

S-452 Seal Strong™ Part B (Hardener)

Revision Date: 04/17/2018

Print Date: 04/17/2018

1. Identification

Product name : S-452 Seal Strong™ Part B (Hardener)
2 Part Moisture Mitigation System

Supplier : Armstrong Flooring Inc. 2500 Columbia Avenue, Lancaster, PA 17603
Phone 1-800-233-3823
email: www.floorexpert.com

Manufacturer : Armstrong Flooring, Inc. 2500 Columbia Avenue, Lancaster, PA 17603
Phone: 1-800-233-3823
email: www.floorexpert.com

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

Recommended use of the chemical and restrictions on use : For further information, refer to product data sheet.


2. Hazards identification

GHS Classification

Acute toxicity, Category 4 (Oral) H302: Harmful if swallowed.
Skin corrosion, Category 1B H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1 H318: Causes serious eye damage.
Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

GHS label elements



Hazard pictograms : 

Signal word : Danger

Hazard statements : H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.

Precautionary statements : **Prevention:**
P260 Do not breathe dust or mist.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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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.
 P310 Immediately call a POISON CENTER/doctor. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
 P363 Wash contaminated clothing before reuse.

Storage:

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Warning : Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain,liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.

See Section 11 for more detailed information on health effects and symptoms.
 There are no hazards not otherwise classified that have been identified during the classification process.
 There are no ingredients with unknown acute toxicity used in a mixture at a concentration \geq 1%.

3. Composition/information on ingredients

Pure substance/mixture : Mixture

Hazardous components

Chemical name	CAS-No.	Concentration (%)
benzyl alcohol	100-51-6	\geq 25 - < 50 %
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	\geq 10 - < 20 %
m-phenylenebis(methylamine)	1477-55-0	\geq 10 - < 20 %
Tall oil acids, triethylenetetramine condensate	68919-79-9	\geq 25 - < 50 %

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If inhaled : Move to fresh air.
 Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately.
 Wash off with soap and plenty of water.
 Immediate medical treatment is necessary as untreated

- wounds from corrosion of the skin heal slowly and with difficulty.
- In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
Remove contact lenses.
Keep eye wide open while rinsing.
- If swallowed : Clean mouth with water and drink afterwards plenty of water.
Do not induce vomiting without medical advice.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
Take victim immediately to hospital.
- Most important symptoms and effects, both acute and delayed : Health injuries may be delayed.
corrosive effects
sensitising effects

Gastrointestinal discomfort
Allergic reactions
Dermatitis
See Section 11 for more detailed information on health effects and symptoms.

Harmful if swallowed.
May cause an allergic skin reaction.
Causes serious eye damage.
Causes severe burns.
- Protection of first-aiders : Move out of dangerous area.
Consult a physician.
Show this safety data sheet to the doctor in attendance.
- Notes to physician : Treat symptomatically.

5. Firefighting measures

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Specific extinguishing methods : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

6. Accidental release measures

- Personal precautions, : Use personal protective equipment.

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- protective equipment and emergency procedures : Deny access to unprotected persons.
- Environmental precautions : Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. Local authorities should be advised if significant spillages cannot be contained.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

7. Handling and storage

- Advice on safe handling : Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Follow standard hygiene measures when handling chemical products
- Conditions for safe storage : Store in original container. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Store in accordance with local regulations.
- Materials to avoid : No data available

8. Exposure controls/personal protection

Component	CAS-No.	Basis **	Value	Exposure limit(s)* / Form of exposure
m-phenylenebis(methylamine)	1477-55-0	ACGIH	C	0.1 mg/m ³
		OSHA P0	C	0.1 mg/m ³

*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

****Basis**

ACGIH. Threshold Limit Values (TLV)

OSHA P0. Table Z-1, Limit for Air Contaminat (1989 Vacated Values)

OSHA P1. Permissible Exposure Limits (PEL), Table Z-1, Limit for Air Contaminant

OSHA P2. Permissible Exposure Limits (PEL), Table Z-2

OSHA Z3. Table Z-3, Mineral Dust

Engineering measures : Use of adequate ventilation should be sufficient to control worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Personal protective equipment

Respiratory protection : Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

Hand protection

Remarks : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eye protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary.

Skin and body protection : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Hygiene measures : Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Remove contaminated clothing and protective equipment before entering eating areas. Wash thoroughly after handling.

9. Physical and chemical properties

Appearance : liquid

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Colour	: yellow
Odour	: amine-like
Odour Threshold	: No data available
Flash point	: > 212 °F (100 °C)
Ignition temperature	: No data available
Decomposition temperature	: No data available
Lower explosion limit (Vol%)	: No data available
Upper explosion limit (Vol%)	: No data available
Flammability (solid, gas)	: No data available
Oxidizing properties	: No data available
pH	: Note: Not applicable
Melting point/range / Freezing point	: No data available
Boiling point/boiling range	: No data available
Vapour pressure	: 15.000 mmHg (19.9983 hPa)
Density	: 1.03 g/cm ³ at 68 °F (20 °C)
Water solubility	: No data available
Partition coefficient: n- octanol/water	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: > 20.5 mm ² /s at 104 °F (40 °C)
Relative vapour density	: No data available
Evaporation rate	: No data available
Burning rate	: No data available
Volatile organic compounds (VOC) content	: <100g/L (combined A + B)

10. Stability and reactivity

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: The product is chemically stable.
Possibility of hazardous	: Stable under recommended storage conditions.

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reactions
Conditions to avoid : No data available

Incompatible materials : No data available

11. Toxicological information**Acute toxicity**

Harmful if swallowed.

Components:**benzyl alcohol:**

Acute oral toxicity : LD50 Oral (Rat): 1,620 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 4.178 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist**3-aminomethyl-3,5,5-trimethylcyclohexylamine:**

Acute oral toxicity : LD50 Oral (Rat): 1,030 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 2,000 mg/kg

m-phenylenebis(methylamine):

Acute oral toxicity : LD50 Oral (Rat): 930 mg/kg

Acute inhalation toxicity : LC50 (Rat): 1.34 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Dermal (Rat): > 3,100 mg/kg

Skin corrosion/irritation

Causes severe burns.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

Components:**3-aminomethyl-3,5,5-trimethylcyclohexylamine:**

Assessment: The product is a skin sensitiser, sub-category 1A.

Result: The product is a skin sensitiser, sub-category 1A.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC Not applicable

NTP Not applicable

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Aspiration toxicity

Not classified based on available information.

12. Ecological information

Other information Do not empty into drains; dispose of this material and its container in a safe way. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Component:

benzyl alcohol	100-51-6	<p><u>Toxicity to fish:</u> LC50 Species: Fish Dose: > 100 mg/l Exposure time: 96 h</p> <p><u>Toxicity to daphnia and other aquatic invertebrates:</u> EC50 Species: Daphnia magna (Water flea) Dose: > 100 mg/l Exposure time: 48 h</p>
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	<p><u>Toxicity to algae:</u> ErC50 Species: Desmodesmus subspicatus (green algae) Dose: > 10 - 100 mg/l Exposure time: 72 h</p>
m-phenylenebis(methylamine)	1477-55-0	<p><u>Toxicity to fish:</u> LC50 Species: Oryzias latipes (Japanese medaka) Dose: > 10 - 100 mg/l Exposure time: 96 h</p> <p><u>Toxicity to daphnia and other aquatic invertebrates:</u> EC50 Species: Daphnia magna (Water flea) Dose: > 10 - 100 mg/l Exposure time: 48 h</p>

13. Disposal considerations**Disposal methods**

- Waste from residues : Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.
- Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information**DOT**

UN number	2735
Description of the goods	Polyamines, liquid, corrosive, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
Class	8
Packing group	III
Labels	8
Emergency Response	153
Guidebook Number	

IATA

UN number	2735
Description of the goods	Polyamines, liquid, corrosive, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
Class	8
Packing group	III
Labels	8
Packing instruction (cargo aircraft)	856
Packing instruction (passenger aircraft)	852
Packing instruction (passenger aircraft)	Y841

IMDG

UN number	2735
Description of the goods	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)
Class	8
Packing group	III
Labels	8
EmS Number 1	F-A
EmS Number 2	S-B
Marine pollutant	no

Special precautions for user

No data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC CodeNot applicable

15. Regulatory information**TSCA list** : On the inventory, or in compliance with the inventory**EPCRA - Emergency Planning and Community Right-to-Know Act****CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA304 Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard
Chronic Health Hazard**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.**SARA 313** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.**Clean Air Act****Ozone-Depletion Potential** This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

California Prop 65 This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. Other information

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HMIS Classification

Health	*	3
Flammability		1
Physical Hazard		0
Personal Protection		X

Caution: HMIS® rating is based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® rating is not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® rating is to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). Please note HMIS® attempts to convey full health warning information to all employees.

Notes to Reader

The information contained in this Safety Data Sheet applies only to the actual Armstrong Flooring product identified and described herein. This information is not intended to address, nor does it address the use or application of the identified Armstrong Flooring product in combination with any other material, product or process. All of the information set forth herein is based on technical data regarding the identified product that Armstrong Flooring believes to be reliable as of the date hereof. Prior to each use of any Armstrong Flooring product, the user must always read and follow the warnings and instructions on the product's current Product Data Sheet, product label and Safety Data Sheet for each Armstrong Flooring product, which are available at web site and/or telephone number listed in Section 1 of this SDS.

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