

Safety Data Sheet

Material: 20071922

NATURAL SHIELD

Version: 2.5 (US)

Date of print: 02/20/2017

Date of last alteration: 04/11/2016

1. Product and company identification

1.1 Identification of the substance or preparation:

Commercial product name: NATURAL SHIELD
 Use of substance / preparation: Industrial.
 Modifying agent for: Building materials

1.2 Company/undertaking identification:

Manufacturer/distributor: SEMCO Modern Seamless Surface Inc
 3620 West Reno Avenue
 Las Vegas, NV 8118
 USA

Customer information: InfoLine:
 Tel (702) 222-9495, info@semcosurfaces.com
 Hours of operation:
 Monday - Friday, 8 am to 5 pm (pacific standard time)
 Corporate website: www.semcosurfaces.com

Emergency telephone no. (24h):
Transportation emergency: (800) 424-9300 (CHEMTREC, USA)
 (703) 527-3887 (CHEMTREC, international)

This SDS was prepared by the Product Safety Department (RAPS) of SEMCO Modern Seamless Surface Inc.

2. Hazards identification

2.1 Classification of the substance or mixture

Classification (GHS):

| Class | Category | Route of exposure |
|--------------------------------------|-------------------|-------------------|
| Hazardous to the aquatic environment | acute, category 3 | |
| Serious eye damage / eye irritation | Category 2 | |
| Skin corrosion/irritation | Category 2 | |

2.2 Label elements

Labelling (GHS):

Pictogram(s):



Signal Word: Warning

| H-Code | Hazard Statements |
|-----------|---------------------------------|
| H315+H320 | Causes skin and eye irritation. |
| H402 | Harmful to aquatic life. |

| P-Code | Precautionary Statements |
|----------------|--|
| P103 | Read label before use. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P404 | Store in a closed container. |
| P501 | Dispose of contents/container to waste disposal. |

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2.3 Other hazards

No data available.

3. Composition/information on ingredients

3.1 Chemical characterization (preparation)

Chemical characteristics

Polysiloxane with functional groups + Fluoropolymer + organosilane (dispersion in water)

3.2 Information on ingredients:

| Type | CAS No. | Substance | Content [wt. %] | | Note |
|------|-------------|------------------------|-----------------|----------|------|
| | | | Lower | Upper | |
| INHA | 64-19-7 | Acetic acid | 0.0001 | <=1.4088 | |
| INHA | 104780-78-1 | Alkylalkoxy siloxane | 0.3474 | <=0.5198 | |
| INHA | 35435-21-3 | Octyl triethoxy silane | 0.9619 | <=2.7226 | |
| INHA | 2867-47-2 | Proprietary Monomer | | <=2.347 | |

Type: HYD - by-product upon hydrolysis, INHA - ingredient, NEBE - by-product, MONO - residual monomer, VERU - impurity, VUL - by-product upon vulcanization. *** **Note:** C1 - IARC carcinogen, C2 - NTP carcinogen, C3 - OSHA carcinogen, NH - non-hazardous, R - reproductive toxin.

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in this section are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product.

4. First-aid measures

4.1 General information:

Get medical attention if irritation occurs or if breathing becomes difficult. Remove contaminated clothing and shoes.

4.2 After inhalation

If inhaled remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult give oxygen.

4.3 After contact with the skin

For skin contact, immediately wipe away excess material. Use a waterless hand cleaner to remove as much of the remaining material as possible. Wash with soap and water.

4.4 After contact with the eyes

If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min.

4.5 After swallowing

For ingestion, if conscious, give several glasses of water but do not induce vomiting. If vomiting does occur, give additional fluids.

4.6 Advice for the physician

Treat symptomatically.

5. Fire-fighting measures

5.1 Flammable properties:

| Property: | Value: | Method: |
|---|--------------------|-----------------------------------|
| Flash point.....: | > 93 °C (> 199 °F) | (ASTM D3278, DIN 55680, ISO 3679) |
| Boiling point / boiling range | not determined | |
| Lower explosion limit (LEL) | not determined | |
| Upper explosion limit (UEL).....: | not determined | |
| Ignition temperature | not determined | |
| NFPA Hazard Class (comb./flam.liquid) | IIIB | |

5.2 Fire and explosion hazards:

This material does not present any unusual fire or explosion hazards.

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5.3 Recommended extinguishing media:

carbon dioxide, dry sand, dry chemical or foam-type extinguishing media Water may be used to cool tanks and structures adjacent to the fire.

5.4 Unsuitable extinguishing media:

None.

5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

Hazardous decomposition products: carbon monoxide , carbon dioxide , silicon dioxide , formaldehyde , Various hydrocarbon fragments .

5.6 Fire fighting procedures:

Full turn-out gear and Self Contained Breathing Apparatus (SCBA) should be worn when fighting large fires.

6. Accidental release measures

6.1 Precautions:

Wear personal protection equipment (see section 8). Avoid contact with eyes and skin. Avoid inhaling mists and vapours. If material is released indicate risk of slipping.

HAZWOPER PPE Level: C

6.2 Containment:

Prevent material from entering sewers or surface waters. Contain any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water. Dispose of in prescribed marked containers.

Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.

6.3 Methods for cleaning up

Take up mechanically and dispose of according to local/state/federal regulations. For small amounts: Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner.

6.4 Further information:

Eliminate all sources of ignition.

7. Handling and storage

7.1 General information:

Avoid exposure by technical measures or personal protective equipment. Always stir well before use.

7.2 Handling

Precautions for safe handling:

Keep away from heat, sparks and flame. Avoid contact with eyes, skin and clothing. Ensure adequate ventilation. Avoid breathing dust/vapor/mist/gas/aerosol. Keep container closed when not in use. When transferring flammable liquids between metal containers, ground and bond the containers to drain off and equalize their static electric charges and reduce the potential for static sparks to occur.

Precautions against fire and explosion:

Do not weld, cut, or grind on empty containers. Where feasible maintain the temperature of flammable or combustible liquids at least 30° F below their flash point. Flammable, combustible or explosive air-vapor mixtures may be present in partial or uncleaned empty containers.

7.3 Storage

Conditions for storage rooms and vessels:

Do not store flammable liquids in plastic IBCs (i.e. Intermediate Bulk Containers or plastic tote tanks). Protect against frost.

Advice for storage of incompatible materials:

none known .

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Further information for storage:

Protect against sun. Keep container tightly closed and store in a cool, well ventilated place. Protect against frost.

Minimum temperature allowed during storage and transportation: 0 °C (32 °F)

Do not allow this material to freeze.

Maximum temperature allowed during storage and transportation: 50 °C (122 °F)

8. Exposure controls and personal protection

8.1 Engineering controls

Ventilation:

Use with adequate ventilation.

Local exhaust:

If spraying or other aerosol generating operations are performed, local exhaust ventilation designed to capture mists and sprays, such as a paint spray booth, is recommended.

8.2 Associate substances with specific control parameters such as limit values

Maximum airborne concentrations at the workplace:

| CAS No. | Material | Type | mg/m ³ | ppm | Dust fract. |
|---------|-------------|-----------|-------------------|---------|-------------|
| 64-17-5 | Ethanol | OSHA PEL | 1,900.0 | 1,000.0 | |
| 64-19-7 | Acetic acid | OSHA PEL | 25.0 | 10.0 | |
| 64-19-7 | Acetic acid | ACGIH TWA | | 10.0 | |

Re Ethanol (CAS no. 64-17-5): STEL is 1000 ppm; carcinogenicity: A3 (ACGIH).

Re Acetic acid (CAS-no. 64-19-7): STEL is 15 ppm (ACGIH).

none known

8.3 Personal protection equipment (PPE)

Respiratory protection:

If spraying or other operations which generate an aerosol mist are conducted, respiratory protection for exposed personnel is recommended. A NIOSH approved air purifying respirator equipped with universal multi-contaminant, multi-gas/vapor cartridges and at least P-99 solid/aerosol particulate filters is recommended if overexposure to dusts, mists, or vapors could occur.

Hand protection:

Any liquid-tight rubber or vinyl gloves.

Eye protection:

Safety glasses with side shields or chemical safety goggles.

Other protective clothing or equipment:

Additional skin protection, such as SARANEX coated Tyvek apron, over-sleeves, lab coat, coveralls, or protective suit should be worn if splashing could occur. Provide eye bath and safety shower.

8.4 General hygiene and protection measures:

Follow standard industrial hygiene practices when using this material. When handling do not eat, drink, smoke or apply cosmetics. Wash thoroughly after handling.

9. Physical and chemical properties

9.1 Appearance

Physical state / form: liquid (23 °C (73 °F))

Colour: milky white

Odour: aromatic

9.2 Safety parameters

Property:

Melting point / melting range: not determined

Boiling point / boiling range: not determined

Flash point.....: > 93 °C (> 199 °F)

Ignition temperature: not determined

Method:

(ASTM D3278, DIN 55680, ISO 3679)

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Lower explosion limit (LEL): not determined
 Upper explosion limit (UEL).....: notdetermined
 Vapour pressure.....: notdetermined
 Density: 1.05 g/cm³ at 23 °C (73 °F), at 1015 hPa
 Water solubility / miscibility.....: completely miscible
 pH-Value: 4.5 at 23 °C (73 °F) (1000 g/l H₂O)
 Viscosity (dynamic): 55 mPa.s at 23 °C (73 °F)

9.3 Further information

Corrosive to Steel or Aluminum.....: Not corrosive to steel or aluminum.

10. Stability and reactivity

10.1 General information:

Stable under normal conditions of use.
 If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

10.2 Conditions to avoid

Although this product is not expected to react with commonly used materials of construction and process equipment, it is advised that any rubber or plastic items such as hoses and gaskets be tested prior to large scale processing to ensure there is no degradation of performance or durability. Heat, open flames, and other sources of ignition. Protect against frost.

10.3 Materials to avoid

Reacts with: acids and alkalis . Reaction causes the formation of: ethanol , methanol .

10.4 Hazardous decomposition products

By hydrolysis: ethanol , methanol . Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation.

10.5 Further information:

Hazardous polymerization cannot occur.

11. Toxicological information

11.1 Information on toxicological effects

11.1.1 General information

Data derived for the product as a whole are of higher priority than data for single ingredients.

11.1.2 Acute toxicity

Assessment:

For this endpoint no toxicological test data is available for the whole product. No data on acute inhalation toxicity is available for this product. In case of aerosol formation: Avoid inhalative exposure!

Acute toxicity estimate (ATE):

ATE_{mix} (oral): > 2000 mg/kg

11.1.3 Skin corrosion/irritation

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.4 Serious eye damage / eye irritation

Assessment:

For this endpoint no toxicological test data is available for the whole product.

11.1.5 Respiratory or skin sensitization

Assessment:

For this endpoint no toxicological test data is available for the whole product.

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Data related to ingredients:**5-Chloro-2-methyl-4-isothiazoline-3-on and 2-methyl-4-isothiazoline-3-on (mixture in a ratio of 3:1):**

Based on the proven low sensitization induction threshold in human, mixtures containing ≥ 15 ppm are classified as skin sensitizing in Europe.

11.1.6 Germ cell mutagenicity**Assessment:**

For this endpoint no toxicological test data is available for the whole product.

11.1.7 Carcinogenicity**Assessment:**

For this endpoint no toxicological test data is available for the whole product.

11.1.8 Reproductive toxicity**Assessment:**

For this endpoint no toxicological test data is available for the whole product.

11.1.9 Specific target organ toxicity (single exposure)**Assessment:**

For this endpoint no toxicological test data is available for the whole product.

11.1.10 Specific target organ toxicity (repeated exposure)**Assessment:**

For this endpoint no toxicological test data is available for the whole product.

11.1.11 Aspiration hazard**Assessment:**

For this endpoint no toxicological test data is available for the whole product.

11.1.12 Further toxicological information

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Data related to ingredients:**Product of hydrolysis (Methanol):**

Methanol (CAS 67-56-1) is readily and rapidly absorbed at all exposure routes and is toxic by all routes. Methanol may cause irritation of the mucosa, as well as nausea, vomiting, headaches, vertigo and visual disorders, including blindness (irreversible damage to the optic nerve), acidosis, spasms, narcosis and coma. There may be a delay in the onset of these effects after exposure.

12. Ecological information**12.1 Toxicity****Assessment:**

For the product as a whole, no test data is available.

12.2 Persistence and degradability**Assessment:**

For the product as a whole, no test data is available.

Data related to ingredients:

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Product of hydrolysis (Methanol):

The product of hydrolysis (methanol) is readily biodegradable.

12.3 Bioaccumulative potential**Assessment:**

No data known.

12.4 Mobility in soil**Assessment:**

No data known.

12.5 Other adverse effects

none known

13. Disposal considerations**13.1 Product disposal****Recommendation:**

Dispose of according to regulations by incineration in a special waste incinerator. Observe local/state/federal regulations.

13.2 Packaging disposal**Recommendation:**

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations. Uncleaned packaging should be treated with the same precautions as the material.

14. Transport information**14.1 US DOT & CANADA TDG SURFACE**

Valuation: Not regulated for transport

Other Information: Protect from freezing, when exposed to cold temperatures approaching 0 °C (32 °F) or below.

14.2 Transport by sea IMDG-Code

Valuation: Not regulated for transport

14.3 Air transport ICAO-TI/IATA-DGR

Valuation: Not regulated for transport

15. Regulatory information**15.1 U.S. Federal regulations****TSCA inventory status and TSCA information:**

This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory. This material or its component(s) is in compliance with TSCA under a Low Volume Exemption.

TSCA 12(b) Export Notification:

This material does not contain reportable amounts of any TSCA 12(b) listed chemicals.

CERCLA Regulated Chemicals:

| CAS No. | Chemical | RQ | Upper limit wt. % |
|---------|-------------|-----------|-------------------|
| 64-19-7 | Acetic acid | 5,000 lbs | <=1.4088 |

SARA 302 EHS Chemicals:

This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:

Delayed (chronic) health hazard.

SARA 313 Chemicals:

This material does not contain any SARA 313 chemicals above de minimus levels.

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HAPS (Hazardous Air Pollutants):

| CAS No. | Chemical | Upper limit wt. % |
|---------|----------|-------------------|
| 67-56-1 | Methanol | <=0.0005 |

15.2 U.S. State regulations**California Proposition 65 Carcinogens:**

This material does not contain any chemicals known to the State of California to cause cancer.

California Proposition 65 Reproductive Toxins:

67-56-1 Methanol

Massachusetts Substance List:

64-19-7 Acetic acid
2867-47-2 Proprietary Monomer

New Jersey Right-to-Know Hazardous Substance List:

64-19-7 Acetic acid
2867-47-2 Proprietary Monomer

Pennsylvania Right-to-Know Hazardous Substance List:

64-19-7 Acetic acid
57-55-6 Propylene glycol
2867-47-2 Proprietary Monomer

15.3 Canadian regulations

This product has been classified in accordance with the Hazard criteria of the CPR and the SDS contains all the information required by the CPR.

WHMIS Hazard Classes:

None.

DSL Status:

This material or one or more of its components is not listed on the Canadian Domestic Substances List.

Non-DSL Chemicals:

| CAS No. | Chemical | Upper limit wt. % |
|--------------|---|-------------------|
| Confidential | Vendor Trade Secret Polymer (Not Disclosed, Proprietary, Unknown) | <= 9.388 |

15.4 Details of international registration status

Relevant information about individual substance inventories, where available, is given below.

European Economic Area (EEA)..... : **REACH** (Regulation (EC) No 1907/2006):

General note: the registration obligations for substances imported into the EEA or manufactured within the EEA by the supplier mentioned in section 1 are fulfilled by the said supplier. The registration obligations for substances imported into the EEA by customers or other downstream users must be fulfilled by the latter.

16. Other information**16.1 Additional information:**

This Safety Data Sheet (SDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all of the information required by the CPR. This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This SDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

Vertical lines in the left-hand margin indicate changes compared with the previous version.

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All deliveries are subject to the SEMCO Health Care Policy.

16.2 Glossary of Terms:

ACGIH - American Conference of Governmental Industrial Hygienists
 DOT - Department of Transportation
 hPa - Hectopascals
 mPa*s - Milli Pascal-Seconds
 OSHA - Occupational Safety and Health Administration
 PEL - Permissible Exposure Limit

ppm - Parts per Million
 SARA - Superfund Amendments and Reauthorization Act
 STEL - Short Term Exposure Limit
 TSCA - Toxic Substances Control Act
 TWA - Time Weighted Average
 WHMIS - Canadian Workplace Hazardous Materials Identification System

Flash point determination methods Common name

| | |
|---------------------------------------|-------------------------------|
| ASTM D56 | Tagliabue (Tag) closed cup |
| ASTM D92, DIN 51376, ISO 2592 | Cleveland open cup |
| ASTM D93, DIN 51758, ISO 2719 | Pensky-Martens closed cup |
| ASTM D3278, DIN 55680, ISO 3679 | Setaflash or Rapid closed cup |
| DIN 51755 | Abel-Pensky closed cup |

16.3 Conversion table:

Pressure:.....: 1 hPa * 0.75 = 1 mm Hg = 1 torr; 1 bar = 1000 hPa
 Viscosity:: 1 mPa*s = 1 centipoise (cP)