1. Identification

1.1. Product identifier

Product Identity: Tectum III & IIIP Roof Deck
Alternate Names: Tectum III & IIIP 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

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.
P240 Ground / bond container and receiving equipment.
P241 Use explosion-proof electrical / ventilating / light / equipment.
P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
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.
P321 Specific treatment (see information on this label).
P333+313 IF skin irritation or a rash occurs: Get medical advice / attention.
P362 Take off contaminated clothing and wash before reuse.
P363 Wash contaminated clothing before reuse.
P370+378 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 CAS Number: NA</td>
<td>25 – 50%</td>
<td>Combustible Dust Carc. 1A; H350 (as wood dust)</td>
<td>[1]</td>
</tr>
<tr>
<td>Extruded Polystyrene CAS Number: 9003-53-6</td>
<td>25 – 50%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oriented Strand Board (OSB, wood fiber)</td>
<td>25 – 50%</td>
<td>Combustible Dust Carc. 1A; H350 (as wood dust)</td>
<td>[1]</td>
</tr>
<tr>
<td>Crystalline Silica CAS Number: 14808-60-7</td>
<td>&lt;0.1%</td>
<td>Acute Tox. 4; H332 STOT RE 2; H373 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>Source</th>
<th>Exposure</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0014808-60-7</td>
<td>Crystalline Silica - Quartz</td>
<td>OSHA</td>
<td>PEL</td>
<td>50 μg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>TWA:</td>
<td>0.025 mg/m3 A1, 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NIOSH</td>
<td>TWA:</td>
<td>0.05 mg/m3 TWA (respirable)</td>
</tr>
<tr>
<td></td>
<td>Supplier</td>
<td>No Established Limit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NA</td>
<td>Wood Dust (regulated under PNOS)</td>
<td>OSHA</td>
<td>TWA:</td>
<td>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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Off White Solid Composite Panel</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight to None.</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH</td>
<td>Not Available</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Evaporation rate (Ether = 1)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>Lower Explosive Limit: Not Available</td>
</tr>
<tr>
<td></td>
<td>Upper Explosive Limit: Not Available</td>
</tr>
<tr>
<td>Vapor pressure (Pa)</td>
<td>Not Known</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not Known</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>Not Available</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>Not Available</td>
</tr>
<tr>
<td>Partition coefficient n-octanol/water (Log Kow)</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Typically 450-600oF</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Viscosity (cSt)</td>
<td>Not Measured</td>
</tr>
<tr>
<td>Relative Density</td>
<td>16-26 lbs/ft³</td>
</tr>
<tr>
<td>9.2. Other information</td>
<td></td>
</tr>
</tbody>
</table>
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

14.1. UN number
Not Applicable

14.2. UN proper shipping name
Not Regulated

14.3. Transport hazard class(es)
DOT Hazard Class: Not Applicable
IMDG: Not Not Applicable
Air Class: Not Applicable

14.4. Packing group
Not Applicable

14.5. Environmental hazards
IMDG: Marine Pollutant: No;

14.6. Special precautions for user
No further information
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</th>
<th>Category</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