SAFETY DATA SHEET

1. Identification of the substance/mixture and of the company/undertaking

Identification of the substance/preparation

Product code: A12380
Product name: Alexa Fluor® 568 phalloidin

Company/Undertaking Identification

Life Technologies
5791 Van Allen Way
PO Box 6482
Carlsbad, CA 92008
+1 760 603 7200

Life Technologies
5250 Mainway Drive
Burlington, ONT
CANADA L7L 6A4
800/263-6236

24 hour Emergency Response:

866-536-0631
301-431-8585
Outside of the U.S. +1-301-431-8585

For research use only.

2. Hazards identification

GHS - Classification

Signal Word
DANGER

Health Hazard

<table>
<thead>
<tr>
<th>Acute oral toxicity</th>
<th>Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute dermal toxicity</td>
<td>Category 3</td>
</tr>
<tr>
<td>Acute Inhalation Toxicity - Dusts and Mists</td>
<td>Category 4</td>
</tr>
</tbody>
</table>

Physical Hazards

not hazardous
Precautionary statements
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water
P361 - Remove/Take off immediately all contaminated clothing
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P330 - Rinse mouth
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P312 - Call a POISON CENTER or doctor/physician if you feel unwell
P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P264 - Wash hands thoroughly after handling

Reproductive toxicity
not applicable

Skin
Sensitization
not applicable

Target Organ Effects
No known effects under normal use conditions.

4. First aid measures
Skin contact
Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>EINECS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexa Fluor® 568 phalloidin</td>
<td>NOT FOUND</td>
<td>-</td>
<td>60-100</td>
</tr>
</tbody>
</table>

We recommend handling all chemicals with caution.
Eye contact
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.

Ingestion
Rinse mouth. Call a POISON CENTER or doctor/physician if exposed or you feel unwell. Never give anything by mouth to an unconscious person.

Inhalation
Move to fresh air. Consult a physician.

Notes to physician
Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media
Dry chemical.

Special protective equipment for firefighters
Wear self-contained breathing apparatus and protective suit.

6. Accidental release measures

Personal precautions
Use personal protective equipment. Avoid contact with skin, eyes and clothing.

Methods for cleaning up
Take up mechanically and collect in suitable container for disposal.

Environmental precautions
Prevent further leakage or spillage if safe to do so.

See Section 12 for additional information.

7. Handling and storage

Handling
Always wear recommended Personal Protective Equipment. Avoid dust formation. Avoid contact with skin and eyes.

Storage
Keep in properly labelled containers.

8. Exposure controls/personal protection

Exposure limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>OSHA PEL (Ceiling)</th>
<th>ACGIH OEL (TWA)</th>
<th>ACGIH OEL (STEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexa Fluor® 568 phalloidin</td>
<td>none</td>
<td>none</td>
<td>none</td>
<td>none</td>
</tr>
</tbody>
</table>

Engineering measures
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment
Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection
In case of insufficient ventilation wear suitable respiratory equipment.

Hand protection
Impervious gloves.

Eye protection
Safety glasses with side-shields.

Skin and body protection
Lightweight protective clothing.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls
Prevent product from entering drains.
9. Physical and chemical properties

General Information

Form  solid
Appearance  purple
Odor  No information available
Boiling Point/Range  °C no data available  °F no data available
Melting point/range  °C no data available  °F no data available
Flash point  °C no data available  °F no data available
Autoignition temperature  °C no data available  °F no data available
Oxidizing properties  No information available.
Water solubility  soluble

10. Stability and reactivity

Stability  Stable under normal conditions.
Materials to avoid  Strong oxidizing agents
Hazardous decomposition products  No information available.
Polymerization  Hazardous polymerisation does not occur.

11. Toxicological information

Acute toxicity

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 (oral,rat/mouse)</th>
<th>LD50 (dermal,rat/rabbit)</th>
<th>LC50 (inhalation,rat/mouse)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexa Fluor® 568 phalloidin</td>
<td>no data available</td>
<td>no data available</td>
<td>no data available</td>
</tr>
</tbody>
</table>

Principle Routes of Exposure/
Potential Health effects

Eyes  May cause eye irritation with susceptible persons.
Skin  Toxic in contact with skin.
Inhalation  Harmful by inhalation.
Ingestion  Harmful if swallowed.
Carcinogenic effects  No information available.
Mutagenic effects  Substances which cause concern for man owing to possible mutagenic effects but for which the available information is not adequate for making a satisfactory assessment.
Reproductive toxicity  No information available.
Sensitization  No information available.

12. Ecological information

Ecotoxicity effects  No information available.
Mobility  No information available.
Biodegradation  No information available.
Bioaccumulation  No information available.
13. Disposal considerations

Dispose of in accordance with local regulations.

14. Transport information

This product is subject to the de minimis exceptions for dangerous goods / hazardous materials in accordance with the following regulations: IATA 2.6.10, ADR 3.5.1.4, and U.S. DOT 49 CFR 173.4b.

<table>
<thead>
<tr>
<th>IATA</th>
<th>Proper shipping name</th>
<th>Toxic solid, organic, n.o.s. (phalloidin)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hazard class</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>Subsidiary Class</td>
<td>none</td>
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<tr>
<td></td>
<td>Packing group</td>
<td>II</td>
</tr>
<tr>
<td></td>
<td>UN-No</td>
<td>UN2811</td>
</tr>
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</table>

15. Regulatory information

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA</th>
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<tr>
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U.S. Federal Regulations

SARA 313
This product is not regulated by SARA.

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain HAPs.

U.S. State Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Massachusetts - RTK</th>
<th>New Jersey - RTK</th>
<th>Pennsylvania - RTK</th>
<th>Illinois - RTK</th>
<th>Rhode Island - RTK</th>
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<tbody>
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California Proposition 65
This product does not contain chemicals listed under Proposition 65

WHMIS Hazard Class

DTA Very toxic materials

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. Other information

Reason for Revision not applicable. (M)SDS sections updated.

For research use only.

Revision Date 10-May-2013
Product code A12380
Product name Alexa Fluor® 568 phalloidin

www.lifetechnologies.com
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End of Safety Data Sheet