



Safety Data Sheet

Armstrong S240 Part A

Revision Date: May 22, 2016

Version: 2

1. Identification

Product identifier used on the label

Armstrong S240 Part A

Recommended use of the chemical and restriction on use: 2-part system recommended for the installation of vinyl and rubber sheet goods, luxury vinyl tiles, and studded rubber and vinyl tiles on all clean and dry sub-floors, above, on or below grade.

Details of the supplier of the safety data sheet

Company:

Armstrong Flooring, Inc.

2500 Columbia Ave

Lancaster, PA 17603, USA

Telephone number: (800) 233-3823

Emergency Telephone Number: 1-800-255-3924

Other Means of Identification

Chemical Family: Epoxy

2. Hazards identification

According to regulation 2012 OSHA Hazard Communication Standard : 29

CFR Part 1910.1200

Classification of the Product:

Irritant

Label Elements

Eye and Skin Irritant

May cause allergic reaction to skin

Labeling of special preparations (GHS):

none

According to Regulation 1994 OSHA Hazard Communication Standard : 29 CFR Part 1910.1200**Emergency Overview:**

Use proper ventilation. Do not mix with Part B until ready for use. Produces exothermic reaction. Do not mix in large quantities.

Caution:

May cause skin irritation if not removed after skin contact.

Use with Use with local exhaust ventilation.

Use protective equipment for eyes, skin protection.

3. Composition / Information on Ingredients**According to Regulation 1994 OSHA Hazard Communication Standard : 29 CFR Part 1910.1200**

This product does not contain any components classified as hazardous under the referenced regulation.

According to Regulation 1994 OSHA Hazard Communication Standard : 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Content</u>	<u>Chemical Name</u>
25068-38-6	45 - 55	Epoxy resin
1317-65-3	30 - 40	Calcium Carbonate
Proprietary	1 - 10	Additives

4. First Aid Measures

Description of First Aid measures

First-aid measures general:

Remove material from contact immediately and apply recommended first-aid procedure.

First-aid measures after inhalation:

Remove individual to fresh air. Administer oxygen if necessary. Seek medical attention.

First-aid measures after skin contact:

Remove from skin and wash with mild soap and water. If irritation persists, seek medical attention.

First-aid measures after eye contact:

Open eyelids and flush with running water for at least 15-20 minutes. If irritation persists, seek medical attention.

First-aid measures after ingestion:

Seek medical attention immediately. Do not induce vomiting. This might cause chemical pneumonitis.

Most important symptoms and effects, both acute and delayed

Acute: May cause headache, skin rash, and central nervous system depression.

Delayed/Chronic: May cause narcosis, unconsciousness from inhalation. May cause dermatitis from chronic skin contact.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:

Symptomatic treatment

5. Fire-Fighting Measures

Extinguishing Media

Carbon dioxide, foam, dry chemicals

Special hazards arising from the substance or mixture

Do not expose to excessive heat, open flames or sparks. Turn off all pilot lights.

Advice for fire-fighters

Water may spread burning liquid. Avoid direct stream of water. Use water spray only to cool containers exposed to flames. Do not enter closed or confined work area without proper protective equipment. Use self-contained breathing apparatus and turn out gear. If leak or spill has not ignited, use water fog to disperse vapors.

Further Information:

Dispose fire debris and contaminated clothing in accordance with official regulations.

6. Accidental release measuresFurther accidental release measures:

Fire and slippage hazard. Eliminate sources of ignition including electrical switches and motors, pilot lights, etc. Evacuate area and report incident immediately.

Personal precautions, protective equipment and emergency procedures

Use protective equipment when handling spills. Avoid contact with skin, eyes, inhalation or vapors.

Environmental Precautions

Dike and contain the area. Block all natural waterways entry during spill.

Methods and material for containment and cleaning up

Use absorbents (clay, sand) to remove large volume of material. Scrape residual amount and place in closed DOT approved containers for disposal.

7. Handling and Storage**Precautions for Safe Handling**

Always use protective equipment when handling material to avoid direct contact. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

Product is flammable. Keep away from sources of ignition. Protect against physical damage. Store in a cool, dry place.

8. Exposure Control/ Personal Protection**Advice on system design:**

Maintain proper ventilation. Keep away from sources of ignition. Avoid skin and eye contact. Use local exhaust. Do not use closed air circulating system. Open doors and windows if necessary.

Personal protective equipment:**Respiratory protection:**

NIOSH respirator

Skin protection:

Chemical resistant gloves

Eye protection:	Safety glasses, goggles, or face shield if needed
General safety and hygiene safety measures:	Always wash hands after use. Remove contaminated clothing to avoid constant contact with skin. Launder contaminate clothing before re-use.

9. Physical and Chemical Properties

Form:	Semi solid paste
Odor:	Epoxy
Odor threshold:	No Data
Color:	Off white
pH value:	Not applicable
Melting point:	Not applicable
Boiling point:	> 392 degree F
Flash point:	200 – 437 degrees F
Flammability:	Material will burn
Lower explosion:	Not applicable
Upper explosion:	Not applicable
Vapor pressure:	Not determined
Density:	11.66 – 13.33 lbs. per gallon
Relative density:	1.4 – 1.6 grams / cm3
Vapor density:	Not applicable
Partition Coefficient n-octanol/water (log Pow):	No data
Self-ignition temperature:	Not determined
Viscosity, dynamic:	50,000 – 75,000 cps
Solubility in water:	Not soluble
Miscibility in water:	Not miscible

Evaporation rate:

Not determined

Other information:

10. Stability and Reactivity

Reactivity:

Stable

Chemical stability:

None known

Possibility of hazardous reactions:

Stable

Conditions to avoid:

Strong acids and bases in bulk at elevated temperatures

Incompatible materials:

Strong oxidizing agents

Hazardous decomposition products:

Oxides of carbon, water and organic compounds of unknown structures. Do not breathe smoke or fumes.

11. Toxicological Information

Primary routes of exposure:

Respiratory, eyes, skin. Ingestion is not likely but might cause gastric disturbances.

Acute Toxicity / Effects

Acute toxicity: (compiled based on the data supplied by supplier)

May cause headache, skin rash, central nervous system depression.

Acute oral effects: > 2000 mg / kg, rat+

Acute dermal toxicity: (LD50): > 2000 mg / kg, rabbit

Sensitization: Moderate sensitizer

Skin: Moderate irritant

Eyes: Slight irritant

Reproduction: No effects when tested on rats

Teratogenicity: No adverse effects when tested on rabbits

Mutagenicity: No mutagenic effects in vivo test. In vitro test showed mutagenic effects.

Sub Chronic: No apparent system effect when tested on rats for 13 weeks except decreased body weight and gain weight.

Chronic Toxicity Effects

<u>Repeated dose toxicity:</u>	May cause narcosis, unconsciousness from inhalation. May cause dermatitis from chronic skin contact.
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<u>Genetic toxicity:</u>	No data available
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<u>Carcinogenicity:</u>	No data available
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<u>Reproductive toxicity:</u>	No data available
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<u>Teratogenicity:</u>	No data available
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Other Information

12. Ecological Information

Biodegradability: 8 – 27%

Fish Toxicity: Rainbow trout (96 hr) LC50 1.5 mg / l

Zebra Fish (96 hr) LC50 2.4 mg / l

Invertebrate Toxicity: Daphnia Toxicity (24 hr) EC50 3.6 mg / l

13. Disposal Considerations

Abide by all State, federal and local regulations

14. Transport Information

Proper Shipping name: None
D.O.T. Hazard Classification: none
D.O.T. Identification no.: none
D.O.T Packaging Group: none
D.O.T Labels required: none
D.O.T. Placards required (CFR 172.504) : None
Bill of Lading Description: **Adhesive, cement, NOI**

15. Regulatory Information:

Federal Regulations

Registration status:

TSCA: Chemicals contained in the product are either listed or exempt in the U.S. EPA TSCA inventory list.

SARA Title III, Section 312 Hazard Class: None

EPA SARA Title III Section 313: None

State regulations:

CA Prop 65: none

16. Other Information

SDS prepared by: Armstrong Flooring, Inc.

SDS prepared on: May 22, 2016

Armstrong Flooring, Inc believes the data set forth herein are accurate as of the date hereof. Armstrong Flooring makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation and verification.



Safety Data Sheet

Armstrong S240 Part B

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Version: 2

1. Identification

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Armstrong S240 Part B

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Telephone number: (800) 233-3823

Emergency Telephone Number: 1-800-255-3924

Other Means of Identification

Chemical Family: Amines

2. Hazards identification

According to regulation 2012 OSHA Hazard Communication Standard :

29 CFR Part 1910.1200

Classification of the Product:

Irritant, Sensitizer

Label Elements

Eye and Skin Irritant

May cause allergic reaction to skin

Labeling of special preparations (GHS):

Irritant

According to Regulation 1994 OSHA Hazard Communication Standard : 29 CFR Part 1910.1200**Emergency Overview**

Caution:

Will cause skin irritation if not removed after skin contact.

Use with Use with local exhaust ventilation.

Use protective equipment for eyes, skin protection.

Use proper ventilation. Do not mix with Part A until ready for use. Produces exothermic reaction. Do not mix in large quantities.

3. Composition / Information on Ingredients**According to Regulation 1994 OSHA Hazard Communication Standard : 29 CFR Part 1910.1200**

This product does not contain any components classified as hazardous under the referenced regulation.

According to Regulation 1994 OSHA Hazard Communication Standard : 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Content</u>	<u>Chemical Name</u>
Trade Secret	60 – 65	Modified polyamide mixture
1317-85-3	35 - 45	Calcium Carbonate

4. First Aid Measures

Description of First Aid measures

First-aid measures general:	Remove material from contact immediately and apply recommended first-aid procedure.
First-aid measures after inhalation:	Remove individual to fresh air. Administer oxygen if necessary. Seek medical attention.
First-aid measures after skin contact:	Remove from skin and wash with mild soap and water. If irritation persists, seek medical attention.
First-aid measures after eye contact:	Open eyelids and flush with running water for at least 15-20 minutes. If irritation persists, seek medical attention.
First-aid measures after ingestion:	Seek medical attention immediately. Do not induce vomiting. This might cause chemical pneumonitis.

Most important symptoms and effects, both acute and delayed

Acute: May cause headache, skin rash, and central nervous system depression.

Delayed/Chronic: May cause narcosis, unconsciousness from inhalation. May cause dermatitis from chronic skin contact.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment:	Symptomatic treatment
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5. Fire-Fighting Measures

Extinguishing Media

Carbon dioxide, foam, dry chemicals, water spray

Special hazards arising from the substance or mixture

Do not expose to excessive heat, open flames or sparks. Turn off all pilot lights.

Advice for fire-fighters

Water may spread burning liquid. Avoid direct stream of water. Use water spray only to cool containers exposed to flames. Do not enter closed or confined work area without proper protective equipment. Use self-contained breathing apparatus and turn out gear. If leak or spill has not ignited, use water fog to disperse vapors.

Further Information:

Dispose fire debris and contaminated clothing in accordance with official regulations.

6. Accidental release measures

Further accidental release measures:

Fire and slippage hazard. Eliminate sources of ignition including electrical switches and motors, pilot lights, etc. Evacuate area and report incident immediately. Keep Parts A and B separated.

Personal precautions, protective equipment and emergency procedures

Use protective equipment when handling spills. Avoid contact with skin, eyes, inhalation or vapors.

Environmental Precautions

Dike and contain the area. Block all natural waterways entry during spill.

Methods and material for containment and cleaning up

Use absorbents (clay, sand) to remove large volume of material. Scrape residual amount and place in closed DOT approved containers for disposal.

7. Handling and Storage

Precautions for Safe Handling

Always use protective equipment when handling material to avoid direct contact. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

Product is flammable. Keep away from sources of ignition. Protect against physical damage. Store in a cool, dry place.

8. Exposure Control/ Personal Protection

Advice on system design:

Maintain proper ventilation. Keep away from sources of ignition. Avoid skin and eye contact. Use local exhaust. Do not use closed air circulating system. Open doors and windows if necessary.

Personal protective equipment:

Respiratory protection:

NIOSH respirator

Skin protection:

Chemical resistant gloves

Eye protection:

Safety glasses, goggles, or face shield if needed

General safety and hygiene safety measures:

Always wash hands after use. Remove contaminated clothing to avoid constant contact with skin. Launder contaminate clothing before re-use.

9. Physical and Chemical Properties

Form:	Semi solid paste
Odor:	Amine
Odor threshold:	No Data
Color:	Yellow to amber
pH value:	10
Melting point:	Not applicable
Boiling point:	> 400 degrees F
Flash point:	383 degrees F
Flammability:	Material will burn
Lower explosion:	Not applicable
Upper explosion:	Not applicable
Vapor pressure:	Not determined
Density:	11.11 lbs. per gallon
Relative density:	1.33 grams / cm ³
Vapor density:	Not applicable
Partition Coefficient n-octanol/water (log Pow):	No data
Self-ignition temperature:	Not determined
Viscosity, dynamic:	25,000 – 50,000 cps
Solubility in water:	Not soluble
Miscibility in water:	Not miscible
Evaporation rate:	Not determined

10. Stability and Reactivity

Reactivity:

Stable

Chemical stability:

N- nitrous amine (a potent carcinogen) may be formed when material comes in contact with nitrous acid, nitrites or atmosphere with high nitrous oxide concentrations.

Possibility of hazardous reactions:

Stable

Conditions to avoid:

Strong acids and bases in bulk at elevated temperatures

Incompatible materials:

Strong oxidizing agents

Hazardous decomposition products:

Oxides of carbon, water and organic compounds of unknown structures. Do not breathe smoke or fumes.

11. Toxicological Information

Primary routes of exposure:

Respiratory, eyes, skin. Ingestion is not likely but might cause gastric disturbances.

Acute Toxicity / Effects

Acute toxicity: (compiled based on the data supplied by supplier) Actual product was not tested.
May cause headache, skin rash, central nervous system depression.

Acute oral effects: > 2000 mg / kg, rat

Acute dermal toxicity: Components

Phenol (LD50): 630 mg / kg, rabbit

Triethylenetetramine (LD50): 550 mg / kg, rabbit

Inhalation: LC50 (1hr): > 20 mg/l, rat

Sensitization: May cause sensitization upon skin contact. Sensitization has occurred in laboratory animals after repeated exposures.

Skin: irritant

Eyes: irritant

Chronic Toxicity Effects Actual product was not tested.

<u>Repeated dose toxicity:</u>	Absorption of phenol solution through skin could damage liver, kidney, spleen and pancreas and edema of the lungs.
<u>Genetic toxicity:</u>	Showed mutagenic activity on repeated short term tests.
<u>Carcinogenicity:</u>	No data available
<u>Reproductive toxicity:</u>	No data available
<u>Teratogenicity:</u>	No data available
<u>Mutagenicity</u>	Showed mutagenic activity on repeated short term tests.

12. Ecological Information

Aquatic Toxicity: No data available

Toxicity to other organisms: No data available

Toxicity to Daphnia (components)

Phenol EC50 (48hr) : 4.2 – 6.6 mg /l

Bioaccumulation: No data available

Bioaccumulation: Components (phenol) Low bioaccumulation potential

Mobility: No data available

13. Disposal Considerations

Abide by all State, federal and local regulations

14. Transport Information

Proper Shipping name: None
D.O.T. Hazard Classification: None
D.O.T. Identification no.: None
D.O.T Packaging Group: None
D.O.T Labels required: None
D.O.T. Placards required (CFR 172.504) : None
Bill of Lading Description: **Adhesive, cement, NOI**

15. Regulatory Information:

Federal Regulations

Registration status:

TSCA: Chemicals contained in the product are either listed or exempt in the U.S. EPA TSCA inventory list.

SARA Title III, Section 312 Hazard Class: Acute Health Hazard

EPA SARA Title III Section 313: None

State regulations:

CA Prop 65: none

16. Other Information

SDS prepared by: Armstrong Flooring, Inc.

SDS prepared on: May 22, 2016

Armstrong Flooring, Inc believes the data set forth herein are accurate as of the date hereof. Armstrong Flooring makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration, investigation and verification.