

# LEGSHIELD S-2-5

## 1. Product and Company identification

### 1.1 Identification of the substance or preparation:

Commercial product name: LEGSHIELD S-2-5  
Use of substance / preparation: Industrial Sealing Compound

### 1.2 Manufacturer

Manufacturer: Walter G LEGGE Co., Inc.  
444 Central Avenue  
Peekskill NY 10566  
USA  
Customer information: Telephone: 914-737-5040  
FAX: 914-737-2636  
Email: [info@leggesystems.com](mailto:info@leggesystems.com)  
Web site: [www.leggesystems.com](http://www.leggesystems.com)

Emergency telephone no: 800-424-9300 (Chemtrec, USA) 24 hour

## 2. Composition/information on ingredients

### 2.1 Chemical characterization (preparation):

#### Chemical characteristics

Alkylalkoxysilane and – siloxane emulsion in water

### 2.2 Information on ingredients:

This material does not contain any OSHA or WHMIS reportable hazardous ingredients.

## 3. Hazards identification

### 3.1 Hazards classifications

HMIS rating (product as packaged):

Health: 1    Fire: 0    Reactivity: 1    PPE: G

(HMIS codes are based on contact with the product as packaged and any hydrolysis by-products, if present.) Hazardous Materials Identification Systems and HMIS are registered trademarks of the National Paint and Coatings Association. Note: Respiratory protection is only recommended in the event that ventilation or engineering controls are unable to maintain exposures below recommended levels; or in the event of a spill or other emergency response situation.

Canadian WHMIS Classification: None

### 3.2 Emergency overview and potential hazards

Physical Hazards: No known physical hazards

## Acute health effects

Route of entry or possible contact: Eyes, skin, inhalation, and ingestion

Eye contact: May cause eye irritation.

Skin contact: May cause skin irritation.

Inhalation: No toxic effects are expected.

In case of aerosol formation: If inhaled at high concentrations lung damage is possible.

Ingestion: Not expected in industrial use.

Additional information on acute health effects:

The toxicological evaluation is in accordance with test result(s) of an/some ingredient(s). This material releases methanol (methyl alcohol) upon hydrolysis (when a strong acid is introduced into the product). According to literature methanol (CAS-No. 67-56-1) irritates mucous membranes, has skin drying and narcotic effects up to coma or death. Absorption by the skin is possible. Possibility of damage to heart, kidneys, liver and optic nerves (blindness) over a period of time. This material releases ethanol (ethyl alcohol) upon hydrolysis. Ethanol (CAS-No. 67-17-5) is an irritant to the eyes and mucous membranes. Overexposure has been shown to cause central nervous system depression. Direct contact with the eyes will cause burning and stinging.

### 3.3 Further information:

Chronic health effects:

None known. See Sect. 3.2 "Acute health effects"

Medical conditions which may be aggravated by exposure:

Methanol may aggravate existing liver and/or kidney diseases.

Carcinogens/Reproductive toxins:

There are no carcinogenic ingredients present at or over 0.1% in this material. This material does not contain any reproductive toxins at or above OSHA or WHMIS reportable levels.

See Section 11 of Toxicological Information, if any.

## 4. First-aid measures

### 4.1 General Information:

Get medical attention if irritation occurs or if breathing becomes difficult.

### 4.2 After inhalation:

If inhaled, remove to fresh air. Get medical attention if symptoms occur.

### 4.3 After contact with the skin:

If contact with skin, immediately flush skin with plenty of water or with water and soap. Get medical attention if symptoms occur.

### 4.4 After contact with the eyes:

If contact with eyes, immediately flush eyes with plenty of water. Get medical attention if irritation occurs.

### 4.5 After swallowing:

If swallowed, give victim several glasses of water. Get medical attention.

## 5. Fire-fighting measures

### 5.1 Flammable properties:

Flash point: not established

Lower explosion limit (LEL): not applicable

Upper explosion limit (UEL): not applicable

Auto ignition temperature: 395° C (743° F)

### 5.2 Fire and explosion hazards:

This material does not present any unusual fire or explosion hazards. Material does not burn.

### 5.3 Recommended extinguishing media:

Use extinguishing measures appropriate to the source of fire.

### 5.4 Unsuitable extinguishing media: Not applicable

5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases: Not applicable

### 5.6 Fire fighting procedures:

Not applicable

## 6. Accidental release measures

### 6.1 Precautions:

Wear personal protection equipment (see section 8). Avoid contact with eyes and skin. Do not inhale gases/vapors/aerosols. If material is released it increases risk of slipping.

### 6.2 Containment:

Do not introduce into sewerage or in waters. Dam in any fluid that runs out using suitable material (e.g. earth). Retain contaminated water/extinguishing water.

Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number 800-424-8802.

### 6.3 Methods for cleaning up:

Take up mechanically and dispose of according to local/state/federal regulations. Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Clean any slippery coating that remains using a cold cleaner (e.g. all purpose cleaner).

## 7. Handling and storage

### 7.1 Handling Precautions for safe handling:

Ensure adequate ventilation. Spilled substance increases risk of slipping.

Precautions against fire and explosion: Observe the general rules for fire prevention.

### 7.2 Storage

Conditions for storage rooms and vessels: Protect against frost.

Advice for storage of incompatible materials: Not applicable

Further information for storage: Keep container tightly closed. Protect against sun.

Minimum temperature allowed during storage and transportation: 0° C (32 °F)

Do not allow this material to freeze.

Maximum temperature allowed during storage and transportation: 38° C (100° F)

Temperature limit to maintain product quality.

## 8. Exposure controls and personal protection

### 8.1 Engineering controls

Ventilation: Use with adequate ventilation.

Local Exhaust: Not necessary

### 8.2 Associate substances with specific control parameters such as limit values

Threshold limit values (TLV):

CAS No.	Material	Type	mg/m	ppm
64-17-5	Ethanol	OSHA PEL	1,900.0	1,000.0
67-56-1	Methanol	OSHA PEL	260.0	200.0
64-17-5	Ethanol	ACGIH TWA		1,000.0
67-56-1	Methanol	ACGIH TWA		200.0

Re Methanol: STEL is 250 ppm, skin notation (ACGIH), STEL is 250 ppm, skin notation (NIOSH).

### 8.3 Personal protection equipment (PPE)

Respiratory Protection:

In case of long or strong exposure use a NIOSH approved respirator for: organic vapors.

Hand protection: PVC gloves  
Eye protection: Chemical safety goggles  
Other protective clothing or equipment: Protective clothing

#### 8.4 General hygiene and protection measures:

Avoid contact with eyes and skin. Avoid breathing dust/vapor/mist/gas/aerosol. Do not eat, drink or smoke when handling. Wash thoroughly after handling.

### 9. Physical and chemical properties

#### 9.1 Appearance

Physical state / form: liquid  
Color: white  
Odor: slight

#### 9.2 Safety parameters

Flash point: not established  
Auto-ignition temperature: 395° C (743° F)  
Lower explosion limit (LEL): not applicable  
Upper explosion limit (UEL): not applicable  
Vapor pressure: 23 hPa at 20° C (68° F)  
Density: 0.95 g/cm<sup>3</sup> at 20° C (68° F)  
Water solubility/miscibility: completely miscible  
PH-value: approx. 8  
Viscosity (dynamic): approx. 12 mPa\*s at 25° C (77° F)

#### 9.3 Further information

Explosion limits for released ethanol: 3.5 – 15% (V). Explosion limits for released methanol: 5.5 – 44% (V).

### 10. Stability and reactivity

10.1 Conditions to avoid: None known  
10.2 Materials to avoid: Reacts with acids and alkalis to form ethanol.  
10.3 Hazardous decomposition products: Ethanol  
10.4 Further information: Hazardous polymerization cannot occur.

### 11. Toxicological information

11.1 General information: Toxicological testing has not been conducted with this material.

### 12. Ecological information

#### 12.1 Information on elimination (persistence and degradability)

Biodegradation/further information: The hydrolysis product (Ethanol) is easily biologically degradable.

Further information:

Behavior in environmental compartments

Further information:

#### 12.2 Ecotoxicological effects:

Classification based on ingredients: Harmful to aquatic organisms. May have long-term damaging effects on in-shore waters.

#### 12.3 Further ecological information

General information:

Do not introduce into waters, sewage water or soil.

## Disposal considerations

### 12.4 Product disposal

Recommendation: Dispose of according to regulations by incineration in a special waster incinerator. Small quantities may be disposed of in a domestic waste incinerator. Observe local/state/federal regulations.

### 12.5 Packaging disposal

Recommendation:

Completely discharge containers (no tear drops, no powder residue, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations.

## 13. Transport information

### 13.1 US DOT & CANADA TDG SURFACE

Valuation: Not regulated

Other information: protect from freezing. Temperature sensitive material

### 13.2 Transport by sea IMDG-Code

Valuation: Not regulated

Marine Pollutant: No

### 13.3 Air transport ICAO-TI/IATA-DGR

Valuation: Not regulated

## 14. Regulatory information

### 14.1 U.S. Federal regulations

TSCA inventory status and TSCA information:

This material or its components are listed on or are in compliance with the requirements of the TSCA Chemical Substance Inventory.

TSCA 12 ((b) Export Notification:

This material does not contain any TSCA 12(b) regulated chemicals.

CERCLA Regulated Chemicals:

This material does not contain any CERCLA regulated chemicals.

SARA 302 EHS Chemicals:

This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:

This product does not present any SARA 311/312 hazards.

SARA 313 Chemicals:

This material does not contain any SARA 313 chemicals above de minimus levels.

HAPS:

67-56-1 Methanol

### 14.2 U.S. State regulations:

California Proposition 65 Carcinogens:

This material does not contain any chemicals known to the state of California to cause cancer.

California Proposition 65 Reproductive Toxins:

This material does not contain any chemicals known to the state of California to cause reproductive effects.

Massachusetts Substance list:

This material contains no listed components.

New Jersey right-to-know Hazardous Substance List:

This material contains no listed components.

Pennsylvania right-to-know Hazardous Substance list:

This material contains no listed components.

### 14.3 Canadian regulations

This product has been classified in accordance with the Hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Hazard Classes:

None

DSL Status:

This material or one or more of its components if not listed on the Canadian Domestic Substances List.

Canadian ingredient disclosure list:

This material contains no listed components.

Other international regulations

EU Risk Phrases:

R-Phrase Description

R52/53 Harmful to aquatic organisms. May cause long-term adverse effects in the Aquatic environment.

EU Safety Phrases:

S-Phrase Description

S35 This material and its container must be disposed of in a safe way.

Details of international registration status

Details of international registration status

Listed on the following inventories:

IECSC: China

PICCS: Philippines

EINECS: Europe

ECL: Korea

AICS: Australia

### 15. Other information

#### 15.1 Additional information:

This Material Safety Data Sheet (MSDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR. This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty, expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This MSDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

#### 15.2 Glossary of terms.

ACGIH – American Conference of Governmental Industrial Hygienists

DOT – Department of Transportation

hPa – Hectopascals  
mPa\*s – Milli Pascal-Seconds  
OSHA – Occupation safety and Health Administration  
PEL – Permissible Exposure Limit  
PPM – Parts per Million  
SARA – Superfund Amendments and Reauthorization Act  
STEL- Short Term Exposure Limit  
TSCA – Toxic Substances Control Act  
TWA – Time Weighted Average  
WHMIS – Canadian Workplace Hazardous Materials  
Identification Systems.

Flash Point determination methods:

ASTM D56  
ASTM D92, DIN 51376, ISO 2592  
ASTM D93, DIN 51758, ISO 2719  
ASTM D3278, DIN 55680, ISO 3679  
DIN 51755

Common name:

Tagliabue (Tag) closed cup  
Cleveland open cup  
Pensky-Martens closed cup  
Setaflash or Rapid closed cup  
Abel-pensky closed cup

15.3 Conversion table:

15.4 Pressure:  $1 \text{ hPa} * 0.75 = 1 \text{ mm Hg} = 1 \text{ torr}$ ;  $1 \text{ bar} = 1000 \text{ hPa}$

Viscosity:  $1 \text{ mPa*s} = 1 \text{ Centipoise (cP)}$