Safety Data Sheet (SDS)

Material Name: SecureShield

*** Section 1 - Chemical Product and Company Identification ***

Manufacturer Information
Nudo
1500 Taylor Avenue
Springfield, IL 62703

*** Section 2 - Hazards Identification ***

Emergency Overview
No specific hazards anticipated from normal product handling. Dust and other particulates generated during cutting, shaping, or forming may cause eye, skin, and respiratory tract irritation.

Potential Health Effects: Eyes
Dusts and particulates may cause eye irritation.

Potential Health Effects: Skin
Dusts and particulates may cause skin irritation.

Potential Health Effects: Ingestion
Not a likely route of exposure under normal product use conditions.

Potential Health Effects: Inhalation
Dusts and particulates may cause respiratory tract irritation.

HMIS Ratings: Health: 1 Fire: 0 HMIS Reactivity 0
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe * = Chronic hazard

*** Section 3 - Composition / Information on Ingredients ***

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Component</th>
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</thead>
<tbody>
<tr>
<td>111211-39-3</td>
<td>Carbonic dichloride, polymer with 4,4'-(1-methylethylidene)bis[phenol], 4-(1-methyl-1-phenylethyl)phenyl ester</td>
</tr>
<tr>
<td>13397-24-5</td>
<td>Gypsum (Ca(SO4).2H2O)</td>
</tr>
<tr>
<td></td>
<td>Not Available Fiberglass Panel</td>
</tr>
<tr>
<td>9004-34-6</td>
<td>Cellulose</td>
</tr>
<tr>
<td>9005-25-8</td>
<td>Starch</td>
</tr>
<tr>
<td>9016-87-9</td>
<td>Polymethylene polyphenylene isocyanate</td>
</tr>
<tr>
<td>101-68-8</td>
<td>Methylene bis(phenylisocyanate)</td>
</tr>
<tr>
<td>14808-60-7</td>
<td>Quartz</td>
</tr>
<tr>
<td>65997-17-3</td>
<td>Glass, oxide</td>
</tr>
<tr>
<td>63148-57-2</td>
<td>Siloxanes and Silicones, methyl hydrogen</td>
</tr>
<tr>
<td>26447-40-5</td>
<td>1,1'-Methylenebis (isocyanato-) benzene</td>
</tr>
<tr>
<td>7631-86-9</td>
<td>Silica, amorphous</td>
</tr>
</tbody>
</table>

*** Section 4 - First Aid Measures ***

First Aid: Eyes
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Eye injuries from glass particles should be treated by a physician immediately.

First Aid: Skin
For skin contact flush with large amounts of water. If irritation persists, get medical attention.

First Aid: Ingestion
If the material is swallowed, get immediate medical attention or advice -- Do not induce vomiting.

First Aid: Inhalation
Move person to non-contaminated air. If the affected person is not breathing, apply artificial respiration.

*** Section 5 - Fire Fighting Measures ***

General Fire Hazards
See Section 9 for Flammability Properties.
None anticipated.
Safety Data Sheet

Material Name: SecureShield

Hazardous Combustion Products
Not Determined

Extinguishing Media
Use appropriate extinguishing media suitable for surrounding fire.

Fire Fighting Equipment/Instructions
Firefighters should wear full protective gear.

NFPA Ratings: Health: 1 Fire: 0 Reactivity: 0
Hazard Scale: 0 = Minimal  1 = Slight  2 = Moderate  3 = Serious  4 = Severe

*** Section 6 - Accidental Release Measures ***

Containment Procedures
None necessary.

Clean-Up Procedures
No special cleanup procedures needed.

Evacuation Procedures
None

Special Procedures
None

*** Section 7 - Handling and Storage ***

Handling Procedures
Avoid dust generation.

Storage Procedures
No special storage procedures needed.

*** Section 8 - Exposure Controls / Personal Protection ***

A: Component Exposure Limits

Gypsum (Ca(SO4).2H2O) (13397-24-5)
ACGIH: 10 mg/m3 TWA (inhalesable fraction)
OSHA: 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)

Cellulose (9004-34-6)
ACGIH: 10 mg/m3 TWA
OSHA: 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)

Starch (9005-25-8)
ACGIH: 10 mg/m3 TWA
OSHA: 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)
NIOSH: 10 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable dust)

Methylene bis(phenylisocyanate) (101-68-8)
ACGIH: 0.005 ppm TWA
OSHA: 0.02 ppm Ceiling; 0.2 mg/m3 Ceiling
NIOSH: 0.005 ppm TWA; 0.05 mg/m3 TWA
0.020 ppm Ceiling (10 min); 0.2 mg/m3 Ceiling (10 min)

Quartz (14808-60-7)
ACGIH: 0.025 mg/m3 TWA (respirable fraction)
OSHA: 0.1 mg/m3 TWA (respirable dust)
NIOSH: 0.05 mg/m3 TWA (respirable dust)

Silica, amorphous (7631-86-9)
NIOSH: 6 mg/m3 TWA
Safety Data Sheet

Material Name: SecureShield

Engineering Controls
Ventilation is not normally required.

PERSONAL PROTECTIVE EQUIPMENT
Personal Protective Equipment: Eyes/Face
Wear dust goggles.

Personal Protective Equipment: Skin
None necessary.

Personal Protective Equipment: Respiratory
Not normally needed.

Personal Protective Equipment: General
None

*** Section 9 - Physical & Chemical Properties ***

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Multi-colored</td>
</tr>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>ND</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>ND</td>
</tr>
<tr>
<td>Solubility (H2O)</td>
<td>ND</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>NA</td>
</tr>
<tr>
<td>Octanol/H2O Coeff.</td>
<td>ND</td>
</tr>
<tr>
<td>Flash Point Method</td>
<td>ND</td>
</tr>
<tr>
<td>Lower Flammability Limit (LFL)</td>
<td>ND</td>
</tr>
<tr>
<td>Auto Ignition</td>
<td>ND</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>pH</td>
<td>NA</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>ND</td>
</tr>
<tr>
<td>Melting Point</td>
<td>ND</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>ND</td>
</tr>
<tr>
<td>VOC</td>
<td>ND</td>
</tr>
<tr>
<td>Flash Point</td>
<td>ND</td>
</tr>
<tr>
<td>Upper Flammability Limit (UFL)</td>
<td>ND</td>
</tr>
<tr>
<td>Burning Rate</td>
<td>ND</td>
</tr>
</tbody>
</table>

*** Section 10 - Chemical Stability & Reactivity Information ***

Chemical Stability
This is a stable material.

Chemical Stability: Conditions to Avoid
Avoid dust generation.

Incompatibility
Not Determined

Hazardous Decomposition
Not Determined

Possibility of Hazardous Reactions
Will not occur.

*** Section 11 - Toxicological Information ***

Acute Dose Effects
A: General Product Information
No information available for the product.

B: Component Analysis - LD50/LC50

Cellulose (9004-34-6)
Inhalation LC50 Rat >5800 mg/m3 4 h; Oral LD50 Rat >5 g/kg; Dermal LD50 Rabbit >2 g/kg

Polymethylene polyphenylene isocyanate (9016-87-9)
Inhalation LC50 Rat 490 mg/m3 4 h; Oral LD50 Rat 49 g/kg; Dermal LD50 Rabbit >9400 mg/kg

Methylene bis(phenylisocyanate) (101-68-8)
Oral LD50 Rat 9200 mg/kg

Quartz (14808-60-7)
Oral LD50 Rat 500 mg/kg
Material Name: SecureShield

1,1'-Methylenebis (isocyanato-) benzene (26447-40-5)
Inhalation LC50 Rat 0.369 mg/L 4 h; Oral LD50 Rat >7400 mg/kg; Dermal LD50 Rabbit >6200 mg/kg

Silica, amorphous (7631-86-9)
Oral LD50 Rat >5000 mg/kg; Inhalation LC50 Rat >2.2 mg/L 1 h; Dermal LD50 Rabbit >2000 mg/kg

Carcinogenicity
A: General Product Information
No information available for the product.

B: Component Carcinogenicity
Starch (9005-25-8)
ACGIH: A4 - Not Classifiable as a Human Carcinogen

Polymethylene polyphenylene isocyanate (9016-87-9)
IARC: Supplement 7 [1987]; Monograph 19 [1979] (Group 3 (not classifiable))

Methylene bis(phenylisocyanate) (101-68-8)
IARC: Monograph 71 [1999]; Supplement 7 [1987]; Monograph 19 [1979] (Group 3 (not classifiable))

Quartz (14808-60-7)
ACGIH: A2 - Suspected Human Carcinogen
NIOSH: potential occupational carcinogen
NTP: Known Human Carcinogen (Select Carcinogen)
IARC: Monograph 68 [1997]; Supplement 7 [1987] (Group 3 (not classifiable))

1,1'-Methylenebis (isocyanato-) benzene (26447-40-5)
IARC: Monograph 71 [1999]; Supplement 7 [1987]; Monograph 19 [1979] (Group 3 (not classifiable))

Silica, amorphous (7631-86-9)
IARC: Monograph 68 [1997]; Supplement 7 [1987] (Group 3 (not classifiable))

Ecotoxicity
A: General Product Information
No information available for the product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

1,1'-Methylenebis (isocyanato-) benzene (26447-40-5)
Test & Species | Conditions
--- | ---
96 Hr EC50 Skeletonema costatum | 3230 mg/L
24 Hr EC50 Daphnia magna | >1000 mg/L

Silica, amorphous (7631-86-9)
Test & Species | Conditions
--- | ---
96 Hr LC50 Brachydanio rerio | 5000 mg/L [static]
72 Hr EC50 Pseudokirchneriella subcapitata | 440 mg/L
48 Hr EC50 Ceriodaphnia dubia | 7600 mg/L

Disposal Considerations
US EPA Waste Number & Descriptions
Component Waste Numbers
No EPA Waste Numbers are applicable for this product's components.
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Disposal Instructions
Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. See Section 7 for Handling Procedures. See Section 8 for Personal Protective Equipment recommendations.

US DOT Information
Shipping Name: Not Regulated

TDG Information
Shipping Name: Not Regulated

US Federal Regulations

Component Analysis
This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Polymethylene polyphenylene isocyanate (9016-87-9)
SARA 313: 1.0 % de minimis concentration

Methylene bis(phenylisocyanate) (101-68-8)
SARA 313: 1.0 % de minimis concentration
CERCLA: 5000 lb final RQ; 2270 kg final RQ

State Regulations

Component Analysis - State
The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gypsum (Ca(SO4).2H2O)</td>
<td>13397-24-5</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Cellulose</td>
<td>9004-34-6</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Starch</td>
<td>9005-25-8</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Glass, oxide</td>
<td>65997-17-3</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
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</tr>
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<td>Yes</td>
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</tr>
</tbody>
</table>

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause cancer.

Component Analysis - WHMIS IDL
The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Minimum Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methylene bis(phenylisocyanate)</td>
<td>101-68-8</td>
<td>0.1 %</td>
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</tbody>
</table>

Additional Regulatory Information
 material name: SecureShield

**Component Analysis - Inventory**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>TSCA</th>
<th>CAN</th>
<th>EEC</th>
</tr>
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<td>Yes</td>
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<td>9004-34-6</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Starch</td>
<td>9005-25-8</td>
<td>Yes</td>
<td>DSL</td>
<td>EINECS</td>
</tr>
<tr>
<td>Polymethylene polyphenylene isocyanate</td>
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<td>Siloxanes and Silicones, methyl hydrogen</td>
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US. California Proposition 65
WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.

**US – California Proposition 65 – Carcinogens & Reproductive Toxicity (CRT): Listed substance**

- **Styrene**
  - Cancer
  - 100-42-5
- **Benzene**
  - Cancer
  - 71-43-2
- **Benzene**
  - Developmental – Male
  - 71-43-2

**Other Information**

The information herein is presented in good faith and believed to be accurate as of the effective date given. However, no warranty, expressed or implied, is given. It is the buyer's responsibility to ensure that its activities comply with Federal, State or provincial, and local laws.

**Key/Legend**

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration, NJTSR = New Jersey Trade Secret Registry.

End of Sheet