



Material Safety Data Sheet

Material Name: SecureShield

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

Manufacturer Information

Nudo
1500 Taylor Avenue
Springfield, IL 62703

Phone: 217-528-5636
Fax: 217-528-8722

*** 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 ***

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

*** 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.

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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 (inhalable 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

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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 ***

Appearance:	Multi-colored	Odor:	None
Physical State:	Solid	pH:	NA
Vapor Pressure:	ND	Vapor Density:	ND
Boiling Point:	ND	Melting Point:	ND
Solubility (H2O):	ND	Specific Gravity:	ND
Evaporation Rate:	NA	VOC:	ND
Octanol/H2O Coeff.:	ND	Flash Point:	ND
Flash Point Method:	ND	Upper Flammability Limit (UFL):	ND
Lower Flammability Limit (LFL):	ND	Burning Rate:	ND
Auto Ignition:	ND		

*** 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

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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] (listed under Crystalline silica inhaled in the form of quartz or cristobalite from occupational sources) (Group 1 (carcinogenic to humans))

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))

* * * Section 12 - Ecological Information * * *

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 <i>Skeletonema costatum</i>	3230 mg/L
24 Hr EC50 <i>Daphnia magna</i>	>1000 mg/L

Silica, amorphous (7631-86-9)

Test & Species

	Conditions
96 Hr LC50 <i>Brachydanio rerio</i>	5000 mg/L [static]
72 Hr EC50 <i>Pseudokirchneriella subcapitata</i>	440 mg/L
48 Hr EC50 <i>Ceriodaphnia dubia</i>	7600 mg/L

* * * Section 13 - 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.

*** Section 14 - Transportation Information ***

US DOT Information

Shipping Name: Not Regulated

TDG Information

Shipping Name: Not Regulated

*** Section 15 - Regulatory Information ***

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:

Component	CAS	CA	MA	MN	NJ	PA	RI
Gypsum (Ca(SO ₄).2H ₂ O)	13397-24-5	No	No	Yes	Yes	Yes	Yes
Cellulose	9004-34-6	No	Yes	Yes	Yes	Yes	Yes
Starch	9005-25-8	No	Yes	Yes	No	Yes	Yes
Polymethylene polyphenylene isocyanate	9016-87-9	No	No	No	Yes	No	No
Methylene bis(phenylisocyanate)	101-68-8	Yes	Yes	Yes	Yes	Yes	Yes
Glass, oxide	65997-17-3	No	No	Yes	No	No	No
Quartz	14808-60-7	No	Yes	Yes	Yes	Yes	Yes
Silica, amorphous	7631-86-9	Yes	Yes	Yes	No	Yes	No

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:

Component	CAS #	Minimum Concentration
Methylene bis(phenylisocyanate)	101-68-8	0.1 %

Additional Regulatory Information

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Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Carbonic dichloride, polymer with 4,4'-(1-methylethylidene)bis[phenol], 4-(1-methyl-1-phenylethyl)phenyl ester	111211-39-3	Yes	DSL	No
Gypsum (Ca(SO ₄).2H ₂ O)	13397-24-5	No	DSL	No
Cellulose	9004-34-6	Yes	DSL	EINECS
Starch	9005-25-8	Yes	DSL	EINECS
Polymethylene polyphenylene isocyanate	9016-87-9	Yes	DSL	No
Methylene bis(phenylisocyanate)	101-68-8	Yes	DSL	EINECS
Siloxanes and Silicones, methyl hydrogen	63148-57-2	Yes	DSL	No
Glass, oxide	65997-17-3	Yes	DSL	EINECS
Quartz	14808-60-7	Yes	DSL	EINECS
1,1'-Methylenebis (isocyanato-) benzene	26447-40-5	Yes	DSL	EINECS
Silica, amorphous	7631-86-9	Yes	DSL	EINECS

*** Section 16 - Other Information ***

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