



SAFETY DATA SHEET

FROGGIE BOARD

Section 1: Identification Of the Substance/Mixture And Of The Supplier

Supplier

Acropolis Studios Model Works, Inc.
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Supplier Emergency Contacts & Phone Number

Jill Kenik: 573-883-2640

Issue Date: 08/26/2015

Product Name: FROGGIE BOARD

CAS Number: NA

Chemical Formula: mixture

Product/Material Uses

Froggie Board is a high-density urethane modeling board used for modelmaking by CNC milling or bench carving.

Section 2: Hazards Identification

Hazard Classification(s)

HAZARD CLASSIFICATION(S): None

SIGNAL WORD: None

HAZARD STATEMENTS: NA

PRECAUTIONARY STATEMENTS: NA

Section 3: Composition/Information On Ingredients

Ingredient Name	CAS Number		Percent Of Total Weight
butyl benzyl phthalate	85-68-7	<	0.1
4,4'-methylene bis(phenylisocyanate)	101-68-8	<	0.1

Product is a reacted mixture composed chiefly of the above ingredients. The chemical, physical and toxicological properties of the finished product are believed to be substantially different than those of these individual unreacted ingredients.

EU Hazard Classifications:

4,4'-methylene bis(phenylisocyanate) - Xi, R20, R36/37/38, R42/43

butyl benzyl phthalate - R61, R62, R50/53

Section 4: First Aid Measures

Eye

Remove contact lenses, if worn. Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately if irritation develops and persists.

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Section 4: First Aid Measures - Continued

Skin

To avoid inhalation of dust, DO NOT shake or blow dust off clothing or the body. Wash affected areas with soap and water. Get medical attention immediately if irritation (redness, rash, blistering) develops and persists.

Ingestion

Call a physician or a poison control center immediately.

Inhalation

Remove person from source of exposure to fresh air. If breathing is difficult, give oxygen. Get medical attention if irritation or respiratory difficulties develop.

Section 5: Fire Fighting Measures

Flash Point Method: NA

Fire And Explosion Hazards

Material is combustible at high temperatures. Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source, may be considered a combustible dust. Maintain a clean area. Collect all shavings and dust in a closed container. Keep away from open flame. Thermal decomposition ("burning") may evolve toxic and irritating combustion byproducts.

Extinguishing Media

Use the appropriate extinguishing media for the surrounding fire.

Fire Fighting Instructions

Firefighters should wear self-contained breathing apparatus and full protective gear. Water can be used to cool and protect exposed material.

Section 6: Accidental Release Measures

Pick up released product with appropriate implements and return to original container if reusable. Avoid generating dust.

Section 7: Handling And Storage

Handling And Storage Precautions

Store in a cool, dry, well-ventilated area. Use only with adequate ventilation when machine, melting or molding.

Section 8: Exposure Controls/Personal Protection

Engineering Controls

None normally required. Use with adequate general and local exhaust ventilation when machine, melting or molding.

Eye/Face Protection

Safety glasses are recommended as minimum industrial eye protection when cutting, machining or sanding.

Skin Protection

None normally required. Thermal-resistant gloves are recommended when melting or molding product.

Respiratory Protection

Engineering controls should be implemented preferentially to reduce exposures. Local exhaust ventilation should be provided in areas of machining and dust generation, or melting/molding. In case of inadequate ventilation, use NIOSH-approved respirator for particulates (e.g., P-100), when generating dust, and/or organic vapors, when molding/melting.

Firefighters and emergency responders should wear positive pressure demand self-contained breathing apparatus.

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Section 8: Exposure Controls/Personal Protection - Continued

Ingredient(s) - Exposure Limits

butyl benzyl phthalate

No exposure limits established by ACGIH or OSHA

4,4'-methylene bis(phenylisocyanate)

ACGIH TLV-TWA: 0.005 ppm

OSHA PEL-CEILING: 0.02 ppm

NIOSH REL-TWA: 0.005 ppm

NIOSH REL-CEILING: 0.02 ppm (10 min)

Section 9: Physical And Chemical Properties

Appearance

green colored blocks, rods or slices

Odor

Odorless during normal handling. High speed cutting may result in a burnt smell from the cutting friction.

Chemical Type: Mixture

Physical State: Solid

Melting Point: >325 °F

Boiling Point: unknown °F

Specific Gravity: 1.07

Percent Volatiles: 0

Vapor Pressure: NA

Vapor Density: NA

pH Factor: NA

Solubility: insoluble

Viscosity: NA

Evaporation Rate: NA

Partition Coefficient (n-octanol/water): not available

Flash Point: not available

Flammability (solid, gas): not available

Lower Explosive Limit (LEL %): not applicable

Upper Explosive Limit (UEL %): not applicable

Autoignition Temperature: not available

Decomposition Temperature: not available

Section 10: Stability And Reactivity

Stability: stable

Hazardous Polymerization: will not occur

Incompatible Materials

None known. Resistant to moisture, many solvents and dilute acids.

Hazardous Decomposition Products

When heated to decomposition, product may evolve irritating and toxic fumes of nitrogen oxides, carbon monoxide, sulfur oxide and traces of hydrogen cyanide.

Section 11: Toxicological Information

Eye Effects

No effects expected in its finished form. Dust may be irritating to the eyes. Molten or melted product may emit irritating vapors or fumes.

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Section 11: Toxicological Information - Continued

Skin Effects

No effects expected for handling the final finished product. Dust may be irritating to the skin and mucous membranes. Contact with hot product will cause thermal burns.

May contain trace unreacted methylenediphenyl diisocyanate (MDI). Allergic contact dermatitis has been reported from occupational contact with MDI. The relevance of this data to this finished product is unknown.

Acute Oral Effects

No effects expected from accidental ingestion of small amounts. No information is available regarding intentional ingestion of large amounts.

Acute Inhalation Effects

No effects expected from the final finished product. Inhalation of excessive dust from machining or sanding may cause respiratory and mucous membrane irritation. Symptoms may include eye and nose irritation, dry or sore throat, shortness of breath, coughing with chest pain or tightness. Very high dust concentrations may cause inflammation of lung tissue and asthma-like wheezing. Pulmonary edema may occur in severe cases.

Thermal decomposition products from melting or molding may be irritating.

May contain trace unreacted methylenediphenyl diisocyanate (MDI). Respiratory sensitization has been reported from occupational inhalation of MDI at low concentrations. The relevance of this data to this finished product is unknown.

Chronic/Carcinogenicity

The International Agency for Research on Cancer (IARC) has concluded that two ingredients reacted to form the finished product, MDI and butyl benzyl phthalate, are not classifiable as to their carcinogenicity to humans (Group 3).

Miscellaneous Toxicological Information

The finished product is a reacted polyurethane resin board composed predominantly of reacted ingredients MDI, butyl benzyl phthalate (BBP), and non-hazardous plasticizers. Trace residual unreacted ingredients may be present especially when heated to decomposition. MDI and BBP may cause skin and respiratory irritation and sensitization, particularly in sensitized individuals. BBP is a reproductive effector.

Ingredient(s) - Carcinogenicity

butyl benzyl phthalate

Listed In The IARC Monographs

4,4'-methylene bis(phenylisocyanate)

Listed In The IARC Monographs

Ingredient(s) - Toxicological Data

butyl benzyl phthalate

LD50 (dermal, rat): 6700 mg/kg

LD50 (dermal, mouse): 6700 mg/kg

LD50 (oral, guinea pig): 13750 mg/kg

LD50 (oral, rat): 2300 mg/kg

LD50 (oral, mouse): 4170 mg/kg

4,4'-methylene bis(phenylisocyanate)

LC50 (inhal, rat): 178 mg/m³

LD50 (oral, rat): 9200 mg/kg

LD50 (oral, mouse): 2200 mg/kg

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Section 12: Ecological Information

Ecotoxicological Information

No information available for the finished product. Not believed to present a significant environmental hazard.

Section 13: Disposal Considerations

Dispose in accordance with applicable federal, state and local government regulations. This product is not considered a Hazardous Waste under RCRA, although the use of a licensed, professional disposal service is recommended for large amounts of waste.

Section 14: Transport Information

Proper Shipping Name

Not regulated for transportation

Section 15: Regulatory Information

U.S. Regulatory Information

Toxic Substance Control Act (TSCA): All ingredients of this product are listed on the TSCA 8(b) Chemical Substance Inventory or are exempt. The finished product does not meet the criteria for any of the five SARA Title III hazard classifications.

Ingredient(s) - U.S. Regulatory Information

4,4'-methylene bis(phenylisocyanate)
SARA Title III - Section 313 Form "R"/TRI Reportable Chemical

Ingredient(s) - Canadian Regulatory Information

butyl benzyl phthalate
WHMIS - Ingredient Disclosure List
4,4'-methylene bis(phenylisocyanate)
WHMIS - Ingredient Disclosure List

Section 16: Other Information

NFPA Rating

Health: 0

Fire: 1

Reactivity: 0

Revision/Preparer Information

This MSDS Supersedes A Previous MSDS Dated: 08/25/2015

Disclaimer

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