



ISOC1-SDS-0222

KINGSPAN INSULATION, LLC
UNFACED RIGID POLYISOCYANURATE FOAM
SAFETY DATA SHEET

KINGSPAN INSULATION, LLC 12501 NW 38TH AVENUE MIAMI, FLORIDA 33054

IMPORTANT: Read this SDS before handling and disposing of this product and pass this information on to employees, customers, and users of this product. This product is covered by the OSHA Hazard Communication Rule and this document has been prepared in accordance with the SDS requirements of the rule.

SECTION 1: IDENTIFICATION

Trade Name: ISO-C1 (densities 2, 2.5, 3, 4 and 6 lb/ft³)
Telephone Number: (305) 921-0100 MIAMI, FL
Other Names: UNFACED ISO, POLYISO
Chemical Name/Family: POLYISOCYANURATE RIGID FOAM INSULATION
DOT Hazardous Materials
Proper Shipping Name: *NOT REGULATED (SEE SUPPLEMENT)*
Generic Name: *POLYISOCYANURATE*
DOT Hazard Class: *NOT REGULATED*
CAS No: *PROPRIETARY*
Amount: 100%
PEL/TLV: *NOT ESTABLISHED*

SECTION 2: HAZARDS IDENTIFICATION

Acute Health Effects (Short-Term): *CAN BE A MECHANICAL IRRITANT TO SKIN, EYES, & UPPER RESPIRATORY SYSTEM DURING FABRICATION*
Chronic Health Effects (Long-Term): *STUDIES SHOW NO STATISTICALLY SIGNIFICANT INCREASED RISK OF RESPIRATORY DISEASES*
Inhalation: *Dust may cause irritation to the upper respiratory tract (nose and throat). NO SIGNIFICANT SIGNS OR SYMPTOMS INDICATIVE OF ANY ADVERSE HEALTH ARE EXPECTED TO OCCUR AS A RESULT OF INHALATION EXPOSURE.*
Eye Contact: *MAY CAUSE MINOR EYE IRRITATION FROM DUST ORIGINATING FROM FABRICATION.*
Skin Absorption: *NO SIGNIFICANT SIGNS OR SYMPTOMS INDICATIVE OF ANY ADVERSE HEALTH HAZARD ARE EXPECTED TO OCCUR AS A RESULT OF SKIN ABSORPTION.*
Skin Irritation: *MAY PRODUCE SLIGHT SKIN IRRITATION.*
Ingestion: *NO SIGNIFICANT SIGNS OR SYMPTOMS INDICATIVE OF ANY ADVERSE HEALTH HAZARD ARE EXPECTED TO OCCUR AS A RESULT OF INGESTION. PRODUCT IS NOT FOR CONSUMPTION.*

Summary Chronic Hazards and Special Health Effects: *THE MAJOR COMPONENTS OF THIS PRODUCT HAVE NOT BEEN IDENTIFIED AS SIGNIFICANT HAZARDS IN LONGTERM STUDIES.*



Hazardous Decomposition Products (Fire): *LIKE WOOD AND OTHER ORGANIC MATERIALS CAN RELEASE TOXIC SMOKE IF IGNITED.*

NO ADDITIONAL MEDICAL INFORMATION FOUND.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

(This may not be a complete list of components)

Component Name	(%)	CAS #
Modified polyisocyanurate polymer	≥85	Not applicable
Cyclopentane	<5	287-92-3
Isopentane	<5	78-78-4
Tris (1-chloro-2-propyl) phosphate	≤5	13674-84-5

SECTION 4: FIRST AID MEASURES

Inhalation: *REMOVE TO FRESH AIR.*

Eye Contact: *FLUSH WITH WATER FOR 15-20 MINUTES OR UNTIL IRRITATION CEASES.*

Skin Contact: *WASH WITH SOAP AND WATER.*

Ingestion: *IF SWALLOWED, DILUTE WITH WATER. DO NOT INDUCE VOMITING.*

Emergency Medical Treatment Procedures: *PERSONS WHO DEVELOP SYMPTOMS OF ALLERGY, IRRITATION, RESPIRATORY PROBLEMS, OR PUFFINESS AROUND THE EYES SHOULD BE EXAMINED BY A PHYSICIAN AS SOON AS POSSIBLE.*

SECTION 5: FIRE FIGHTING MEASURES

Flash Point (Method): *UNKNOWN*

Auto-ignition Temperature: *Greater than 450°C, per ASTM D1929*

Flammable Limits (% Vol. in Air)

At Normal Atmospheric Temperature and Pressure: *Lower: N/A Upper: N/A*

Fire and Explosion Hazards: *POLYISOCYANURATE FOAM WILL BURN IF EXPOSED TO FLAME OF SUFFICIENT HEAT AND INTENSITY. LIKE OTHER ORGANIC MATERIALS, CAN RELEASE TOXIC SMOKE IF IGNITED.*

Extinguishing Media: *DRY CHEMICAL, CO2, WATER SPRAY, WATER FOG, FOAM, WATER*

Special Firefighting Procedures: *SELF-CONTAINED BREATHING APPARATUS, dense smoke is emitted when polyisocyanurate foam is burned in an oxygen starved environment.*



Unusual Fire Hazards: *Cutting, grinding and sawing can cause the formation of dust. To reduce the potential of dust explosions, do not permit dust to accumulate, provide adequate ventilation and practice good housekeeping procedures.*

The compaction of polyisocyanurate foam for disposal can entrap pentane in pockets of the compressed foam or at the bottom of the compactor. Appropriate engineering of the compactor is recommended to keep pentane levels below the LFL levels and to remove potential ignition sources caused from metal to metal contact in the compactor.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Precautions If Material is Spilled or Released: *NOT APPLICABLE*

Waste Disposal Methods: *DISPOSAL SHOULD BE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.*

SECTION 7: HANDLING AND STORAGE

PROTECT FROM MOISTURE. WHEN STORED OUTDOORS, STACK ABOVE GROUND LEVEL AND COVER WITH TARPAULINS OR OTHER SUITABLE COVERING.

THIS MATERIAL IS COMBUSTIBLE AND SHOULD NOT BE EXPOSED TO FLAME OR OTHER IGNITION SOURCES, REFER TO FIRE AND EXPLOSION RISKS (SECTION 5 IN THIS SDS).

THE ACGIH LISTING FOR HYDROCARBON BLOWING AGENTS HAVE A TIME WEIGHTED AVERAGE OF 600 PPM.

NO SMOKING, OPEN FLAMES, OR SOURCES OF IGNITION IN HANDLING AND STORAGE AREA.

FABRICATION METHODS WHICH INVOLVE CUTTING INTO THIS PRODUCT MAY RELEASE THE BLOWING AGENT REMAINING IN THE DAMAGED CELLS. PROVIDE ADEQUATE VENTILATION TO ASSURE LOCALIZED CONCENTRATIONS OF THE BLOWING AGENT ARE MAINTAINED BELOW THE LFL (LOWER FLAMMABILITY LIMIT)

Shipping Regulations: *NOT CLASSIFIED AS A HAZARDOUS MATERIAL BY DEPARTMENT OF TRANSPORTATION DEFINITIONS AND HENCE IT IS NOT REGULATED.*

Materials to Avoid: *DIRECT APPLICATION OF HOT ASPHALT.*

Conditions to Avoid: *AVOID TEMPERATURES ABOVE 150°C (302°F). EXPOSURE TO ELEVATED TEMPERATURES CAN CAUSE PRODUCT TO DECOMPOSE. AVOID DIRECT SUNLIGHT. AVOID OPEN FLAME OR OTHER IGNITION SOURCES AND PROLONGED EXPOSURE TO THE ELEMENTS.*

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Substance	Source	Date	Type	Value/Units	Time
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<i>NUISANCE DUST (TOTALS)</i>	<i>OSHA</i>	<i>1989</i>	<i>TWA</i>	<i>15 MG/MS</i>	<i>8 HRS</i>
<i>NUISANCE PARTICULATES</i>	<i>ACGIH</i>	<i>1989</i>	<i>TWA</i>	<i>10 MG/M3</i>	<i>8 HRS</i>
<i>NUISANCE DUST (RESP.)</i>	<i>OSHA</i>	<i>1989</i>	<i>TWA</i>	<i>5 MG/M3</i>	<i>8 HRS</i>

Respiratory: USE NIOSH/OSHA APPROVED PARTICULATE FILTER MASK DURING FABRICATION.

Eye: WEAR SAFETY GLASSES OR GOGGLES.

Skin: NOT NORMALLY CONSIDERED A SKIN HAZARD. PRACTICE GOOD PERSONAL HYGIENE.

Engineering Controls: EXERCISE GOOD HOUSEKEEPING PROCEDURES. REMOVE DUST DURING FABRICATION BY VACUUM.

Other Hygienic and Work Practices: PROVIDE ADEQUATE VENTILATION WHEN FABRICATING. REMOVE DUST PROMPTLY.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: RIGID TAN CELLULAR PLASTIC. NO ODOR.

Flammability Limits: At Normal Atmospheric Temperature and Pressure: Lower: N/A Upper: N/A

Odor: Odorless

Vapor Pressure: NOT APPLICABLE

Odor Threshold: NOT APPLICABLE

Vapor Density: NOT APPLICABLE

Vapor Specific Gravity: NOT APPLICABLE

Boiling Point: NOT APPLICABLE

pH: NOT APPLICABLE

Relative Density: NOT APPLICABLE

Specific Gravity: NOT APPLICABLE

Melting Point: NOT APPLICABLE

Freezing Point: NOT APPLICABLE

Solubility in Water: NOT APPLICABLE

Initial Boiling Point and Boiling Range: NOT APPLICABLE

Flash Point: NOT APPLICABLE

Evaporation Rate: NOT APPLICABLE

Flammability: At Normal Atmospheric Temperature and Pressure: Lower: N/A Upper: N/A

Partition Coefficient: NOT APPLICABLE

Auto-ignition Temperature: >450°C (per ASTM D1929)

Decomposition Temperature: NOT APPLICABLE

Viscosity Units, Temp. (Method): NOT APPLICABLE

Dry Point: NOT APPLICABLE

Volatile Characteristics: NOT APPLICABLE

Viscosity: NOT APPLICABLE

Hazardous Polymerization: NOT EXPECTED TO OCCUR

Other Chemical Reactivity: NONE

Stability: STABLE

Other Physical and Chemical Properties: NONE



SECTION 10: STABILITY AND REACTIVITY

Stability/Instability: Thermally stable at typical use temperatures.

Conditions to Avoid: Avoid temperatures above 150°C (302°F). Exposure to elevated temperatures can cause product to begin to char and decompose. Avoid direct sunlight.

Incompatible Materials: Avoid contact with strong oxidizers.

Thermal Decomposition: Decomposition products depend upon temperature, air supply and the presence of other materials. Toxic gases are released during decomposition.

SECTION 11: TOXICOLOGICAL INFORMATION

Hazardous Decomposition Products (Fire): *LIKE WOOD AND OTHER ORGANIC MATERIALS CAN RELEASE TOXIC SMOKE IF IGNITED.*

SECTION 12: *Non-mandatory*

SECTION 13: *Non-mandatory*

SECTION 14: *Non-mandatory*

SECTION 15: *Non-mandatory*

SECTION 16: OTHER INFORMATION

Preparation: This SDS was prepared in November 2017

General Comments: *SOME OF THE INFORMATION PRESENTED AND CONCLUSIONS DRAWN HEREIN ARE FROM SOURCES OTHER THAN DIRECT TEST DATA ON THE PRODUCT ITSELF.*

This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication standard, 29 CFR 1910.1200

a. SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA), TITLE III

EXEMPT. APPENDIX H(4) SECTION 1910, 1200(b) AS A MANUFACTURED ITEM a), b), c), AND SECTION 311(e) #10.

b. TOXIC SUBSTANCES CONTROL ACT (TSCA)

ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE TSCA INVENTORY.

c. COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA)

NO CHEMICALS IN THIS PRODUCT ARE SUBJECT TO THE REPORTING REQUIREMENTS OF CERCLA.

DISCLAIMER OF LIABILITY



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