

# MATERIAL SAFETY DATA SHEET

enlighten-U<sup>®</sup> microcellular polyurethane

## Section 1: Product & Company Information

Manufacturer: GRISWOLD LLC  
Address: P.O. Box 638  
One River Street  
Moosup, CT 06354-0638  
Phone: 860-564-3321  
Fax: 860-564-5690

Trade Name and Synonyms: enlighten-U<sup>®</sup>  
Products beginning with the following: U7R  
Chemical Name: Polyurethane Foam  
Chemical Family: Polyurethane

## Section 2: Composition

Ingredients: Polyurethane  
CAS#: N/A  
%: >75%  
ACGIH-TLV, TWA: Not established  
OSHA PEL: Not established

Ingredients: Hydrated Alumina  
CAS#: 21645-51-2  
%: <25%  
ACGIH-TLV, TWA: 10 mg/m<sup>3</sup> (as AL)  
OSHA PEL: 15 mg/m<sup>3</sup> (as Dust)

The urethane foam, on these products, is supported by a layer of plastic film:

Ingredients: Polyethylene Terephthalate (PET)  
CAS#: 25038-59-9  
%: Not part of the foam  
ACGIH-TLV: Not established  
OSHA PEL: Not established

This material is exempt from the Hazard Communication Standard since it is produced as an "article" as defined in 20 CFR 1910.1200 (b)(6)(v). An "article" is defined in 1910.1200(c). Under normal conditions of use, this material does not release and will not result in exposure to a hazardous chemical. Therefore, no Material Safety Data Sheet is required. This data sheet is therefore provided only as a convenience to users of our products.

## Section 3: Hazards Identification

LD50 – LC50: None specified.

Route of Entry – Inhalation:	Not expected to be an inhalation hazard.
Route of Entry – Skin:	Not expected to be a skin hazard.
Route of Entry – Ingestion:	Not expected to be an ingestion hazard.
Health Hazard Acute and Chronic:	None are expected with normal handling. Cutting, grinding and other finishing operations may generate nuisance dust. As such, proper ventilation and personnel protection measures should be taken to limit exposure to nuisance dusts as defined by OSHA. Hot wire cutting operations may produce toxic fumes.
Carcinogenicity – NTP:	NA
Carcinogenicity – IARC:	NA
Carcinogenicity – OSHA:	NA
Signs and Symptoms of Overexposure:	None specified.
Medical Conditions Aggravated by Overexposure:	None specified.
National Fire Protection Association (NFPA)	Ratings have not been established for this material.
Hazardous Material Information System: (HMIS)	Ratings have not been established for this material.

## Section 4: First Aid Measures

Eye Contact:	In case of eye contact, immediately rinse with clean water. Obtain medical attention if pain, blinking, tears or redness persists.
Skin Contact:	Not expected to present a significant skin hazard under anticipated conditions of normal use.
Inhalation:	NA
Ingestion:	Ingestion unlikely. However, if ingested, obtain emergency medical attention.

## Section 5: Fire-fighting Measures

Flash Point:	NA
Lower Explosive Limit:	NA
Upper Explosive Limit:	NA
Extinguishing Media:	Water, Fog, Dry Chemical, Foam, Carbon Dioxide.
Special Fire Fighting Procedures:	Wear NIOSH/MSHA approved SCBA and full protective gear as decomposition in fire may produce toxic fumes.
Unusual Fire and Explosion Hazards:	May generate dense smoke in fire situation.

## Section 6: Accidental Release Measures

Steps to take if Material Released/Spilled:	Clean up while avoiding the creation of nuisance dust.
Neutralizing Agent:	None specified.

## Section 7: Handling and Storage

General Storage Requirements:	Keep away from open flame, electrical or mechanical sparks, electric heaters, high-powered lights, flame sources and flammable liquids and gases.
-------------------------------	---

## Section 8: Exposure Controls and Personal Protection

Eye Protection:	Wear safety glasses during cutting operations.
Skin Protection:	Not expected to be a skin hazard. Where use can result in skin contact, practice good personal hygiene. Wash hands and other exposed areas with mild soap and water before eating, drinking, smoking, and when leaving the work area.
Respiratory Protection:	Wear a suitable dust mask during mechanical cutting operations. The use of hot wire cutting devices requires local exhaust sufficient to prevent exposure to potential toxic fumes that may be generated.
Ventilation:	Use sufficient ventilation to keep dust exposure below the 5-mg/m <sup>3</sup> minimum for a respirable nuisance dust.

## Section 9: Physical and Chemical Properties

Physical State:	Semi-Rigid Cellular Polyurethane
Odor:	Slight
Specific Gravity:	0.2 – 0.5
Vapor Pressure:	NA
Evaporation Rate:	NA
Solubility in Water:	NA
pH:	NA

## Section 10: Stability and Reactivity

Stability:	Stable under normal conditions.
Incompatibility:	None known.
Hazardous Decomposition:	Decomposition in fire may produce toxic fumes consisting of carbon monoxide, carbon dioxide, oxides of nitrogen, HCN and other toxic materials.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	NA

## Section 11: Toxicological Information

Toxicity:	Inhalation of dust is to be avoided, as it is a mechanical irritant.
Eye Irritant:	Dust exposure may create a mechanical irritant.
Primary Skin Irritation:	Not generally considered a skin irritant.

## Section 12: Ecological Information

No data available. This material has yet to undergo testing to determine ecological impact.

## Section 13: Disposal Considerations

Waste Disposal:	Dispose of in accordance with all applicable federal, state and local regulations.
-----------------	--

## Section 14: Transport Information

Proper Shipping Name: Polyurethane Foam  
Primary Hazard Class: NA  
Secondary Hazard Class: NA  
Label Required: None  
Placard Required: None  
Poison Constituent: NA  
UN Code: NA  
EPA Registration #: NA

## Section 15: Regulations

Regulatory information: Not available

## Section 16: Other Information

General Comments: Some of the information presented and conclusions drawn herein are from sources other than direct test data of the material itself.

Disclaimer of Liability: The information in this MSDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the material are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the material.

This MSDS was prepared and is to be used only for this material. If the material is used as a component in another material, this MSDS information may not be applicable. This document is generated for the purpose of distributing health, safety, and environmental data. It is not a specification sheet nor should any displayed data be construed as a specification. Some of the information presented and conclusions drawn herein are from sources other than direct test data on the material itself.

Prepared By: Art James III  
Title: Polyurethane Chemist, Department Manager  
Date: October 1, 2015