



# Safety Data Sheet

## FRXA™

### SECTION 1 – PRODUCT AND COMPANY INFORMATION

<b>Manufacturer</b>	AZDEL, Inc – 2000 Enterprise Drive, Forest, VA 24551, USA <a href="http://www.hanwhaazdel.com-info@hanwhaazdel.com">www.hanwhaazdel.com-info@hanwhaazdel.com</a>
<b>Product Family</b>	Thermoplastic
<b>Trade Name</b>	FRXA™
<b>Product ID</b>	SLFRXA
<b>Recommended Uses</b>	Molded Products, Flat Panels
<b>Preparation Date</b>	July 20, 2023

**Emergency Phone:**  
**(434) 385-6524**

### SECTION 2 – HAZARD IDENTIFICATION

**Classification:** This product is not classified as hazardous according to 29 CFR 1910.1200 (2012)

**Note:** None of the base resins in the physical form present in the product are classified as hazardous according to 29 CFR 1910.1200 (2012). While this product does not represent a significant hazard to health, safety or the environment when handled and stored as advised, processing fumes generated through the use this product may cause irritation to the eyes, nose, and throat and heating the product during use creates a potential hazard. Grinding, sanding, and other forms of mechanical alteration of this product may result in exposure to dusts.

### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Percent (Wt.)
Magnesium Hydroxide	115-07-1	15-40
Polypropylene	9003-07-0	10-35
Fibrous Glass	65887-17-3	20-45
Anti-oxidants, Pigments and Processing Aids	NA	<5

### SECTION 4 – FIRST AID MEASURES

**Skin Contact:** First aid not normally required. Get medical attention if irritation occurs and persists or if fiberglass becomes imbedded. If heated product comes in contact with skin, cool under a running water stream. Do not attempt to remove resin from skin. Removal could result in sever tissue damage. Seek medical attention.

**Eye Contact:** Remove contact lenses if present. Flush with water/saline solution until all traces of material are gone. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get medical attention if irritation occurs and persists.

**Inhalation:** May cause eye irritation upon heating. Remove affected person from source of exposure. Emergency responders should use the appropriate respiratory protection when moving an affected victim to fresh air. Give artificial respiration if breathing has stopped. Call for prompt medical attention.

**Ingestion:** May cause respiratory tract irritation upon heating. Do not induce vomiting because of danger of aspiration into lungs. If spontaneous vomiting occurs, monitor for breathing difficulty. Get medical attention.

### SECTION 5 – FIREFIGHTING MEASURES

#### Basic Firefighting Procedures

Product ignition point is 625°F. Use water spray, foam, dry chemical or CO2 to smother fire. Use water to cool the product and protect surrounding materials. Exposed firefighters should wear MSHA/NIOSH approved self-contained breathing apparatus with full-face mask and full protective equipment.

**Unusual Fire and Explosion Hazards:** Severe overheating of product can result in auto-ignition and, in a sustained fire, resin may decompose releasing hazardous products of combustion.

### SECTION 6 – ACCIDENTIAL RELEASE MEASURES

Refer to Section 8: Exposure Control and Personal Protection

**Emergency Action:** No Special Precautions. This product does not lend itself to spills. U.S.A. regulations require reporting spills of this material that could reach any surface waters. The toll free number for the U.S. Coast Guard National Response

Center is (800) 424-8802.

**Waste Disposal Method:** Dispose of as a solid waste in accordance with local, state and federal regulations. Not considered a hazardous waste under Federal "RCRA".

## SECTION 7 – HANDLING AND STORAGE

### Refer to Section 8: Exposure Control and Personal Protection

**Handling:** This product is inert, nonreactive and non-toxic. When heated to processing temperatures virtually all thermoplastics emit processing fumes. The exact composition and concentration of processing fumes depend upon the resin formulation including additives, the residence time in the processing equipment, equipment variables such as oven design, venting parameters, etc., and the process temperature. When this resin is processed according to HANWHA AZDEL, Inc.'s recommended practices (available on request) and taking normal precautions detailed in Section 8 there are no known adverse effects to human health. During molding operation, it becomes necessary from time to time to not mold heated blanks. It is recommended to keep a bucket of water near the preheat oven to cool these blanks once they exit the oven. DO NOT stack and allow these blanks to cool in air. Stacking of heated blanks retains heat that may allow for spontaneous ignition to occur. Any material heated and not molded should be cooled immediately by immersion in water or by putting the individual blank 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.

**Storage:** LWRT should be stored in a dry location at ambient temperatures. Avoid contact with hot (140°F or higher) concentrated acids.

## SECTION 8 – EXPOSURE CONTROL AND PERSONAL PROTECTION

### Component Exposure Limits

Under normal conditions of use, no special precautions or control measures are required. In use, processing and packaging operations where inhalation or skin and eye contact are possible exposure limits are provided.

### Exposure Guidelines Components

Fibrous Glass (65887-17-3): OSHA: Respirable Fraction PEL 5 mg/m<sup>3</sup> and Total Particulate PEL 15 mg/m<sup>3</sup> – NIOSH: 3 fibers/m<sup>3</sup> Recommended airborne exposure limit for fibers ≤ 3.5 micrometers in diameter and > 10 micrometers in length and 5 mg/m<sup>3</sup> for total particulates averaged over a 10-hour work shift. – ACGIH: Recommended airborne exposure limit is 1 fiber/cubic centimeter for respirable fibers greater than 5 micrometers in length averaged over an 8-hour work shift.

Polypropylene: (9003-07-0): AIHA WEEL: 10 mg/m<sup>3</sup>

Antioxidants, pigments & processing aids as nuisance dust: TLV 3.5 mg/m<sup>3</sup> – PEL 3.5 mg/m<sup>3</sup> – Signs and symptoms of exposure are rash, itching, conjunctivitis, coughing and sneezing.

Magnesium Hydroxide (115-07-1): OSHA: Respirable Fraction PEL 15 mg/m<sup>3</sup> averaged over an 8-hour work shift. – NIOSH: None determined. - ACGIH: Recommended airborne exposure limit is 10 mg/m<sup>3</sup> averaged over an 8-hour work shift.

### Engineering Controls

**Ventilation:** Good industrial practice requires adequate general ventilation of the workplace. This is especially important during heating and molding. Use of a local exhaust system will safely remove all fumes during processing and secondary operations. Provide appropriate ventilation of confined spaces. Use explosion-proof ventilation equipment. Cleaning of fumes, condensates (which may include toxic contaminants), residues and dust from processing and ventilation equipment should be undertaken in well ventilated conditions and wearing protective clothing including impervious gloves.

### Personal Protection

**Eye and Face Protection:** Operators should always wear safety glasses with side shields to assure clear vision.

**Skin Protection:** Frequent or prolonged to process vapor may irritate the skin and cause a skin rash (dermatitis). Product sharp edges could cut skin. Molten product will burn skin. Use impervious gloves to avoid cuts and skin injuries.

**Respiratory Protection** Molding temperatures above recommended levels releases hazardous decomposition products. Inhalation of freshly generated vapors from melting can cause irritation. Wear an appropriate respirator in accordance with 29CFR 1910.134 or CSA Standard Z94.4-M1982 for exposure that may exceed recommended limits. If adequate ventilation is not possible, then a self-contained breathing apparatus or an air supplied respirator is recommended. Respiratory Protection using a NIOSH approved dust mask is recommended where dust creation is likely.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance/Physical State</b>	Solid	<b>Flash Point (Ignition Temp.)</b>	625°F
<b>Specific Gravity (Water=1)</b>	<1.0	<b>Upper/Lower Flammability Limits in Air</b>	Not Determined
<b>pH</b>	Not Applicable	<b>Volatiles</b>	<1.0%
<b>Solubility in Water</b>	Insoluble	<b>Vapor Pressure</b>	Not Determined
<b>Odor</b>	Mild resin odor	<b>Vapor Density</b>	Not Determined
<b>Odor Threshold</b>	Not Determined	<b>Partition Coefficient</b>	Not Determined
<b>Melting/Freezing Point</b>	327°F Melting Pt.	<b>Viscosity</b>	Not Determined
<b>Boiling Range</b>	Not Applicable	<b>Critical Temperature</b>	Not Determined
<b>Initial Boiling Point</b>	Not Applicable	<b>Auto Ignition Temperature</b>	Not Determined
<b>Particulates (fiber width)</b>	≥ 6 microns	<b>Physical Data is Typical not Specifications</b>	

**SECTION 10 – STABILITY AND REACTIVITY**

**Reactivity:** Stable, does not react under normal conditions of use.

**Chemical Stability:** Stable under normal conditions of use. Avoid contact with acids especially at elevated temperatures.

**Stability/Incompatibility:** Avoid contact with strong oxidizers and concentrated acids.

**Hazardous Reactions/Decomposition Products:** Does not decompose under normal conditions. In a sustained fire resin may decompose releasing hazardous products of combustion.

**Hazardous Polymerization:** Will not occur.

**SECTION 11 – TOXICOLOGICAL INFORMATION**

**Likely Routes of Exposure:** Inhalation, skin, eyes

**Acute Effects:** Fumes produced through heating material to use temperatures may be associated with respiratory irritation.

**Chronic Effects:** Acute effects can be increased by repeated exposure.

**Carcinogenicity:** 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.

**SECTION 12 – ECOLOGICAL INFORMATION**

**Ecotoxicity:** This product is not characterized as a hazard to the environment by not lending itself to spills.

**Persistence and Biodegradability:** Not Applicable

**Bioaccumulative Potential:** Not Applicable

**Mobility in Soil:** Not Applicable

**SECTION 13 – DISPOSAL CONSIDERATION**

**US/RCRA Waste Disposal Methods:** This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous. Avoid repacking wet material in sealed containers. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Low Carbon Nitrogen Bearing Chrome is not listed RCRA Hazardous Waste (40 CFR 261).

**SECTION 14 – TRANSPORT INFORMATION**

**DOT:** Not Regulated – **IATA:** Not Regulated – **IMDG:** Not Regulated

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through a shipper authorized sales or customer service representative.

**SECTION 15 – REGULATORY INFORMATION**

**TSCA** (Toxic Substance Control Act): Components of this product are listed on the TSCA Inventory.

**DSL:** This product, or its components, are listed on or are exempt from the Canadian Domestic Substances List (DSL).

**CERCLA:** (Comprehensive Emergency Response Compensation, and Liability Act): “List of Hazardous Substances and Reportable Quantities” (40 CFR 302.4): None

**RCRA:** (Resource Conservation/Recovery Act): None

**SARA TITLE III:** (Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories: None.

313 Reportable Ingredients: None.

**California Proposition 65:** None

**WHMIS:** Uncontrolled product according to WHMIS classification criteria.

**SECTION 16 – OTHER INFORMATION**

The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet. However, no warranty or representation, expressed or implied, is made as to the accuracy or completeness of the foregoing data and safety information, nor is any authorization given or implied to practice any patented invention without a license. In addition, no responsibility can be assumed by the vendor for any damage or injury resulting from abnormal use, from failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.