



MATERIAL SAFETY DATA SHEET

Product: **SIGN FOAM RPU-4000**

Revision 12/15/14
Prepared by Chemical Lab

GENERAL INFORMATION

Sign Arts Products
26081 Merit Circle
Suite 104
Laguna Hills, CA 92653

Product Information:

SIGN FOAM RPU-4000 is a closed-cell rigid polyurethane foam. All substances used to manufacture **SIGN FOAM RPU-4000** is listed on the TSCA inventory.

*Last two digits indicate density in pounds/cubic foot

PHYSICAL CHEMICAL DATA

HAZARDOUS INGREDIENTS	None
FORM	Cellular Solid
WATER SOLUBILITY	Not soluble
SPECIFIC GRAVITY	0.05 to 0.60
VAPOR PRESSURE	Not applicable

FIRE AND EXPLOSION DATA

FLASH POINT	None. This material is flame resistant and self-extinguishing; however, it will burn in the presence of sufficient heat and oxygen.
EXTINGUISHING MEDIA	Dry chemical, carbon dioxide, water or foam spray.
SPECIAL PROCEDURES	During a fire: carbon monoxide, nitrogen oxides and other polymer fragments that may be highly toxic and/or irritating may be present. Self-contained breathing apparatus and full protective gear should be used.

Polyurethane foam dust, like most dusts, can present an explosion risk. However, a dust collection system necessary for a suitable work environment is more than adequate to eliminate this risk. General Plastics Manufacturing Company has used a dust collection system and over many years of experience in cutting, planing, shaping, routing and sanding **SIGN FOAM®** polyurethane foam has never experienced any fire or explosion hazards.

REACTIVITY DATA

INCOMPATIBLE MATERIALS None, this product is stable and chemically inert

HEALTH HAZARDS

INGESTION	Urethane foams are generally considered not toxic; however, all ingestion is to be avoided.
EYE CONTACT	See comments about dust below
SKIN CONTACT	See comments about dust below
INHALATION	SIGN FOAM RPU-4000 foams are chemically inert. This foam has been developed to minimize dust generated in machining operations. Minor amounts of foam dust may generated in many operations and a dust collection system is normally used for a suitable work environment. Studies published by Upjohn in the Technical Bulletin No. 107 show no sensitization on skin contact with rigid polyurethane foam dust, and the many years of experience in cutting, planing shaping, routing, and sanding rigid polyurethane foams at General Plastics Manufacturing Company is in agreement with these studies. The studies by Upjohn show no inhalation problems which are peculiar to polyurethane foam dust. Normal protective equipment, such as gloves, eye goggles and masks that mechanically filter the dust may be necessary in operations where significant amount dust is generated.

Note: Tests with Sprague-Dawley rats at 8.65mg/cubic meter of polyurethane dust show no carcinogenic effects.

Medical conditions that may be aggravated by exposure include asthma, bronchitis, emphysema, skin allergies, and eczema.

The possibility exists that individuals who are very sensitive to isocyanates may also be sensitive to the reacted foam. Should this be the case, those individuals need to be assigned to an area which does not have polyurethane foam.

FIRST AID PROCEDURES

SKIN	Wash with soap and water. Seek medical attention if redness persists.
EYES	Immediately flush with plenty of water to remove dust particles. If irritation is severe and/or is not promptly relieved by washing seek medical attention.
INGESTION	Not applicable
INHALATION	Move to fresh air
NOTE	Any worker exposed to polyurethane dust who develops symptoms of irritation (dermatitis, respiratory problems, puffiness around the eyes, etc.) should seek medical attention.

SPILL AND DISPOSAL

SPILL	Not applicable
DISPOSAL	Dispose of in accordance with state and Federal regulations

SPECIAL PROTECTION INFORMATION

RESPIRATORY	If cutting, machining, or drilling normal ventilation for standard manufacturing procedures is generally adequate. Dust collection systems and/or dust masks should be used as appropriate to reduce excessive inhalation of dust.
SKIN	Standard shop coats, arm protectors and gloves should be used if extensive skin contact with dusts from machining work is possible.
EYE PROTECTION	Side shield goggles required for normal drilling and cutting operations are used to protect eyes from particles and dusts.

ADDITIONAL PRECAUTIONS

HANDLING	Not applicable
STORAGE	Will yellow on surface with sunlight or with time

OTHER REGULATORY INFORMATION

TRANSPORTATION DATA	SIGN FOAM RPU-4000 is not regulated or classified in a manner that requires special handling or precautions in shipment.
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CANADIAN REGULATORY INFORMATION

With respect to Canadian regulations for Controlled and Not Controlled Products, **SIGN FOAM RPU-4000** is not a Controlled Product.

With respect to the Canadian New Substances Notification Regulation, this foam meets the requirements for definition as an article; therefore, **SIGN FOAM RPU-4000** is exempt by the provision for an Article Exemption.