blanks in contact with a cool surface, (i.e. floor). This will stop the heating process and allow for safe disposal of this material by conventional waste procedures used for thermoplastic resin materials.
- Extinguishing media - Dry Chemical, CO<sub>2</sub>, H<sub>2</sub>O.

- ***Handling Considerations***

**Exposure to glass fibers can sometimes cause irritation of the skin and, less frequently, irritation of the eyes, nose, or throat.**

- When loading ovens and auto-loaders use light-weight gloves such as vinyl or latex to provide a barrier between skin and fiberglass.
- SuperLite and Laminate sheets can have abrasive edges. Light-weight leather gloves or equivalent should be used when handling.
- When removing blanks from ovens use adequate protection from molten resins (**BURNS CAN BE SERIOUS**), and use good quality heat resistant gloves.
- If molten material comes in contact with the skin, cool under a running stream of water. **Do not attempt to remove the resin from the skin.** Removal could result in severe tissue damage. Seek medical attention

- ***Handling Considerations***

**Exposure to glass fibers can sometimes cause irritation of the skin and, less frequently, irritation of the eyes, nose, or throat.**

- When removing parts from mold and when trimming parts use light-weight gloves.
- Tyvek sleeves and/or Tyvek jump suits are recommended to reduce skin contact with glass fibers and to prevent glass fiber contamination of clothing.
- Use safety glasses with side shields.

- ***Air-borne Glass Fibers***

**Respiratory protection is not normally required. However, if airborne fiberglass concentrations exceed permissible exposure levels, respiratory protection for nuisance dusts in accordance with OSHA 1910.134 should be provided.**

- During molding and blank handling, virtually all glass is locked within the thermoplastic resin matrix.
- Grinding, sanding, lack of cover skins or other forms of mechanical alteration of this product may result in exposure to glass fibers and/or dusts.
- Continuous/chopped filament fiberglass has been designated by IARC as a Group 3, “not classifiable as to human carcinogenicity”. This means that evidence is insufficient to link that fiber to cancer.
- Glass fiber clean-up should be through the use of vacuum or liquid sweeping compound so that the fibers are not re-introduced into the air. Blow-down or sweeping without liquid compound are not recommended.