

**1. Identification**

Product name	: S-452 Seal Strong™ Part A (Resin) 2 Part Moisture Mitigation System
Supplier	: Armstrong Flooring Inc, 2500 Columbia Avenue, Lancaster, PA 17603 PhoneK 1-800-233-3823 email: www.floorexpert.com
Manufacturer	: Armstrong Flooring Inc, 2500 Columbia Avenue, Lancaster, PA 17603 PhoneK 1-800-233-3823 email: <del>www</del> 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**

Skin irritation, Category 2  
Eye irritation, Category 2A  
Skin sensitisation, Category 1

H315: Causes skin irritation.  
H319: Causes serious eye irritation.  
H317: May cause an allergic skin reaction.

**GHS label elements**

Hazard pictograms	:	
Signal word	:	Warning
Hazard statements	:	H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.
Precautionary statements	:	<b>Prevention:</b> P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/ eye protection/ face protection. <b>Response:</b> P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

**S-452 Seal Strong™ Part A (Resin)**

Revision date: 04/17/2018

Print Date: 04/17/2018

P337 + P313 If eye irritation persists: Get medical advice/ attention.  
 P362 Take off contaminated clothing and wash before reuse.  
**Disposal:**  
 P501 Dispose of contents/ container to an approved waste disposal plant.

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 (%)
reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight $\leq 700$ )	25068-38-6	$\geq 50 - \leq 100 \%$
oxirane, mono[(C12-14-alkyloxy)methyl]derivs	68609-97-2	$\geq 10 - < 20 \%$

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.  
If symptoms persist, call a physician.
- In case of eye contact : Immediately flush eye(s) with plenty of water.  
Remove contact lenses.  
Keep eye wide open while rinsing.  
If eye irritation persists, consult a specialist.
- 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.  
Obtain medical attention.
- Most important symptoms and effects, both acute and delayed : irritant effects  
sensitising effects  
  
Allergic reactions

**S-452 Seal Strong™ Part A (Resin)**

Revision date: 04/17/2018

Print Date: 04/17/2018

Excessive lachrymation  
Erythema  
Dermatitis  
See Section 11 for more detailed information on health effects and symptoms.

Causes skin irritation.  
May cause an allergic skin reaction.  
Causes serious eye irritation.

- 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, protective equipment and emergency procedures : Use personal protective equipment.  
Deny access to unprotected persons.
- Environmental precautions : Do not flush into surface water or sanitary sewer system.  
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 : Do not breathe vapours or spray mist.  
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 : 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.  
Store in accordance with local regulations.

Materials to avoid : No data available

---

## 8. Exposure controls/personal protection

Contains no substances with occupational exposure limit values.

**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
Colour	:	colourless
Odour	:	characteristic
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	:	No data available
Density	:	1.12 g/cm <sup>3</sup> at 68 °F (20 °C)
Water solubility	:	Note: insoluble
Partition coefficient: n- octanol/water	:	No data available
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	> 20.5 mm <sup>2</sup> /s at 104 °F (40 °C)
Relative vapour density	:	No data available
Evaporation rate	:	No data available
Burning rate	:	
Volatile organic compounds (VOC) content	:	No data available <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 reactions	: Stable under recommended storage conditions.
Conditions to avoid	: No data available
Incompatible materials	: No data available

---

**11. Toxicological information****Acute toxicity**

Not classified based on available information.

**Components:**

**reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight <= 700):**

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 20,000 mg/kg

**Skin corrosion/irritation**

Causes skin irritation.

**Serious eye damage/eye irritation**

Causes serious eye irritation.

**Respiratory or skin sensitisation**

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

**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**

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.  
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
May be harmful to the environment if released in large quantities.  
Water polluting material.

**Component:**

reaction product: 25068-38-6  
bisphenol-A-  
(epichlorhydrin) and epoxy  
resin (number average  
molecular weight <= 700)

Toxicity to fish:  
LC50  
Species: Oncorhynchus mykiss (rainbow trout)  
Dose: 2 mg/l  
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:  
EC50  
Species: Daphnia magna (Water flea)  
Dose: 1.8 mg/l  
Exposure time: 48 h

---

**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	3082
Description of the goods	Environmentally hazardous substances, liquid, n.o.s. (epoxy resin, oxirane, mono[(C12-14-alkyloxy)methyl]derivs)
Class	9
Packing group	III
Labels	9
Emergency Response	171
Guidebook Number	

**IATA**

UN number	3082
Description of the goods	Environmentally hazardous substance, liquid, n.o.s. (epoxy resin, oxirane, mono[(C12-14-alkyloxy)methyl]derivs)
Class	9
Packing group	III
Labels	9
Packing instruction (cargo aircraft)	964
Packing instruction (passenger aircraft)	964
Packing instruction (passenger aircraft)	Y964

**IMDG**

UN number	3082
Description of the goods	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (epoxy resin, oxirane, mono[(C12-14-alkyloxy)methyl]derivs)
Class	9
Packing group	III
Labels	9
EmS Number 1	F-A
EmS Number 2	S-F
Marine pollutant	yes

**Special precautions for user**

No data available

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not applicable

---

**15. Regulatory information**

**TSCA list** : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

**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**

**HMIS Classification**

<b>Health</b>	*	2
<b>Flammability</b>		1
<b>Physical Hazard</b>		0
<b>Personal Protection</b>		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.

**S-452 Seal Strong™ Part A (Resin)**

Revision date: 04/17/2018

Print Date: 04/17/2018

ARMSTRONG FLOORING MAKES NO WARRANTIES EXPRESS OR IMPLIED AND ASSUMES NO LIABILITY ARISING FROM THIS INFORMATION OR ITS USE. ARMSTRONG FLOORING SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES AND SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.