

FinPan Inc.
 PF NICHES
 PREFORMED UNDERLAYMENT COMPONENTS
MATERIAL SAFETY DATA SHEET

The Niches are a composite insert of 2lb density EPS expanded polystyrene foam insulation, as a base material. The entire assembly is coated with Water Armor waterproof membrane. A finish coat of latex-modified, cementitious coating is then applied. This MSDS will be treated as a two-part document covering: (A) the expanded polystyrene foam thermal insulation and (B) the waterproof coating.

(A) EXPANDED POLYSTYRENE THERMAL INSULATION

1. Product and Company Identification:

Product Name: Chang He EPS
Manufacturer: Chang He Foam Company; Tianjin, China

2. Composition/Information on Ingredients:

<u>Chemical Name</u>	<u>TLV</u>	<u>PEL</u>	<u>CAS</u>
Polystyrene			<u>CAS Number</u> 009003-53-6
Flame Retardant Additive			

This document was prepared pursuant to the OSHA hazard communication standard (29 CFR 1910.1200). In addition, other substances not hazardous per this OSHA standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard. This part of the document has been taken from MSDS information supplied to us from THE MANUFACTURER.

3. Physical and Chemical Properties:

Boiling Point	Not Applicable
Melting Point	Softens at 175 ° F to 220 ° F
Percent Volatiles	<4% (pentane and water)
Vapor Pressure.....	Not Applicable
Vapor Density	Not Applicable
Evaporation Rate	None
Solubility in water	Insoluble
Specific Gravity/Density.....	2.0 pcf to 3.0 pcf
Appearance.....	White Panels
Odor	Slight Hydrocarbon Odor
pH.....	Not Applicable
Physical State.....	Solid

4. Fire and Explosion Hazard Data:

Flash Point	610 ° F Min.
Method Used	ASTM D 1929
Flammable Limits LFL	Not Applicable
Flammable Limits UFL	Not Applicable
Extinguishing Media	Water Fog, Carbon Dioxide, Dry Chemical, Foam

FinPan Inc.
PF NICHES
PERFORMED UNDERLAYMENT COMPONENTS
MATERIAL SAFETY DATA SHEET

Hazardous Combustion Products: Not Applicable

Fire-fighting Instructions: Keep people away. Isolate fire area and deny unnecessary entry. If material is molten, do not apply direct water stream. Use fine water spray or foam. Soak thoroughly with water to cool and prevent re-ignition. Cool surroundings with water to localize fire zone.

Protective Fire-fighting Equipment: Use approved self-contained breathing apparatus and personal protective clothing (turn out gear)

5. Reactivity Data:

Stability: This is a stable material, avoid sources of ignition

Incompatibility with Other Materials: Reactive with oxidizing agents. Organic solvents, esters, amines and aldehydes will dissolve product. High temperature, poor ventilation with freshly expanded product may create hazardous, explosive or fire conditions.

Hazardous Decomposition Products: Does not normally decompose. Evolution of small amounts of hydrogen halides occurs when heated above 250°C. Under high heat, non-flaming conditions, small amounts of aromatic hydrocarbons such as styrene and ethylbenzene are generated. Hazardous decomposition products depend upon temperature, air supply and the presence of other materials. Hazardous decomposition products may include and are not limited to ethylbenzene, aromatic compounds, aldehydes, hydrogen bromide, hydrogen chloride, hydrogen fluoride, polymer fragments, and styrene.

Hazardous Polymerization: Will not occur

6. Health Hazard Data:

Eye: Dust particles may cause eye irritation and/or injury

Skin Contact: None. May produce slight irritation in a few individuals

Ingestion: Biologically inert. May act as an obstruction if swallowed.

Inhalation: Little or no smell. May cause dizziness in a few individuals.

Systemic (Other Target Organ) Effects: None.

Cancer Information: None.

Teratology (Birth Defects): None.

Reproductive Effects: None.

7. First Aid:

Eyes: Flush eyes with water for 15 minutes. Seek medical attention if irritation persists.

FinPan Inc.
PF NICHES
PERFORMED UNDERLAYMENT COMPONENTS
MATERIAL SAFETY DATA SHEET

Skin: Wash with mild soap and running water. Remove and launder contaminated clothing before reuse. Seek medical attention if irritation persists.

Ingestion: Ingestion of this material is unlikely. If it does occur, do not induce vomiting, seek medical attention.

Inhalation: Move person to fresh air. Seek medical attention if irritation persists

Note to Physician:

8. Handling and Storage:

Handling: Use protective equipment (gloves, safety glasses, etc.) when handling uncontained material. Avoid breathing dusts from this material.

Storage: Store in a well ventilated area. Avoid direct exposure to very high heat, open flame or other source of ignition.

9. Accidental Release Measures: (See Section NUM for Regulatory Information)

Protect People: Clear non-emergency personnel from area. Use appropriate safety equipment. For additional information, refer to Section 10, Exposure Controls/Personal Protection.

Protect the Environment: Fire/water run off may be toxic.

Cleanup: Pick up, or if dust or in small pieces, sweep up and place in suitable container for disposal. See Section 11, Disposal Considerations.

10. Exposure Controls/Personal Protection:

Engineering Controls: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

Respiratory Protection: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, including but not limited to saw, router, or hot wire cutting, use an approved air-purifying respirator. In dusty atmospheres, use an approved dust respirator.

Skin Protection: No precaution other than clean body-covering clothing should be needed.

Eye Protection: Use Safety Glasses. If there is a potential for exposure to particles, which could cause mechanical injury to the eye, wear chemical goggles.

FinPan Inc.
PF NICHES
PERFORMED UNDERLAYMENT COMPONENTS
MATERIAL SAFETY DATA SHEET

11. Ecological Information:

Ecotoxicity: This product has not been tested. Based on information related to all raw materials in the finished product, it is not expected to harm the ecosystem through its applied use.

12. Disposal Considerations: (See Section NUM for Regulatory Information)

Disposal:

For unused & uncontaminated product,

For additional information, refer to Section NUM, Handling & Storage Information.

THE MANUFACTURER can provide names of information resources to help identify waste management companies and other facilities, which recycle, reprocess or manage PRODUCT TYPES. Call MANUFACTURER at PHONE for further details.

13. Transportation Information:

Department of Transportation (DOT): This product is not regulated by the D.O.T. when shipped domestically by land.

Canadian TDG Information: This product is not regulated by the T.D.G. when shipped domestically by land.

14. Regulatory Information: (Not meant to be all-inclusive - selected regulations represented)

NOTICE: The information contained herein is based on data considered to be accurate. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with Federal, State/Provincial, and local laws. While the information is believed to be reliable, NO Warranty, expressed or implied, is given in regards to the accuracy of this data or the results to be obtained from the use thereof. Since the use of this information and the conditions and use of this product are controlled by the user, it is the user's obligation to determine the conditions of safe use of the product. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. Regulations

SARA 313 Information: This product contains the following substances subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

FinPan Inc.
 PF NICHES
 PREFORMED UNDERLAYMENT COMPONENTS

MATERIAL SAFETY DATA SHEET

<u>Chemical Name</u>	<u>CAS Number</u>	<u>Concentration</u>
Chlorodifluoroethane	000075-00-3	< 15%

SARA Hazard Category: This product has been reviewed according to the EPA "Hazard Categories" promulgated under sections 311 and 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA, Title III) and is considered, under applicable definitions, to meet the following categories:

Not to have met any hazard category.

State Right-to-Know: The following product components are cited on certain state lists as mentioned. Non-listed components may be shown in the composition section of the MSDS.

<u>Chemical Name</u>	<u>CAS Number</u>	<u>List</u>
Chlorodifluoroethane	000075-00-3	NJ2 PA1 NJ3
Talc	014807-96-6	PA1 NJ3

NJ2=New Jersey Environmental Hazardous Substance (present at greater than or equal to 1.0%)

NJ3=New Jersey Workplace Hazardous Substance (present at greater than or equal to 1.0%)

PA1=Pennsylvania Hazardous Substance (present at greater than or equal to 1.0%)

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

Canadian Regulations

WHMIS Information: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

This Product is not a "Controlled Product" under WHMIS.

Canadian Environmental Protection Act (CEPA): All substances in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

15. Other Information:

National Fire Protection Association (NFPA) Ratings:

Health.....0
 Flammability2
 Reactivity0

HMIS Ratings:

Health.....0
 Flammability2
 Reactivity0

FinPan Inc.
 PF NICHES
 PREFORMED UNDERLAYMENT COMPONENTS
MATERIAL SAFETY DATA SHEET

(B) WATER ARMOR WATERPROOF MEMBRANE

1. Product and Company Identification:

Product Name: Water Armor
Company: T. Clear Corporation, 3255 Symmes Road, Hamilton, Ohio 45015
 Emergency Contact: (800) 544-7398

2. Composition/Information on Ingredients:

<u>Chemical Name</u>	<u>WT%</u>	<u>TLV (mg/m³)</u>	<u>PEL (mg/m³)</u>	<u>CAS Number</u>	<u>STEL</u>	<u>CEIL</u>
Silica, Crystalline Quartz	15.00 - 40.00	0.05	0.1	14808-60-7	(NE)	(NE)

(T) - Total (R) - Respirable (NE) - Not Established (P) - Proprietary

This document was prepared pursuant to the OSHA hazard communication standard (29 CFR 1910.1200). In addition, other substances not hazardous per this OSHA standard may be listed. Where proprietary ingredient shows, the identity may be made available as provided in this standard. This document has been taken from MSDS information supplied to us from Degussa Wall Systems.

3. Physical and Chemical Properties:

Boiling Point..... No data available
 Melting Point..... No data available
 Freeze Point No data available
 Vapor Pressure No data available
 Vapor Density..... Heavier than air
 Partition coefficient (n-octanol/water) No data available
 Evaporation Rate..... Slower than Butyl acetate
 Solubility in water..... Dilutable
 Specific Gravity/Density 1.5
 Viscosity..... No data available
 Odor..... Mild acrylic
 Odor Threshold..... No data available
 pH..... 9-10
 Physical State Liquid
 VOC Concentration as applied: 11 g/l
 (less than water and exempt solvents)

4. Fire and Explosion Hazard Data:

Flash Point..... >200.01°F (93.34°C)
 Flammable Limits LFL..... No data available
 Flammable Limits UFL..... No data available
 Extinguishing Media..... Water fog, foam, carbon dioxide (CO₂), dry chemical

Hazardous Combustion Products: No data available.

FinPan Inc.
 PF NICHES
 PREFORMED UNDERLAYMENT COMPONENTS
MATERIAL SAFETY DATA SHEET

Fire-fighting Instructions: Suitable extinguishing methods include water fog, foam, carbon dioxide (CO2), and dry chemical.

Protective Fire-fighting Equipment: As in any fire, wear pressure demand self-contained breathing apparatus (NIOSH approved or equivalent) and full protective gear.

5. Reactivity Data:

Stability: Stable under recommended storage conditions.

Conditions To Avoid - No data available.

Materials to Avoid - Strong acids and strong bases.

Hazardous Decomposition Products: No data available.

Hazardous Polymerization: Will not occur under normal conditions.

6. Health Hazard Data:

Eye: Can cause slight irritation.

Skin Contact: Can cause slight irritation.

Ingestion: Can cause slight irritation.

Inhalation: Can cause slight irritation.

Systemic (Other Target Organ) Effects: No data available

Cancer Information: This product contains Crystalline (quartz) Silica, which has been listed as a human carcinogen by NTP (Group 1) and IARC (Human Carcinogen) and a Suspected Human Carcinogen by ACGIH (category A2). Repeated or prolonged over exposure to free respirable Crystalline (quartz) Silica can cause silicosis or other delayed and serious lung injury. No exposure to respirable Crystalline (quartz) Silica anticipated with recommended use of this product.

<u>Carcinogenicity</u>	<u>ACGIH</u>	<u>IARC</u>	<u>NTP</u>	<u>OSHA</u>
Silica, Crystalline Quartz	Suspected human carcinogen	Human carcinogen	(NE)	(NE)

Teratology (Birth Defects): No data available.

Reproductive Effects: No data available.

7. First Aid:

Eyes: Flush eyes with water, lifting upper and lower lids occasionally for 15 minutes. Seek medical attention.

Skin: Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists seek medical attention. Wash contaminated clothing before reuse.

FinPan Inc.
PF NICHES
PERFORMED UNDERLAYMENT COMPONENTS
MATERIAL SAFETY DATA SHEET

Ingestion: Do not induce vomiting without medical advice. If conscious, drink plenty of water. If a person feels unwell or symptoms of skin irritation appear, consult a physician. If a person vomits, place him/her in the recovery position. Never give anything by mouth to an unconscious person.

Inhalation: Remove victim from exposure. If there is difficulty with breathing, administer oxygen. If breathing has stopped, administer artificial respiration, preferably mouth-to-mouth. Seek immediate medical attention.

8. Handling and Storage:

Handling: Keep out of reach of children. For personal protection see section 10.

Storage: Keep tightly closed.

9. Accidental Release Measures: (See Section 15 for Regulatory Information)

Containment Procedures: Take action to eliminate source of leak; contain spill by diking.

Cleanup Procedures: Wear appropriate protective equipment (refer to section 10). Take action to eliminate source of leak; prevent from entry into open streams or sewers; contain spill by diking; vacuum up liquid or use absorbent media; remove to storage for disposal and rinse residual stain with water.

Special Procedures: None known.

10. Exposure Controls/Personal Protection:

Engineering Controls: Local exhaust ventilation can be necessary to control any air contaminants to within their TLV's during the use of this product.

Respiratory Protection: In case of insufficient ventilation wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use NIOSH approved respirators.

Skin Protection: Wear as appropriate: impervious clothing, preventive skin protection and/or impervious gloves.

Eye Protection: Wear as appropriate: safety glasses with side-shields, goggles and/or face shield.

Hygienic Practices: Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas. Wash hands before breaks and at the end of the workday. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practices.

FinPan Inc.
 PF NICHES
 PREFORMED UNDERLAYMENT COMPONENTS
MATERIAL SAFETY DATA SHEET

11. Toxicological Information:

Acute inhalation toxicity

	Exposure	Type	Value	Species	Time
<i>Product</i>		LC50	No data available		
Component					
Silica, Crystalline Quartz		LC50	No data available		

Acute oral toxicity

	Type	Value	Exposure Species	Time
<i>Product</i>	LD50 (Oral)	No data available		
Component				
Silica, Crystalline Quartz	LD50 (Oral)	1,300 mg/kg		

Acute dermal toxicity

	Type	Value	Exposure Species	Time
<i>Product</i>	LD50 (Dermal)	No data available		
Component				
Silica, Crystalline Quartz	LD50 (Dermal)	No data available		

12. Ecological Information:

Movement & Partitioning: No data available.

Degradation & Persistence: No data available.

Ecotoxicity: There is no data available for this product.

13. Disposal Considerations: (See Section 15 for Regulatory Information)

Disposal: Handle disposal of waste material in a manner, which complies with local, state, province and federal regulations.

For unused & uncontaminated product, use excess product in an alternate beneficial application.

FinPan Inc.
PF NICHES
PERFORMED UNDERLAYMENT COMPONENTS
MATERIAL SAFETY DATA SHEET

For additional information, refer to Section 8, Handling & Storage Information.

Degussa Wall Systems can provide names of information resources to help identify waste management companies and other facilities, which recycle, reprocess or manage Water Armor. Call Degussa Wall Systems at (800) 424-9300 for further details.

14. Transportation Information:

Department of Transportation (DOT): Proper shipping name - Not regulated.

International Air Transport Association (IATA): Proper shipping name - Not regulated.

15. Regulatory Information: (Not meant to be all-inclusive - selected regulations represented)

NOTICE: The information contained herein is based on data considered to be accurate. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with Federal, State/Provincial, and local laws. While the information is believed to be reliable, NO Warranty, expressed or implied, is given in regards to the accuracy of this data or the results to be obtained from the use thereof. Since the use of this information and the conditions and use of this product are controlled by the user, it is the user's obligation to determine the conditions of safe use of the product. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

SARA 311/312 (RTK): This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions to meet the following categories:
IMMEDIATE (ACUTE) HEALTH HAZARD

SARA 313: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

<u>Chemical Name</u>	<u>WT%</u>	<u>CAS Number</u>
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This product contains no chemical subject for the SARA 313 supplier notification requirements.

CERCLA: CERCLA section 103(a) specifically requires the person in charge of a vessel or facility to report immediately to the National Response Center (NRC) a release of a hazardous substance whose amount equals or exceeds the assigned RQ. The following hazardous substances are contained in this product:

<u>Chemical Name</u>	<u>RQ</u>	<u>CAS Number</u>
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NO CERCLA chemicals exist in this product above reportable concentrations.

FinPan Inc.
 PF NICHES
 PREFORMED UNDERLAYMENT COMPONENTS
MATERIAL SAFETY DATA SHEET

TSCA Section 12(b) Export Notification: This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b), if exported from the United States:

<u>Chemical Name</u>	<u>CAS Number</u>
Benzyl Chloride	100-44-7

California Proposition 65: The chemical(s) below, and contained in this product, are known to the state of California to cause cancer, birth defects or other reproductive harm. Unless otherwise specified in Section 2 of this MSDS, these chemicals are present at <0.1%:

<u>Chemical Name</u>	<u>CAS Number</u>
Silica, Crystalline Quartz	14808-60-7
Carbon Black	1333-86-4
Benzyl Chloride	100-44-7
Ethylene Oxide	75-21-8
Benzene	71-43-2
Toluene	108-88-3
Mercury	7439-97-6
Inorganic Lead	7439-92-1
Arsenic	7440-38-2
4-Vinylcyclohexene	100-40-3
1,3-Butadiene	106-99-0
Ethyl Benzene	100-41-4

16. Other Information:

HMS Ratings:

Health	1*
Flammability	1
Physical Hazard	0

WHMIS Class: D2B