

# SLEEP INNOVATIONS/ADVANCED URETHANE TECHNOLOGIES

Tomorrow's innovations.....Today

FOR ANY EMERGENCY, CALL A LOCAL - NATIONAL POISON CONTROL UNIT OR THE SLEEP INNOVATIONS/ADVANCED URETHANE TECHNOLOGIES EMERGENCY PHONE (24 hours: In the USA):(732)-403-1002

PRODUCT NAME: POLYURETHANE FOAM

### I. PRODUCT AND COMPANY IDENTIFICATION

REVISION DATE:

November 25, 2009

SUPERCEDES:

None

MSDS NO:

0001

SYNONYMS:

Flexible Polyurethane Foam

CHEMICAL FAMILY:

All polyether and polyester foam products

DESCRIPTION / USE:

Bedding, Cushions, Automotive

FORMULA:

Not Available

Sleep Innovations, Inc./Advanced Urethane Technologies, 187 Route 36, Suite 101, West Long Branch, NJ 07764

#### II. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS#	% Range	OSHA PEL / ACGIH TLV
Polyurethane Foam	9009-54-5	100%	None Established

Polyurethane foam is a fully cross-linked reaction product of polyether polyhydroxy polyol(s), diisocyanate(s) and/or polymeric isocyanates such as toluene diisocyanate, methylene diphenyl diisocyanates, catalysts, surfactants, colorants, water, and in some instances stabilizers, polymer modifiers and other additives. Polyurethane foam product is cellular plastic polymeric material consisting of repeating units of carbon, hydrogen, oxygen and nitrogen that is fully reacted and cured.

### III. HAZARDS IDENTIFICATION

Product Classification:

None

Routes of Entry:

Inhalation, Eyes

Chemical Interactions:

No known interactions

Medical Conditions

No data available

Aggravated:

## **Human Threshold Response Data**

Odor Threshold:

Not established

Irritation Threshold:

Not established

## Immediate (Acute) Health Effects

Inhalation Toxicity:

Not expected to be toxic by inhalation.

Inhalation Irritation:

Coarse dust can cause mechanical irritation of lungs and eyes. Airborne dust is evaluated as a nuisance dust. If ignited, foam may decompose and emit toxic gases and

respiratory irritants a respiratory irritant.

Skin Contact:

No data available

Eye Contact:

Coarse dust can cause mechanical irritation to the eyes. If

exposed, avoid rubbing eyes.

Ingestion Irritation:

No data available

Ingestion Toxicity:

No data available

Acute Target Organ

Toxicity:

None known

## Prolonged (Chronic) Health Effects

Carcinogenicity:

This product is not known or reported to be carcinogenic by

any reference source including IARC or NTP.

Reproductive and

Not known or reported to cause reproductive or

Developmental Toxicity:

developmental toxicity.

Inhalation:

Coarse dust can cause mechanical irritation of lungs and

eyes. Airborne dust is evaluated as a nuisance dust. If ignited, foam may decompose and emit toxic gases and

respiratory irritants a respiratory irritant.

Skin Contact:

There are no known or reported effects from chronic

exposure except for effects (if any) similar to those

experienced from acute exposure.

Ingestion:

There are no known or reported effects from chronic

ingestion except for effects similar to those experienced from

single exposure.

Chronic Target Organ

Toxicity:

None known

Supplemental Health

Hazard Information:

No additional health information available

### IV. FIRST AID

Inhalation:

IF INHALED: Remove individual to fresh air; Call a

physician if respiratory discomfort persists.

Skin Contact:

IF ON SKIN: None necessary.

Eyes:

IF IN EYES: Flush eyes with plenty of water for at least 15

minutes. Call a physician if irritation develops.

Ingestion:

IF SWALLOWED: Consult a physician.

### V. FIRE FIGHTING MEASURES

Fire/Explosion Hazards:

Material may be ignited only if preheated to high

temperatures (greater than 500 deg F), for example in a fire.

Extinguishing Media:

Use alcohol foam, carbon dioxide, dry chemical or water spray when fighting fires. Water or foam may cause frothing if liquid solvent or oil is burning but it still may be a useful

extinguishing agent if carefully applied to the fire.

Fire Fighting Instructions: In case of fire, use normal fire fighting equipment including an approved self-contained breathing apparatus (SCBA).

Hazardous Combustion

Carbon monoxide, Carbon dioxide

Products:

Classification:

Combustible Solid

NFPA Sprinkler

Extra Hazard

Classification:

Lower

No data

Flammable/Explosive

Limit, % in air:

Upper

No data

Flammable/Explosive

Limit, % in air:

Special Considerations:

Flexible polyurethane foam, like all organic materials, will burn if exposed to a sufficient heat source. The ignition temperature of polyurethane foam will vary depending on the product chemical formulation, but all polyurethane foams are combustible and can create a fire risk. Flexible polyurethane foams, once ignited, may degrade and melt to a combustible liquid, which may add to the fire involvement.

Fire retardant foams should not be considered safe under all conditions.

Thermal decomposition products from foams can be toxic and present a

risk to humans who are exposed.

Fires of polyurethane foams generate large quantities of dense smoke

# VI. ACCIDENTAL RELEASE MEASURES

No special response required.

## VII. HANDLING AND STORAGE

Safe Handling and Storage:

Warehousing of bun stock, sheets, rolls and fabricated items should be stored under a fusible sprinkler system with a minimum of six feet clearance between stacks of foam and the sprinkler heads. Do not store foam near any ignition sources such as exposed electrical or gas heating elements, open flames and exposed lights. Do not smoke in foam storage areas. Do not allow foam scrap and cutting to accumulate and maintain clear aisles with adequate access to all storage areas and exits.

Shelf Life Limitations:

No data available

Incompatible Materials

for Storage:

Refer to Section X, "Incompatible Materials."

#### VIII. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ventilation:

General exhaust is normally required for those processing areas that may generate foam dust and decomposition products. Examples of these processes include sawing, grinding, buffing and flame lamination, hot wire cutting, heat sealing and hot stamping. No exposure limits exist for the

constituents of this product.

### Protective Equipment for Routine Use of Product

Respiratory Protection Respiratory protection not normally needed since volatility

and toxicity are low. If vapors, mists or aerosols are

generated, wear an approved respirator.

Respirator Type(s):

An approved air purifying respirator with dust/mist filter. Air

purifying respirators should not be used in oxygen deficient or IDLH atmospheres or if exposure concentrations exceed

ten (10) times the published limit.

Skin:

Follow good industrial hygiene practices.

Eyes:

Use safety glasses with side shields.

Protective Clothing Type:

Normal clothing

# Exposure Limit Data

CHEMICAL NAME	CAS#	% Range	OSHA PEL / ACGIH TLV	
Polyurethane Foam	9009-54-5	100%	None Established	
:. NIOSH Immediately	The IDLH has not been established for			

NIOSH Immediately Dangerous to Life or

this product.

Health:

#### IX. PHYSICAL DATA

Physical State: Uniform cellular solid structure

Color:

Varies

Odor:

Sweet

Molecular Weight:

Not Applicable

pH (@ 25 Deg. C):

Not Applicable

Octanol/Water Coeff:

Not Applicable

Solubility in Water:

Not Applicable

Bulk Density:

0.5 - 40 lb/cubic foot

Specific Gravity:

Not Applicable

Vapor Density:

Not Applicable

Vapor Pressure:

Not Applicable

Evaporation Rate:

Not Applicable

Volatiles, % by vol.:

Not Applicable

Boiling Point:

Not Applicable

Melting Point:

175 - 190 C

Freezing Point:

Not Applicable

Flammable Properties

Flash Point:

> 260 C

Autoignition

No Data

Temperature:

#### X. STABILITY AND REACTIVITY

Stability and Reactivity

Stable under normal conditions.

Summary:

Reactive Properties:

Not sensitive to static discharge.

Hazardous

Will not occur

Polymerization:

Conditions to Avoid:

Moisture (will lead to product performance degradation)

Hygroscopic High temperatures

Chemical

Strong oxidizing agents, strong acids and bases

Incompatibility:

Hazardous

Unidentified organic compounds, carbon monoxide

Decomposition Products:

Decomposition

No data

Temperature:

# XI. TOXICOLOGICAL INFORMATION

# Component Animal Toxicology

Oral LD50 value:

No data

Dermal LD50 value:

No data

Inhalation LC50 value:

No data

# Product Animal Toxicity

Oral LD50 value:

No data

Dermal LD50 value:

No data

Inhalation LC50 value:

No data

Skin Irritation:

This material is expected to be non-irritating.

Eye Irritation:

This material is expected to be non-irritating.

Reproductive and

Not known or reported to cause reproductive or

Developmental Toxicity:

developmental toxicity.

Mutagenicity:

Not known or reported to be mutagenic.

Carcinogenicity:

This chemical is not known or reported to be carcinogenic by

any reference source including IARC or NTP.

#### XII. ECOLOGICAL INFORMATION

**Ecological Toxicity** 

No data.

Values:

### XIII. DISPOSAL CONSIDERATIONS

CARE MUST BE TAKEN TO PREVENT ENVIRONMENTAL CONTAMINATION FROM THE USE OF THIS MATERIAL. THE USER OF THIS MATERIAL HAS THE RESPONSIBILITY TO DISPOSE OF UNUSED MATERIAL, RESIDUES AND CONTAINERS IN COMPLIANCE WITH ALL RELEVANT NATIONAL LAWS, DIRECTIVES AND REGULATIONS REGARDING TREATMENT, STORAGE AND DISPOSAL FOR HAZARDOUS AND NONHAZARDOUS WASTES.

Waste Disposal

Dispose according local, state, and federal laws, directives

Summary:

and regulations.

Disposal Methods:

As a nonhazardous waste, it should be disposed of in accordance with National and EU laws, directives and

regulations.

#### XIV. TRANSPORTATION INFORMATION

Air (IATA/ICAO):

Not Regulated

Water (IMO):

Not Regulated

Flash Point: (C)

> 260

Land (ADR/RID):

Not Regulated

### XV. REGULATORY INFORMATION

EU labeling and packing:

Not applicable

Symbols:

None

### XVI. ADDITIONAL INFORMATION

MSDS REVISION

Revised to meet the ANSI standard of 16 sections.

STATUS:

Additional Information:

None

THE INFORMATION INTHIS SDS SHOULD BE PROVIDED TO ALL WHO WILL USE, HANDLE, STORE, TRANSPORT, OR OTHERWISE BE EXPOSED TO THIS PRODUCT. THIS INFORMATION HAS BEEN PREPARED FOR THE GUIDANCE OF PLANT ENGINEERING, OPERATIONS AND MANAGEMENT AND FOR PERSONS WORKING WITH OR HANDLING THIS PRODUCT. SLEEP INNOVATIONS BELIEVES THIS INFORMATION TO BE RELIABLE AND UP TO DATE AS OF THE DATE OF PUBLICATION BUT, MAKES NO WARRANTY THAT IT IS. ADDITIONALLY, IF THIS SDS IS MORE THAN THREE YEARS OLD, YOU SHOULD CONTACT SLEEP INNOVATIONS AT THE PHONE NUMBER ON THE FRONT PAGE TO MAKE CERTAIN THAT THIS DOCUMENT IS CURRENT.