Float and Rolled Flat Glass

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Manufacturer: Andrew Pearson Industries

Contact address: 1 Andrew Pearson Drive

Mount Airy, NC 27030 Telephone: 336 786 1800

Product: Float Glass, Flat Glass, Kiln-Fired Fused Glass, Laminated Glass

Intended Use: Glass, Countertops, Stair Treads, Wall Cladding, Flooring and

Architectural products manufactured from glass.

Date Prepared: March, 1993 Current Version: March 2011

SECTION 2 HAZARDS IDENTITY

Appearance/Odor Solid, clear or pale green, tinted to various shades depending on

product type. No odor.

Emergency Overview: Product may have sharp edges. Improper handling may cause

lacerations. Flat glass products in their normal state do not present an inhalation or ingestion hazard. Fabrication operations such as cutting, grinding, seaming, edging or breaking may result in the release

of airborne dust which may present a health hazard.

Likely Routes of Exposure: Direct skin contact and/or inhalation of dust.

Potential Health Effects: See Section 11

Acute Signs and Symptoms of Overexposure: Irritation of eyes, nose, and throat when exposed

to dust.

Chronic Signs and Symptoms of Overexposure: No known specific disease associated with

chronic exposure.

Carcinogenicity: Not listed in IARC, OSHA, or NTP.

Medical Conditions Generally Aggravated by Exposure: None during normal handling of glass. Persons with impaired respiratory function or pre-existing skin disorders may be more susceptible to exposure of dust if cutting or grinding glass.

Other: The coatings of the coated glasses listed in section 1 are all based on stable oxide materials, listed in section 3. These oxides are an integral part of the glass product and there is no separate exposure. Note that X-ray diffraction analysis has demonstrated that all the silica (SiO₂) deposited on the glass is non-crystalline and as such does not pose a risk of silicosis.

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SECTION 3 COMPOSITION | INFORMATION ON INGREDIENTS

Components	Wt%	CAS No.
Glass, Oxide, Chemicals	100%	65997-17-3

This product is not considered to be or to contain hazardous chemicals based on evaluations made under the US Hazard Communication Standard, 29 CFR 1910.1200. Dust generated during breakage or fabrication of this product is an amorphous silicate and should be considered a "nuisance particulate."

The products listed in section 1 are based on typical soda-lime-silicate flat glass. Trace amounts of the metals Fe, Se, Ni, Cr and Co are purposely added to some compositions to color the glass and trace amounts of Pb is sometimes present as a contaminant.

SECTION 4 FIRST AID MEASURES

Glass dust:

Eye: Wash out immediately with large volumes of water. If necessary, contact physician

Skin: Wash with soap and water. Do not rub.

Inhalation: Remove from exposure and contact physician.

Ingestion: Seek medical attention.

Flat glass:

Eye: Wash out immediately with large volumes of water. If necessary, contact physician

Skin: If laceration occurs, seek appropriate first aid or medical attention for cuts and bleeding.

Inhalation: None. Ingestion: None

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SECTION 5 FIRE FIGHTING MEASURES

Flash Point: N/A Extinguishing Media: N/A

Flammable Limits LEL: N/A Special Fire-Fighting Procedures: None

UEL: N/A

Auto Ignition Temperature: Non-flammable. Unusual Fire and Explosion Hazards: None

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions: Safety glasses/goggles recommended to protect

eyes in the event of breakage.

Steps Taken in Case Material is Released/Spilled: N/A

Waste Disposal Methods: Not considered a hazardous waste. (Consult

Federal, State and local regulations).

Recycle wherever appropriate facilities exist.

SECTION 7 HANDLING AND STORAGE

Handling: Use proper material handling equipment to avoid accidental breakage. Ensure product

is handled with proper PPE to avoid lacerations. Stand out of the danger zone when

moving glass.

Storage: Secure glass against breaking, falling, impact and vibrations.

SECTION 8 EXPOSURE CONTROLS & PERSONAL PROTECTION

The greatest risk in the handling and storage of glass is through laceration. Appropriate precautions to prevent the risk of this should be taken, e.g. eye protection, cuffs, gloves, foot protection, head protection if handling above head height, etc.

Respiratory Protection: Respiratory protection is not required under normal use of this

product where there are no cutting or grinding operations that

may generate dust.

Respiratory protection may be necessary if engineering controls are not used to reduce dust generation during cutting or grinding operations. If respiratory protection is deemed necessary from exposure monitoring data, follow OSHA regulation 29 CFR 1910, 134 or other local regulations. Always use a NIOSH or other

approved respirator when necessary.

Specified Type: NIOSH/MSHA/CEN approved for particulates.

Ventilation: Use local exhaust as required to maintain dust below TLV or PEL.

Protective Gloves: Anti-lacerative gloves recommended.

Eye Protection: Goggles or face shield

Other Protective Clothing or Equipment: Glass handlers' cuffs, chaps, and apron.

Work/Hygienic Practices: Use wet methods during grinding or cutting to reduce dust.

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SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: N/A Specific Gravity $(H_20) = 1$: 2.45

Vapor Pressure (mm Hg): N/A Vapor Airy Density (Air - 1): N/A

Evaporation Rate (BuAc=1): N/A Solubility in Water: Insoluble

Melting Point: >2000°F, >1100°C Volatility: Not Volatile

Appearance and Odor: Solid, clear or pale green or tinted to various shades depending on

product type. No odor.

SECTION 10 STABILITY AND REACTIVITY DATA

Stability: Stable.

Incompatibility (Materials to avoid): None known.

Hazardous Decomposition Products: None.

Hazardous Polymerization: Will not occur.
Conditions to Avoid: None known.

The coated products listed in section 1 are all designed to pass European Standard (EN1096) which tests the coatings' durability to high temperatures, humidity, corrosive atmospheres and abrasion to ensure the coatings are not damaged or release materials in service. The coatings are stable during production processes, e.g. toughening and IGU formation. The coatings' surface is stable and inert.

SECTION 11 TOXICOLOGY INFORMATION

Flat glass products in their normal state do not present an inhalation or ingestion hazard. Fabrication operations such as cutting, grinding, seaming, edging or breaking may result in the release of airborne dust which may present a health hazard. Dust generated during breakage or fabrication of this product is an amorphous silicate and should be considered a "nuisance particulate."

US Regulation

Component	CAS No.	PEL	TLV
Particulate - Not otherwise regulated	6599717-3	15 mg/m3 (total)	10 mg/m3 (inhalable)
		5 mg/m3 (respirable)	3mg/m3 (respirable)

SECTION 12 ECOLOGICAL INFORMATION

No adverse effects recorded or foreseen.

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SECTION 13 DISPOSAL CONSIDERATIONS

Glass and glass dust can be recycled into some new glass products and should be recycled wherever appropriate and possible.

Glass and glass dust is not considered a hazardous waste under USEPA RCRA.

Dispose as an industrial waste per local requirements.

SECTION 14 TRANSPORTATION INFORMATION

Glass and glass dust is not a hazardous material under USDOT regulations, RQ = NA.

Glass and glass dust is not considered dangerous goods per Canadian DG regulations.

SECTION 15 REGULATORY INFORMATION

Carcinogenicity: Glass and glass dust are not listed by IARC, NTP or OSHA.

EPCRA, CERCLA, SARA: Glass and glass dust are not listed as an Extremely Hazardous Substance

under Section 302 and are not listed as a Hazardous Substance under Section 304. The products do not contain any listed Section 313 (40CFR 372) chemicals in amounts above the minimum notification levels.

Reportable Quantity (RQ): N/A.

TSCA (USA): Listed.

Directive 67|548|EC: Not classified. Regulation EC 1278/2008: Not classified.

SECTION 16 OTHER INFORMATION

The information presented above is believed to be accurate and reliable to the best of our knowledge, however Andrew Pearson Industries makes no warranties expressed or implied regarding this information. In addition, since the use of the product is not within the control of Andrew Pearson Industries, it is the user's obligation to determine the conditions of safe use of the product.