



DERBIGUM®
MAKING BUILDINGS SMART

Material Safety Data Sheet

Product: DERBIGUM OF Surfacing - Component A

MSDS Date: 6-30-10
Product Name: DERBIGUM OF Surfacing - Component A
Manufacturer: DERBIGUM Americas, Inc.

I. Product and Company Description

DERBIGUM Americas, Inc.
4821 Chelsea Ave.
Kansas City, MO 64130

Emergency Phone Number:
(800) 424-9300 CHEMTREC

For Product Information:
(800) 541-5455

Product Description:
Urethane Prepolymer Solution

II. Chemical Composition

Component	CAS#	%Composition
Hydrocarbons	NA	2.5-10
Naptha, Light Aromatic Solvent	64742-95-6	<0.5

III. Hazards Identification

A. Emergency Overview:

Physical Appearance and Odor:
Liquid with characteristic odor.

B. Potential Health Effects:

Acute Eye:
Contact may cause irritation.

Acute Skin:
Not anticipated to have any potential skin effects.

Acute Inhalation:
Inhalation may cause headache, dizziness, nausea and irritation. Inhalation of spray mist may be toxic.

Acute ingestion:
Harmful or fatal if swallowed.

Chronic effects:
ND



Product: DERBIGUM OF Surfacing - Component A

IV. First Aid Measures

First Aid Measures for Accidental Exposure:

Eye Exposure:

Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

Skin Exposure:

Wash affected area with soap and water; remove contaminated clothing and wash before reuse. Get medical attention if irritation develops or persists.

Inhalation:

Remove to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

Ingestion:

Seek medical attention immediately. Never give anything by mouth to an unconscious person.

V. Fire Fighting Measures

Fire Hazard Data:

Flash Point: >212°F (>100°C)

Ignition Temperature: 680°F (360°C)

Flammability Limits (vol/vol%): Lower: NA Upper: NA

Extinguishing Media:

Use extinguishing media suitable for surrounding fire.

Special Fire Fighting Procedures:

If excessive fumes or smoke is encountered, wear self-contained breathing apparatus and full protective equipment.

Unusual Fire and Explosion Hazards:

None

Hazardous Decomposition Materials (Under Fire Conditions):

Oxides of carbon.

VI. Accidental Release Measures

Cleanup and Disposal of Spill:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use protective measures as outlined in Section VIII below. Avoid contact with eyes, skin or clothing.

Dispose of materials according to the applicable Federal, State, or local regulations.



Product: DERBIGUM OF Surfacing - Component A

VII. Handling and Storage

Handling:

Use with adequate ventilation. Avoid prolonged or repeated contact with skin.

Storage:

None

VIII. Exposure Controls / Personal Protection

Exposure Guidelines:

Component	Exposure limits		
	ACGIH	NIOSH	OSHA-PELs
Hydrocarbons	ND	ND	ND
Naptha, Light Aromatic Solvent	ND	ND	ND

Engineering Controls:

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

Respiratory Protection:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or EN approved respirator when necessary.

Eye / Face Protection:

Wear appropriate safety glasses with side shields or chemical goggles as described by OSHA's eye and face protection regulations in 29CFR 1910.133 or European Standard EN166.

Skin Protection:

Chemical resistant gloves recommended, such as neoprene or nitrile rubber. Body covering clothing should be utilized.

IX. Physical and Chemical Properties

Physical Appearance:	Liquid
Odor:	Characteristic
pH:	ND
Specific Gravity:	ND
Water Solubility:	Insoluble
Melting Point Range:	ND
Boiling Point:	ND
Vapor Pressure:	ND
Vapor Density:	1.25 g/cm ³
%Volatile by volume:	ND
Evaporation Rate:	ND

X. Stability and Reactivity



Product: DERBIGUM OF Surfacing - Component A

Chemical Stability:

Stable under standard use and storage conditions.

Conditions to Avoid:

None

Materials / Chemicals to be Avoided:

None

Hazardous Decomposition Products:

Oxides of carbon

Hazardous Polymerization:

Should not occur.

XI. Toxicological Information

Acute Oral Toxicity:

For Naptha: LD50: 2000 mg/kg (rat)

Acute Dermal Toxicity:

For Naptha: LD50: 2000 mg/kg (rat)

Acute Inhalation Toxicity:

For Naptha: LC50/4h: 5 mg/l (rat)

Chronic Toxicity:

ND

XII. Ecological Information

Ecotoxicological Information:

Degradation:	Not Determined
Accumulation:	Not Determined
Fish-Toxicity:	Not Determined

Chemical Fate Information:

Not Determined

XIII. Disposal Considerations

Waste Disposal Method:

Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.

Container Handling and Disposal:

Dispose of container and unused contents in accordance with federal, state, and local regulations.

XIV. Transportation Information



Product: DERBIGUM OF Surfacing - Component A

US Department of Transportation Shipping Name:

US Department of Transportation	Proper Shipping Name	Not Regulated
	Hazard Class	Not Regulated
	ID Number	Not Regulated
	Packaging Group	Not Regulated

XV. Regulatory Information

Federal Regulations:

SARA Title III Hazard Classes:

Fire Hazard: NO
 Reactive Hazard: NO
 Release of Pressure: NO
 Acute Health Hazard: NO
 Chronic Health Hazard: NO

SARA Section References:

Section 302 (RQ)
 None
 Section 302 (TPQ)
 None
 Section 313
 None

Toxic Substances Control Act (TSCA): All components are included in the inventory or are not required to be listed.

Other Regulations:

State:

The components identified with an X are present on the respective state's Right To Know lists:

Component	MA	PA	MI	NJ
Hydrocarbons				
Naptha, Light Aromatic Solvent				

California Prop. 65: None of the chemicals in this product are listed.

XVI. Other Information

National Fire Protection Association Hazard Ratings – NFPA(R):

Health Hazard: 0
 Flammability: 1
 Reactivity: 0



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Material Safety Data Sheet

Product: DERBIGUM OF Surfacing - Component A

Key Legend Information:

N/A – Not Applicable

ND – Not Determined

ACGIH – American Conference of
Governmental Industrial Hygienists

OSHA – Occupational Safety and Health
Administration

TLV – Threshold Limit Value

PEL – Permissible Exposure Limit

TWA – Time Weighted Average

STEL – Short Term Exposure Limit

NTP – National Toxicology Program

IARC – International Agency for Research on
Cancer

The information contained herein is based on the data available to us and is believed to be correct. However DERBIGUM Americas, Inc. makes no warranty, expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof.



Product: DERBIGUM OF Surfacing - Component B

MSDS Date: 6-30-10
Product Name: DERBIGUM OF Surfacing - Component B
Manufacturer: DERBIGUM Americas, Inc.

I. Product and Company Description

DERBIGUM Americas Inc.
4821 Chelsea Ave.
Kansas City, MO 64130

Emergency Phone Number:
(800) 424-9300 CHEMTREC

For Product Information:
(800) 541-5455

Product Description:
Sealing/Coating

II. Chemical Composition

Component	CAS#	%Composition
Diphenylmethane Diisocyanate	9016-87-9	50-100

III. Hazards Identification

A. Emergency Overview:

Physical Appearance and Odor:
Liquid with characteristic odor.

B. Potential Health Effects:

Acute Eye:
Contact may cause irritation.

Acute Skin:
Contact with skin may cause irritation and sensitization.

Acute Inhalation:
Inhalation may cause irritation and sensitization.

Acute ingestion:
Harmful or fatal if swallowed.

Chronic effects:
ND



Product: DERBIGUM OF Surfacing - Component B

IV. First Aid Measures

First Aid Measures for Accidental Exposure:

Eye Exposure:

Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

Skin Exposure:

Wash affected area with soap and water; remove contaminated clothing and wash before reuse. Get medical attention if irritation develops or persists.

Inhalation:

Remove to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

Ingestion:

Seek medical attention immediately. Never give anything by mouth to an unconscious person.

V. Fire Fighting Measures

Fire Hazard Data:

Flash Point: >356°F (>180°C)

Ignition Temperature: 752°F (400°C)

Flammability Limits (vol/vol%): Lower: NA Upper: NA

Extinguishing Media:

Use extinguishing media suitable for surrounding fire.

Special Fire Fighting Procedures:

If excessive fumes or smoke is encountered, wear self-contained breathing apparatus and full protective equipment.

Unusual Fire and Explosion Hazards:

None

Hazardous Decomposition Materials (Under Fire Conditions):

None

VI. Accidental Release Measures

Cleanup and Disposal of Spill:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use protective measures as outlined in Section VIII below. Avoid contact with eyes, skin or clothing.

Dispose of materials according to the applicable Federal, State, or local regulations.



Product: DERBIGUM OF Surfacing - Component B

VII. Handling and Storage

Handling:

Use with adequate ventilation. Avoid prolonged or repeated contact with skin.

Storage:

Keep containers tightly closed.

VIII. Exposure Controls / Personal Protection

Exposure Guidelines:

Component	Exposure limits		
	ACGIH	NIOSH	OSHA-PELs
Diphenylmethane Diisocyanate	ND	ND	ND

Engineering Controls:

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

Respiratory Protection:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or EN approved respirator when necessary.

Eye / Face Protection:

Wear appropriate safety glasses with side shields or chemical goggles as described by OSHA's eye and face protection regulations in 29CFR 1910.133 or European Standard EN166.

Skin Protection:

Chemical resistant gloves recommended, such as neoprene or nitrile rubber. Body covering clothing should be utilized.

IX. Physical and Chemical Properties

Physical Appearance:	Liquid
Odor:	Characteristic
pH:	ND
Specific Gravity:	ND
Water Solubility:	Insoluble
Melting Point Range:	106°F (41°C)
Boiling Point:	374°F (190°C)
Vapor Pressure:	0.0002 hPa (0 mm Hg)
Vapor Density:	1.24 g/cm ³
%Volatile by volume:	ND
Evaporation Rate:	ND

X. Stability and Reactivity

Chemical Stability:



Product: DERBIGUM OF Surfacing - Component B

Stable under standard use and storage conditions.

Conditions to Avoid:

None

Materials / Chemicals to be Avoided:

None

Hazardous Decomposition Products:

None

Hazardous Polymerization:

Should not occur.

XI. Toxicological Information

Acute Oral Toxicity:

LD50: 15000 mg/kg (rat)

Acute Dermal Toxicity:

ND

Acute Inhalation Toxicity:

LC50/4h: 490 mg/l (rat)

Chronic Toxicity:

ND

XII. Ecological Information

Ecotoxicological Information:

Degradation:	Not Determined
Accumulation:	Not Determined
Fish-Toxicity	EC50:>100 mg/l (Belebschlamm-bakterien);>1000 mg/l (DAPHNIA MAGNA) LC0 >1000 mg/l (DANIO RERIO)

Chemical Fate Information:

Not Determined

XIII. Disposal Considerations

Waste Disposal Method:

Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.

Container Handling and Disposal:

Dispose of container and unused contents in accordance with federal, state, and local regulations.



Product: DERBIGUM OF Surfacing - Component B

XIV. Transportation Information

US Department of Transportation Shipping Name:

US Department of Transportation	Proper Shipping Name	Not Regulated
	Hazard Class	Not Regulated
	ID Number	Not Regulated
	Packaging Group	Not Regulated

XV. Regulatory Information

Federal Regulations:

SARA Title III Hazard Classes:

Fire Hazard: NO
 Reactive Hazard: NO
 Release of Pressure: NO
 Acute Health Hazard: NO
 Chronic Health Hazard: NO

SARA Section References:

Section 302 (RQ)
 None
 Section 302 (TPQ)
 None
 Section 313

This category is on the list of toxic chemicals subject to reporting under Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA), also called the Toxic Release Inventory (TRI). Listed Category: Diisocyanates. Listed Name: Polymeric diphenylmethane diisocyanate.

Toxic Substances Control Act (TSCA): All components are included in the inventory or are not required to be listed.

Other Regulations:

State:

The components identified with an X are present on the respective state's Right To Know lists:

Component	MA	PA	MI	NJ
Diphenylmethane Diisocyanate				

California Prop. 65: None of the chemicals in this product are listed.



Product: DERBIGUM OF Surfacing - Component B

XVI. Other Information

National Fire Protection Association Hazard Ratings – NFPA(R):

Health Hazard:	2
Flammability:	1
Reactivity:	0

Key Legend Information:

N/A – Not Applicable

ND – Not Determined

ACGIH – American Conference of
Governmental Industrial Hygienists

OSHA – Occupational Safety and Health
Administration

TLV – Threshold Limit Value

PEL – Permissible Exposure Limit

TWA – Time Weighted Average

STEL – Short Term Exposure Limit

NTP – National Toxicology Program

IARC – International Agency for Research on
Cancer

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Product: DERBIGUM OF Surfacing - Component C

MSDS Date: 6-30-10
Product Name: DERBIGUM OF Surfacing - Component C
Manufacturer: DERBIGUM Americas, Inc.

I. Product and Company Description

DERBIGUM Americas, Inc.
4821 Chelsea Ave
Kansas City, MO 64130

Emergency Phone Number:
(800) 424-9300 CHEMTREC

For Product Information:
(800) 541-5455

Product Description:
Sealing additional component

II. Chemical Composition

Component	CAS#	%Composition
Quartz (SiO ₂)	14808-60-7	50-100

III. Hazards Identification

A. Emergency Overview:

Physical Appearance and Odor:
Solid with characteristic odor.

B. Potential Health Effects:

Acute Eye:
Contact may cause irritation, redness and pain.

Acute Skin:
No adverse health effects expected.

Acute Inhalation:
Acute pneumoconiosis from overwhelming exposure to silica dust has occurred. Coughing and irritation of throat are early symptoms

Acute ingestion:
No adverse health effects expected.

Chronic effects:
Inhalation of quartz is classified as a human carcinogen. Chronic exposure can cause silicosis, a form of lung scarring that can cause shortness of breath, reduced lung function, and in severe cases, death.



Product: DERBIGUM OF Surfacing - Component C

IV. First Aid Measures

First Aid Measures for Accidental Exposure:

Eye Exposure:

Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

Skin Exposure:

Wash affected area with soap and water; remove contaminated clothing and wash before reuse. Get medical attention if irritation develops or persists.

Inhalation:

Remove to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult.

Ingestion:

Seek medical attention immediately. Never give anything by mouth to an unconscious person.

V. Fire Fighting Measures

Fire Hazard Data:

Flash Point: NA

Ignition Temperature: NA

Flammability Limits (vol/vol%): Lower: NA Upper: NA

Extinguishing Media:

CO₂, extinguishing powder, foam
Fight larger fires with alcohol-resistant foam.

Special Fire Fighting Procedures:

If excessive fumes or smoke is encountered, wear self-contained breathing apparatus and full protective equipment.

Unusual Fire and Explosion Hazards:

None

Hazardous Decomposition Materials (Under Fire Conditions):

None

VI. Accidental Release Measures

Cleanup and Disposal of Spill:

Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal. Use protective measures as outlined in Section VIII below. Avoid contact with eyes, skin or clothing.



Product: DERBIGUM OF Surfacing - Component CC

Dispose of materials according to the applicable Federal, State, or local regulations.

VII. Handling and Storage

Handling:

Use dustless systems for handling, storage, and clean up so that dust does not exceed the PEL. Use adequate ventilation and dust collection. Practice good housekeeping. Do not allow dust to collect on walls, floors, sills, ledges, machinery, or equipment. Maintain, clean and test respirators in accordance with OSHA regulations. Maintain and test ventilation and dust collection equipment. Wash clothing that has become dusty; do not breathe the dust from clothing. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

Storage:

Keep containers tightly closed and in a cool, dry, ventilated area. Protect against physical damage.

VIII. Exposure Controls / Personal Protection

Exposure Guidelines:

Component	Exposure limits		
	ACGIH	NIOSH	OSHA-PELs
Quartz	0.05 mg/m ³ (TWA) respirable dust	ND	Total dust: 30mg/m ³ /(%SiO ₂ + 2) Respirable Fraction: 10 mg/m ³ /(%SiO ₂ + 2)

Engineering Controls:

Ventilation must be adequate to maintain the ambient workplace atmosphere below the exposure limit(s) outlined in the MSDS.

Respiratory Protection:

Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or EN approved respirator when necessary.

Eye / Face Protection:

Wear appropriate safety glasses with side shields or chemical goggles as described by OSHA's eye and face protection regulations in 29CFR 1910.133 or European Standard EN166.

Skin Protection:

Chemical resistant gloves recommended, such as neoprene or nitrile rubber. Body covering clothing should be utilized.

IX. Physical and Chemical Properties

Physical Appearance: Solid
Odor: Characteristic
pH: ND
Specific Gravity: ND



Product: DERBIGUM OF Surfacing - Component C

Water Solubility:	Insoluble
Melting Point Range:	ND
Boiling Point:	ND
Vapor Pressure:	ND
Vapor Density:	ND
%Volatile by volume:	ND
Evaporation Rate:	ND

X. Stability and Reactivity

Chemical Stability:

Stable under standard use and storage conditions.

Conditions to Avoid:

None

Materials / Chemicals to be Avoided:

None

Hazardous Decomposition Products:

None

Hazardous Polymerization:

Should not occur.

XI. Toxicological Information

Acute Oral Toxicity:

ND

Acute Dermal Toxicity:

ND

Acute Inhalation Toxicity:

ND

Chronic Toxicity:

ND

XII. Ecological Information

Ecotoxicological Information:

Degradation:	Not Determined
Accumulation:	Not Determined
Fish-Toxicity	Not Determined

Chemical Fate Information:

Not Determined



Product: DERBIGUM OF Surfacing - Component C

XIII. Disposal Considerations

Waste Disposal Method:

Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.

Container Handling and Disposal:

Dispose of container and unused contents in accordance with federal, state, and local regulations.

XIV. Transportation Information

US Department of Transportation Shipping Name:

US Department of Transportation	Proper Shipping Name	Not Regulated
	Hazard Class	Not Regulated
	ID Number	Not Regulated
	Packaging Group	Not Regulated

XV. Regulatory Information

Federal Regulations:

SARA Title III Hazard Classes:

Fire Hazard: NO
 Reactive Hazard: NO
 Release of Pressure: NO
 Acute Health Hazard: YES
 Chronic Health Hazard: YES

SARA Section References:

Section 302 (RQ)
None
 Section 302 (TPQ)
None
 Section 313
None

Toxic Substances Control Act (TSCA): All components are included in the inventory or are not required to be listed.

Other Regulations:

State:

The components identified with an X are present on the respective state's Right To Know lists:

Component	MA	PA	MI	NJ
Quartz				



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Material Safety Data Sheet

Product: DERBIGUM OF Surfacing - Component C

California Prop. 65: None of the chemicals in this product are listed.

XVI. Other Information

National Fire Protection Association Hazard Ratings – NFPA(R):

Health Hazard:	2
Flammability:	0
Reactivity:	0

Key Legend Information:

N/A – Not Applicable

ND – Not Determined

ACGIH – American Conference of
Governmental Industrial Hygienists

OSHA – Occupational Safety and Health
Administration

TLV – Threshold Limit Value

PEL – Permissible Exposure Limit

TWA – Time Weighted Average

STEL – Short Term Exposure Limit

NTP – National Toxicology Program

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