

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name : Flash Phalloidin™ Red 594  
 Product code : 424203

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Research use only

#### 1.3. Details of the supplier of the safety data sheet

BioLegend Inc.  
 9727 Pacific Heights Blvd.  
 San Diego, CA 92121 - USA  
 T +1-858-455-9588

#### 1.4. Emergency telephone number

Emergency number : +1-858-455-9588 (7:00AM – 5:00PM PT, M-F)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

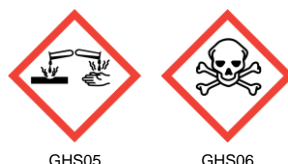
##### GHS-US classification

Acute Toxicity 4 (Oral)  
 Acute Toxicity 3 (Dermal)  
 Acute Toxicity 4 (Inhalation)  
 Serious Eye Damage 1C

#### 2.2. Label elements

##### GHS-US labelling

Hazard pictograms (GHS-US) :



GHS05

GHS06

Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

Toxic in contact with skin. Harmful if swallowed or if inhaled. Causes serious eye damage.

Precautionary statements (GHS-US) :

Wear protective gloves. Wear eye or face protection. Wear protective clothing. Use only outdoors or in a well-ventilated area. Avoid breathing dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth. IF ON SKIN: Take off immediately all contaminated clothing. Wash with plenty of soap and water. Call a POISON CENTER or physician if you feel unwell. Wash contaminated clothing before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

#### 2.3. Other hazards

No additional information available.

#### 2.4. Unknown acute toxicity (GHS US)

No additional information available.

### SECTION 3: Composition/information on ingredients

#### 3.1. Substance

Name	Product identifier	%	GHS-US classification
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# Flash Phalloidin™ Red 594

## Safety Data Sheet

according to the Hazard Communication Standard (CFR29 1910.1200) HazCom 2012

Name	Product identifier	%	GHS-US classification
Flash Phalloidin™ Red 594	(CAS No) 17466-45-4	90-100	Acute Tox. 4 (Oral) Acute Tox. 3 (Dermal) Acute Tox. 4 (Inhalation) Serious Eye Damage 1C

### 3.2. Mixture

Not applicable.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- First-aid measures after inhalation : Get medical attention if adverse. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- First-aid measures after skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- First-aid measures after eye contact : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- First-aid measures after ingestion : Get medical attention if adverse health effects persist or are severe. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open air/vay. Loosen tight clothing such as a collar, tie, belt or waistband.

### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : Harmful if inhaled. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
- Symptoms/injuries after skin contact : Toxic in contact with skin.
- Symptoms/injuries after eye contact : Causes serious eye irritation.
- Symptoms/injuries after ingestion : Harmful if swallowed. May cause burns to mouth, throat and stomach.

#### Over-exposure signs/symptoms:

- Eye contact: Adverse symptoms may include the following:  
pain  
watering  
redness
- Inhalation: No specific data.
- Skin contact: Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Ingestion: Adverse symptoms may include the following:  
stomach pains

### 4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible).

*Notes to physician:* Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

*Specific treatments:* No specific treatment.

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*Protection of first-aiders:* No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.  
Unsuitable extinguishing media : None known.

#### 5.2. Special hazards arising from the substance or mixture

Fire hazard : No specific fire or explosion hazard. May be combustible at high temperatures.

#### 5.3. Advice for firefighters

Protection during firefighting : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

#### 6.2. Methods and material for containment and cleaning up

For containment : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).  
Methods for cleaning up : *Small spills:* Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. *Large spills:* Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

#### 6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Precautions for safe handling : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.  
Hygiene measures : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

#### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Do not store above the following temperature: 4°C (39.2°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

#### 7.3. Specific end use(s)

Not available.

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

Flash Phalloidin™ Red 594	
ACGIH	Not applicable
OSHA	Not applicable

#### 8.2. Exposure controls

Appropriate engineering controls	: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Hand protection	: Wear chemically resistant protective gloves.
Eye protection	: Wear eye/face protection.
Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: A NIOSH approved dust mask or filtering facepiece is recommended in poorly ventilated areas or when permissible exposure limits may be exceeded. Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2).
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Other information	: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: No data available
Colour	: Yellow orange
Odour	: Odorless
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Vapour pressure	: No data available
Relative density	: No data available
Relative vapour density at 20 °C	: No data available
Solubility	: Soluble in the following materials: cold water, hot water and methanol
Partition coefficient: n-octanol/water	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

#### 9.2. Other information

No additional information available.

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

No dangerous reaction known under conditions of normal use.

#### 10.2. Chemical stability

Stable under normal storage conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reaction known under conditions of normal use.

#### 10.4. Conditions to avoid

No specific data.

#### 10.5. Incompatible materials

No specific data.

#### 10.6. Hazardous decomposition products

No hazardous decomposition products known under conditions of normal use.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity :

Flash Phalloidin™ Red 594	
LD50 Intraperitoneal mouse	Dose: 2mg/kg

Skin corrosion/irritation	: Not available.
Serious eye damage/irritation	: Not available.
Respiratory or skin sensitization	: Not available.
Germ cell mutagenicity	: Not available.
Carcinogenicity	: Not available.
Reproductive toxicity	: Not available
Specific target organ toxicity (single exposure)	: Not available
Specific target organ toxicity (repeated exposure)	: Not available
Aspiration hazard	: Not available
Symptoms/injuries after inhalation	: No specific data.
Symptoms/injuries after skin contact	: Toxic in contact with skin.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Harmful if swallowed. May cause burns to mouth, throat and stomach.

### SECTION 12: Ecological information

#### 12.1. Toxicity

Ecology - general : Not available.

#### 12.2. Persistence and degradability

Flash Phalloidin™ Red 594	
Persistence and degradability	Not established.

#### 12.3. Bioaccumulative potential

Flash Phalloidin™ Red 594	
Bioaccumulative potential	Not established.

#### 12.4. Mobility in soil

No additional information available.

#### 12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

- Waste disposal recommendations : The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
- Additional information : None.

### SECTION 14: Transport information

#### Department of Transportation (DOT)

- In accordance with DOT
- UN-No.(DOT) : UN2811
- Proper Shipping Name (DOT) : Toxic solid, organic, n.o.s. (phalloidin conjugate)
- Department of Transportation (DOT) Hazard Classes : Poisons
- Packing group (DOT) : II

#### Additional information

- Other information : No supplementary information available.
- Special transport precautions : Do not handle until all safety precautions have been read and understood.

### SECTION 15: Regulatory information

#### 15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory except for:

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- U.S. Federal regulations:
- TSCA 8(a) CDR Exempt/Partial exemption: Not determined
- United States inventory (TSCA 8b): This material is not listed.
- Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed
- Clean Air Act Section 602 / Class I Substances: Not listed
- Clean Air Act Section 602 / Class II Substances: Not listed
- DEA List I Chemicals (Precursor Chemicals): Not listed
- DEA List II Chemicals (Essential Chemicals): Not listed
- SARA 302/304
- Composition/information on ingredients: No products were found.
- SARA 304 RQ: Not applicable.
- SARA 311/312
- Classification: Immediate (acute) health hazard

#### 15.2. US State regulations

- Massachusetts: This material is not listed.
- New York : This material is not listed.
- New Jersey : This material is not listed.
- Pennsylvania : This material is not listed.
- Canada inventory : Not determined.

### SECTION 16: Other information

- Date of issue : 02/09/2016
- Other information :

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### Hazardous Material Information System (U.S.A.)

Health	2
Chronic Health Hazard	
Flammability	0
Physical hazards	0

### National Fire Protection Association (U.S.A.)

Health	2
Flammability	0
Instability/Reactivity	0
Special	

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