



3form Inc.
2300 S. 2300 W.
Salt Lake City, UT 84119

Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: 3form Laminated Glass

Manufacturer/Supplier:
3form, Salt Lake City, UT 84119

MSDS Prepared by: 3form Technical Support and Product Development, 3form, Salt Lake City, UT 84119

For Emergency Health, Safety, and Environmental Information or Other Information, 3form Call 800-726-0126 or 801-649-2500

Chemical Name: Thermoplastic Polyurethane Laminated Glass.

2. COMPOSITE/INFORMATION ON INGREDIENTS (Typical composition given. Composition may vary slightly.)

Weight % Component

4% - 10% Thermoplastic Polyurethane
90% - 96% Glass

3. HAZARDOUS IDENTIFICATION

CAUTION! HOT MATERIAL WILL PRODUCE THERMAL BURNS

0 = minimal 1 = slight 2 = moderate 3 = serious 4 = severe

HMIS Hazard Ratings:

Health = 0

Flammability = 1

Chemical Reactivity = 0

HMIS and NFPA ratings may vary from company to company.

NFPA Hazard Ratings:

Health = 0

Flammability = 1

Instability = 0

4. FIRST-AID MEASURES



Inhalation: If symptomatic, move to fresh air.

Eye Contact: In case of contact, flush eyes with plenty of lukewarm water. Get medical attention if irritation develops.

Skin Contact: In case of skin contact, wash affected areas with soap and water. Get medical attention if thermal burn occurs.

Ingestion: Get medical attention.

Notes to Physician: In the event of possible diisocyanate exposure due to thermal decomposition: Eyes: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation as needed. Workplace vapors could produce reversible corneal epithelial edema impairing vision. Skin: This compound is skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. Ingestion: Treat symptomatically. There is no specific antidote. Inducing vomiting is contraindicated because of the irritating nature of the compound. Inhalation: Treatment is essentially symptomatic. An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate.

5. FIRE FIGHTING MEASURES

Extinguishing Media: water spray, foam, dry chemical

Special Fire-fighting Procedures: Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

Unusual Fire/Explosion Hazards: Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.

6. ACCIDENTAL RELEASE MEASURES

Spill and Leak Procedures: If molten, allow material to cool and place into an appropriate marked container for disposal.

7. HANDLING AND STORAGE

Storage Temperature: Maximum 65°C (149°F)

Storage Period: Not established



Handling/Storage Precautions: handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Avoid breathing dust. Containers should be kept tightly closed to prevent contamination. Material is hygroscopic and may absorb small amounts of atmospheric moisture.

Further Info on Storage Conditions: Protect equipment (e.g. storage bins, conveyors, dust collectors) with exposed vents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Supplementary local exhaust ventilation, closed systems, or respiratory protection may be needed in special circumstances such as poorly ventilated spaces, mechanical generation of dusts, heating, drying, etc.

Respiratory Protection: If engineering controls do not maintain airborne concentrations to an acceptable level, an approved respirator must be worn (Dust respirator). If respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152.

Eye Protection: It is a good industrial hygiene practice to minimize contact with eyes and wear eye protection when working with these materials.

Skin Protection: No special skin protection requirements are needed during normal handling and use.

Additional Protective Measures: Employees should wash their hands and face before eating, drinking, or using tobacco products. Educate and train employees in the safe use and handling of this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical form: Solid

Appearance: Sheet

Color: Colorless

Odor: Odorless

pH: N/A

Boiling point: N/A

Melting Range: see softening point

Softening point: 85 - 140°C 9185 - 284°F)

Solubility in Water: Insoluble

Specific Gravity: 1.0 – 1.1

Vapor pressure: N/A



Vapor density: N/A
Auto ignition Temperature: N/A

10. STABILITY AND REACTIVITY

Stability: This material is stable.

Materials to Avoid: None

Conditions

Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

No information available.

12. ECOLOGICAL INFORMATION

No ecological information available.

13. DISPOSAL CONSIDERATIONS

Waste disposal should be in accordance with existing federal, state and local environmental control laws.

14. TRANSPORT INFORMATION

Material is considered Non-Regulated by all of the following:

DOT (Domestic Surface)

IMDG Code (Ocean)

ICAO/IATA (Air)

15. REGULATORY INFORMATION

OSHA Status: This product is not hazardous under the criteria of the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, thermal processing and decomposition fumes from this product may be hazardous as noted in section 3.

CERCLA reportable quantity: None reported

SARA Title III:



Section 302 Extremely Hazardous Substances: None

Section 311/312 Hazard Categories: Non- Hazardous under Section 311/312

Section 313 Toxic Chemicals: None

RCRA Status: If discarded in its purchased form, this product would not be hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

16. OTHER INFORMATION

Neither 3form nor its marketing affiliates shall be responsible for the use of this information, or of any product, process or apparatus mentioned, and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and for the health and safety of your employees and purchasers of your products. No warranty is made of the merchantability or fitness of any product; and nothing herein waives any of the Seller's conditions of sale.
