

Armstrong Flooring™

Safety Data Sheet

Armstrong S240 Part A

Revision Date: November 30, 2020

Version: 4

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

Website: www.floorexpert.com

Emergency Telephone Number (CHEM-TEL): 1-800-255-3924 or +01-813-248-0585 (call collect)

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:

Skin corrosion/irritation Category 2	H315	Causes Skin irritation
Skin sensitization Category 1	H317	May cause an allergic skin reaction
Carcinogenicity Category 1A	H350	May cause cancer

Label Elements

Signal word (GHS-US): Danger

Hazard statements (GHS-US): H315- Causes skin irritation
H317- May cause an allergic skin reaction
H350- May cause cancer

Precautionary statements (GHS-US): P201- Obtain special instructions before use
P202- Do not handle until all safety precautions have been read and understood
P261- Avoid breathing dust/fume/gas/mist/vapors/spray
P264- Wash thoroughly after handling
P272- Contaminated work clothing must not be allowed out of the workplace
P280- Wear protective gloves/protective clothing/eye protection/ face protection
P302+P352- If on skin: Wash with plenty of water
P308+P313- If exposed or concerned: Get medical advice/attention
P321- Specific treatment (see...on this label)
P332+P313- If skin irritation occurs: Get medical advice/attention
P362+P364- Take off contaminated clothing and wash it before reuse
P363- Wash contaminated clothing before reuse

Labeling of special preparations (GHS):



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

Emergency Overview

Caution:

May cause skin irritation if not removed after skin contact.
Use with local exhaust ventilation.
Use protective equipment for eyes, skin protection.

Use proper ventilation. Do not mix with Part B 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>
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 neededNote 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 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.

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 / cm ³
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

Repeated dose toxicity: May cause narcosis, unconsciousness from inhalation. May cause dermatitis from chronic skin contact.

Genetic toxicity: No data available

Carcinogenicity: No data available

Reproductive toxicity: No data available

Teratogenicity: No data available

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

14.1. In Accordance with DOT

Proper Shipping name: Not Regulated

Hazard Class:

Identification Number:

Label Codes:

Packing Group:

ERG Number:

14.2. In Accordance with IMDG

Proper Shipping Name: Not Regulated

Hazard Class:

Identification Number:

Packing Group:

Label Codes:
EmS-No. (Fire):
EmS-No. (Spillage):
MFAG Number:
14.3. In Accordance with IATA
Proper Shipping Name: Not Regulated
Packing Group:
Identification Number:
Hazard Class:
Label Codes:
ERG Code (IATA):

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

16. Other Information

SDS prepared by: Armstrong Flooring, Inc.

SDS prepared on: May, 22, 2015

Armstrong Flooring, Inc. believes the data set forth herein are accurate as of the date hereof. Armstrong Flooring, Inc. 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.

ArmstrongFlooring™

Safety Data Sheet

Armstrong S240 Part B

Revision Date: November 30, 2020

Version: 4

1. Identification

Product identifier used on the label

Armstrong S240 Part B

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.

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Telephone number: (800) 233-3823

Website: www.floorexpert.com

Emergency Telephone Number (CHEM-TEL): 1-800-255-3924 or +01-813-248-0585 (call collect)

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:

Skin corrosion/irritation Category 1B	H314	Causes severe skin burns and eye damage
Skin sensitization Category 1	H317	May cause an allergic skin reaction

Germ cell mutagenicity Category 2	H341	Suspected of causing genetic defects
Carcinogenicity Category 1A	H350	May cause cancer
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs through prolonged or repeated exposure

Label Elements

Signal Word (GHS-US):	Danger
Hazard statements (GHS-US):	H314- Causes severe skin burns and eye damage H317- May cause an allergic skin reaction H341- Suspected of causing genetic defects H350- May cause cancer H373- May cause damage to organs through prolonged or repeated exposure
Precautionary statements (GHS-US):	P201- Obtain special instructions before use P202- Do not handle until all safety precautions have been read and understood P260- Do not breathe dust/fume/gas/mist/vapors/spray P261- Avoid breathing dust/fume/gas/mist/vapors/spray P264- Wash thoroughly after handling P272- Contaminated work clothing must not be allowed out of the workplace P280- Wear protective gloves/protective clothing/eye protection/ face protection P301+P330+P331- If swallowed rinse mouth. Do NOT induce vomiting P302+P352- If on skin: Wash with plenty of water P303+P361+P353- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower P304+P340- If inhaled: Remove person to fresh air and keep comfortable for breathing P305+P351+P338- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Labeling of special preparations (GHS):



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

Emergency Overview

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

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.

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

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.
<u>Personal protective equipment:</u>	
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

14.1. In Accordance with DOT

Proper Shipping name: Not Regulated

Hazard Class:

Identification Number:

Label Codes:

Packing Group:

ERG Number:

14.2. In Accordance with IMDG

Proper Shipping Name: Not Regulated

Hazard Class:

Identification Number:

Packing Group:

Label Codes:

EmS-No. (Fire):

EmS-No. (Spillage):

MFAG Number:

14.3. In Accordance with IATA

Proper Shipping Name: Not Regulated

Packing Group:

Identification Number:

Hazard Class:

Label Codes:

ERG Code (IATA):

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:

16. Other Information**SDS prepared by:**

Armstrong Flooring, Inc.

SDS prepared on:

May, 22, 2015

Armstrong Flooring, Inc. believes the data set forth herein are accurate as of the date hereof. Armstrong Flooring, Inc. 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.