1. Identification

1.1. Product identifier
Product Identity       Tectum E-N Roof Deck
Alternate Names       Tectum E-N Roof Deck

1.2. Relevant identified uses of the substance or mixture and uses advised against
Intended use           Roof deck panels.
Application Method     See Technical Data Sheet. (www.armstrongceilings.com/tectum)

1.3. Details of the supplier of the safety data sheet
Company Name          Armstrong World Industries (www.armstrongceilings.com)
                                      2500 Columbia Ave.
                                      Lancaster, PA  17603
                                      In Canada:
                                      255 Montpellier Blvd.
                                      St. Laurent, Quebec
                                      Canada N4N 2G3

Emergency
24 hour Emergency Telephone No. (800) 255-3924 (ChemTel)
Customer Service: Armstrong World Industries, Inc. (877) 276-7876 (email: techline@armstrongceilings.com)

2. Hazard(s) identification

2.1. Classification of the substance or mixture
Skin Irrit. 2;H315 Causes skin irritation.
Skin Sens. 1;H317 May cause an allergic skin reaction.
Carc. 1A;H350 May cause cancer.
Combustible Dust May form combustible dust concentrations in air.

Note: The hazard classifications are for the dust of the product, and do not apply to the product as shipped. Please take care when cutting or sanding to avoid contact with the dust.

2.2. Label elements

Danger
H317 May cause an allergic skin reaction.
H350 May cause cancer.
May form combustible dust concentrations in air.

[Prevention]:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.
P220 Keep container in a cool place.
P240 Ground / bond container and receiving equipment.
P241 Use explosion-proof electrical / ventilating / light / equipment.
P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
P262 Avoid contact with skin / eyes / clothing / fabric.
P264 Wash thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves / eye protection / face protection.

[Response]:
P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.
P302+352 IF ON SKIN: Wash with plenty of soap and water.
P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.
P308+313 IF exposed or concerned: Get medical advice / attention.
P313 Specific treatment (see information on this label).
P313+338 If skin irritation or a rash occurs: Get medical advice / attention.
P333+313 Take off contaminated clothing and wash before reuse.
P334 Wash contaminated clothing before reuse.
P362 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:
P405 Store locked up.

[Disposal]:
P501 Dispose of contents / container in accordance with local / national regulations.

3. Composition/information on ingredients

This product contains the following substances that present a hazard within the meaning of the relevant State and Federal Hazardous Substances regulations.

<table>
<thead>
<tr>
<th>Ingredient/Chemical Designations</th>
<th>Weight %</th>
<th>GHS Classification</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood Fiber</td>
<td>25 – 50%</td>
<td>Combustible Dust</td>
<td></td>
</tr>
<tr>
<td>CAS Number: NA</td>
<td></td>
<td>Carc. 1A; H350 (as wood dust) [1]</td>
<td></td>
</tr>
<tr>
<td>Graphite Enhanced Polystyrene</td>
<td>25 – 50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAS Number: 9003-53-6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oriented Strand Board (OSB, wood fiber)</td>
<td>25 – 50%</td>
<td>Combustible Dust</td>
<td></td>
</tr>
<tr>
<td>CAS Number: NA</td>
<td></td>
<td>Carc. 1A; H350 (as wood dust) [1]</td>
<td></td>
</tr>
<tr>
<td>Crystalline Silica</td>
<td>&lt;0.1%</td>
<td>Acute Tox. 4;H332</td>
<td></td>
</tr>
<tr>
<td>CAS Number: 14808-60-7</td>
<td></td>
<td>STOT RE 2;H373</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Carc. 1A;H350</td>
<td>[1][2]</td>
</tr>
</tbody>
</table>
In accordance with paragraph (i) of §1910.1200, the specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

[1] Substance classified with a health or environmental hazard.

*The full texts of the phrases are shown in Section 16.

### 4. First aid measures

#### 4.1. Description of first aid measures

**General**

In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.

**Inhalation**

Remove to fresh air, keep patient warm and at rest. If breathing is irregular or stopped, give artificial respiration. If unconscious, place in the recovery position and obtain immediate medical attention. Give nothing by mouth.

**Eyes**

Irrigate copiously with clean water for at least 15 minutes, holding the eyelids apart and seek medical attention.

**Skin**

Wash with soap and water.

**Ingestion**

If swallowed obtain immediate medical attention. Keep at rest. Do NOT induce vomiting.

**Overview**

**EFFECTS OF OVEREXPOSURE:**

**SKIN:** May cause skin irritation.

**EYES:** Contact may cause eye irritation. Wear protective safety glasses / goggles when cutting to avoid contact with dust.

**INGESTION:** Not an expected route of exposure. If ingested, contact a medical professional immediately.

**INHALATION:** Possible cancer hazard; cutting can release wood dust. Contains an ingredient which may cause cancer based on animal data (See Section 3 and Section 15 for each ingredient). Risk of cancer depends on duration and level of exposure. See section 2 for further details.

### 5. Fire-fighting measures

#### 5.1. Extinguishing media

Water, dry chemical and other agents rated for a wood fire (Type A fire). Use an extinguisher rated for a Type A fire.

#### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition: Carbon monoxide, hydrogen cyanide, hydrogen halides and other products of combustion. Keep away from heat / sparks / open flames / hot surfaces - No smoking.

Ground / bond container and receiving equipment.

Use explosion-proof electrical / ventilating / light / equipment.

Avoid breathing dust / fume / gas / mist / vapors / spray.

#### 5.3. Advice for fire-fighters

Evacuate the area and notify the fire department. If possible isolate the fire by removing other combustible materials. If the fire is small, use a hose-line or extinguisher rated for a Type A fire. If possible, dike and collect water used to
fight fires. Fire fighters should wear normal protective equipment (full bunker gear) and positive-pressure self-contained breathing apparatus.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Put on appropriate personal protective equipment (see section 8).

6.2. Environmental precautions
Do not allow spills to enter drains or waterways.
Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

6.3. Methods and material for containment and cleaning up
Sweep or vacuum to clean up spills. Do not use any procedure which causes dispersion of dust into the air if any possibility of ignition exists. Dispose of in accordance with local, state and federal regulations.

7. Handling and storage

7.1. Precautions for safe handling
Handle containers carefully to prevent damage and spillage.
Avoid dust generation when handling product to minimize dust explosion potential.
Provide ventilation to limit dust exposure.
See section 2 for further details. - [Prevention]:

7.2. Conditions for safe storage, including any incompatibilities
Keep product away from sources that exceed the auto ignition limit.
Incompatible materials: Keep away from high temperatures and strong oxidizers, such as concentrated nitric acid, oxygen, hydrogen peroxide, and chlorine.
See section 2 for further details. - [Storage]:

7.3. Specific end use(s)
No data available.

8. Exposure controls and personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>0014808-60-7</td>
<td>Crystalline Silica - Quartz</td>
<td>OSHA PEL 50 μg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH TWA: 0.025 mg/m3 A1, 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH 0.05 mg/m3 TWA (respirable)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Supplier No Established Limit</td>
</tr>
<tr>
<td>NA</td>
<td>Wood Dust (regulated under PNOS)</td>
<td>OSHA TWA:15 mg/m3; 5 mg/m3 (respirable)</td>
</tr>
</tbody>
</table>
The exposure limits for nuisance dust (Particulate Not Otherwise Specified - PNOS) are: OSHA PEL: 15 mg/m3 (50 mppcf*) TWA, 5 mg/m3 (respirable fraction). OSHA regulates wood dust as PNOS.

8.2. Exposure controls

Respiratory

If workers are exposed to concentrations above the exposure limit they must use the appropriate, certified respirators.

Eyes

Protective safety glasses recommended

Skin

Protective gloves recommended.

Engineering Controls

Provide adequate ventilation. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and any vapor below occupational exposure limits suitable respiratory protection must be worn.

Other Work Practices

Use good personal hygiene practices. Wash hands before eating, drinking, smoking or using toilet. Promptly remove soiled clothing and wash thoroughly before reuse.

See section 2 for further details.

9. Physical and chemical properties

| Appearance | Off White Solid Composite Panel |
| Odor | Slight to None. |
| Odor threshold | Not determined |
| pH | Not Available |
| Melting point / freezing point | Not Available |
| Initial boiling point and boiling range | Not Available |
| Flash Point | Not Available |
| Evaporation rate (Ether = 1) | Not Available |
| Flammability (solid, gas) | Not Applicable |
| Upper/lower flammability or explosive limits | Lower Explosive Limit: Not Available, Upper Explosive Limit: Not Available |
| Vapor pressure (Pa) | Not Known |
| Vapor Density | Not Known |
| Specific Gravity | Not Available |
| Solubility in Water | Not Available |
| Partition coefficient n-octanol/water (Log Kow) | Not Measured |
| Auto-ignition temperature | Typically 450-600°F |
| Decomposition temperature | Not Available |
| Viscosity (cSt) | Not Measured |
| Relative Density | 16-26 lbs/ft³ |
No other relevant information.

### 10. Stability and reactivity

10.1. Reactivity
Hazardous Polymerization will not occur.

10.2. Chemical stability
Stable under normal circumstances.

10.3. Possibility of hazardous reactions
No data available.

10.4. Conditions to avoid
High temperatures and fires.

10.5. Incompatible materials
Keep away from high temperatures and strong oxidizers, such as concentrated nitric acid, oxygen, hydrogen peroxide, and chlorine.

10.6. Hazardous decomposition products
Carbon monoxide, hydrogen cyanide, hydrogen halides and other products of combustion.

### 11. Toxicological information

**Acute toxicity**
Note: When no route specific LD50 data is available for an acute toxin, the converted acute toxicity point estimate was used in the calculation of the product's ATE (Acute Toxicity Estimate).

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Oral LD50, mg/kg</th>
<th>Skin LD50, mg/kg</th>
<th>Inhalation Vapor LC50, mg/L/4hr</th>
<th>Inhalation Dust/Mist LC50, mg/L/4hr</th>
<th>Inhalation Gas LC50, ppm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood dust</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
<tr>
<td>Crystalline Silica - Quartz - (14808-60-7)</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Carcinogen Data**

<table>
<thead>
<tr>
<th>CAS No.</th>
<th>Ingredient</th>
<th>Source</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0014808-60-7</td>
<td>Crystalline Silica - Quartz</td>
<td>OSHA</td>
<td>Regulated Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: Yes; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No</td>
</tr>
<tr>
<td>NA</td>
<td>Wood Dust</td>
<td>OSHA</td>
<td>Regulated Carcinogen: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NTP</td>
<td>Known: Yes; Suspected: No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>IARC</td>
<td>Group 1: Yes; Group 2a: No; Group 2b: No; Group 3: No; Group 4: No</td>
</tr>
</tbody>
</table>

### 12. Ecological information
12.1. Toxicity
No additional information provided for this product. See Section 3 for chemical specific data.

Aquatic Ecotoxicity

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>96 hr LC50 fish, mg/l</th>
<th>48 hr EC50 crustacea, mg/l</th>
<th>ErC50 algae, mg/l</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood dust</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
<tr>
<td>Crystalline Silica - Quartz - (14808-60-7)</td>
<td>Not Available</td>
<td>Not Available</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability
There is no data available on the preparation itself.

12.3. Bioaccumulative potential
Not Measured

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
This product contains no PBT/vPvB chemicals.

12.6. Other adverse effects
No data available.

13. Disposal considerations

13.1. Waste treatment methods
Observe all federal, state and local regulations when disposing of this substance.

14. Transport information

<table>
<thead>
<tr>
<th>DOT (Domestic Surface Transportation)</th>
<th>IMO / IMDG (Ocean Transportation)</th>
<th>ICAO/IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number</td>
<td>Not Applicable</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not Regulated</td>
<td>Not Regulated</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>DOT Hazard Class: Not Applicable</td>
<td>IMDG: Not Applicable</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>Not Applicable</td>
<td>Sub Class: Not Applicable</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>IMDG: Not Applicable</td>
<td>Air Class: Not Applicable</td>
</tr>
<tr>
<td>IMDG</td>
<td>Marine Pollutant: No;</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>14.6. Special precautions for user</td>
<td>No further information</td>
<td></td>
</tr>
</tbody>
</table>
15. Regulatory information

Regulatory Overview
The regulatory data in Section 15 is not intended to be all-inclusive, only selected regulations are represented.

Toxic Substance Control Act (TSCA)
All components of this material are either listed or exempt from listing on the TSCA Inventory.

US EPA Tier II Hazards

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire</td>
<td>Yes</td>
</tr>
<tr>
<td>Sudden Release of Pressure</td>
<td>No</td>
</tr>
<tr>
<td>Reactive</td>
<td>No</td>
</tr>
<tr>
<td>Immediate (Acute)</td>
<td>Yes</td>
</tr>
<tr>
<td>Delayed (Chronic)</td>
<td>Yes</td>
</tr>
</tbody>
</table>

EPCRA 302 Extremely Hazardous:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

EPCRA 313 Toxic Chemicals:
To the best of our knowledge, there are no chemicals at levels which require reporting under this statute.

Proposition 65 - Carcinogens:
- Crystalline Silica - Quartz
- Wood Dust

16. Other information

SDS Revision Date: 09/08/2017
The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. We accept no responsibility and disclaim all liability for any harmful effects which may be caused by exposure to our products. Customers/users of this product must comply with all applicable health and safety laws, regulations, and orders.

Disclaimer: The information presented herein is supplied as a guide to those who handle or use this product. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.

End of Document