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

1.1. Product identifier

Product No: 9900  
Product name: PD98059  
Reach registration number: This substance/mixture contains only ingredients which have been registered, or are exempt from registration, according to Regulation (EC) No. 1907/2006.

Contains

Formula: C_{16}H_{13}NO_{3}  
Molecular Weight: 267.28 g/mol

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

Identified uses: For research use only

1.3. Details of the supplier of the safety data sheet

Importer (Applicable in EU only):
Cell Signaling Technology Europe B.V.  
Schuttersveld 2  
2316 ZA Leiden  
The Netherlands  
TEL: +31 (0)71 7200 200  
FAX: +31 (0)71 891 0098

Manufacturer:
Cell Signaling Technology, Inc.  
3 Trask Lane  
Danvers, MA 01923  
United States  
TEL: +1 978 867 2300  
FAX: +1 978 867 2400

Website: www.cellsignal.com  
E-mail Address: info@cellsignal.eu

1.4. Emergency telephone number

CHEMTREC: 24 hours a day, 7 days a week, 365 days a year  
+1 703 527 3887 (INTERNATIONAL) +1 800 424 9300 (NORTH AMERICA)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Acute oral toxicity: Category 3 - (H301)

2.2. Label elements
Hazard statement(s)
H301 - Toxic if swallowed

Precautionary statement(s)
P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
P330 - Rinse mouth
P405 - Store locked up
P501 - Dispose of contents/container to an approved waste disposal plant

2.3. Other hazards
For the full text of the H-phrases & EUH-phrases mentioned in this Section, see Section 16

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms 2'-Amine-3'-methoxyflavone, 4H-1-Benzopyran-4-one, 2-(2-Amino-3-methoxyphenyl)-
Formula C_{16}H_{13}NO_{3}
Chemical nature Organic compound.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight %</th>
<th>EC No</th>
<th>Classification (1272/2008)</th>
<th>REACH Registration Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Amino-3-methoxyphenyl)-4H-1-benzopyran-4-one</td>
<td>167869-21-8</td>
<td>100</td>
<td>-</td>
<td>-</td>
<td>no data available</td>
</tr>
</tbody>
</table>

For the full text of the R-phrases mentioned in this Section, see Section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Use first aid treatment according to the nature of the injury. When symptoms persist or in all cases of doubt seek medical advice.
Inhalation Move to fresh air.
Skin contact Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes.
Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Ingestion Rinse mouth. Call a physician or poison control center immediately.

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

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

Notes to physician Treat symptomatically.
SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media  Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media  No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit. Use personal protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel  Evacuate personnel to safe areas. Ensure adequate ventilation.

For emergency responders  Use personal protection recommended in Section 8.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Methods for containment  Prevent further leakage or spillage if safe to do so.

Methods for cleaning up  Use personal protective equipment. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid dust formation. Clean contaminated surface thoroughly.

6.4. Reference to other sections

See Sections 8 & 13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat. Protect from light. Recommended storage temperature -20 °C.

7.3. Specific end use(s)

Use as a laboratory reagent.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls
Appropriate engineering controls
Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment
Eye/face protection
   Safety glasses with side-shields
Skin protection
   Hand protection
      Impervious gloves.
   Other
      Wear suitable protective clothing.
Respiratory protection
   In the case of dust or aerosol formation use respirator with an approved filter.
      Recommended filter:
         Type P3

Environmental Exposure Controls
No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>Lyophilized Powder</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Yellow</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>166.7-167.3 °C</td>
<td>No information available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
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<td></td>
</tr>
<tr>
<td>Explosive properties</td>
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<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
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<td></td>
</tr>
<tr>
<td>Softening point</td>
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</tr>
<tr>
<td>Molecular Weight</td>
<td>267.28 g/mol</td>
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</tr>
<tr>
<td>Solubility in other solvents</td>
<td>Dimethylsulfoxide, @ 25 mg/mL</td>
<td></td>
</tr>
<tr>
<td>VOC content</td>
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<td></td>
</tr>
<tr>
<td>Density</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity
No information available.

10.2. Chemical stability
Stable under normal conditions.
10.3. Possibility of hazardous reactions

**Hazardous polymerization**
Hazardous polymerization does not occur.

**Hazardous reactions**
None under normal processing.

10.4. Conditions to avoid

Heat. Exposure to light.

10.5. Incompatible materials

Strong oxidizing agents, strong acids, and strong bases.

10.6. Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapors.

### SECTION 11: Toxicological information

11.1. Information on toxicological effects

This material should only be handled by, or under the close supervision of, those properly qualified in the handling and use of potentially hazardous chemicals. It should be borne in mind that the toxicological and physiological properties of this compound is not well defined.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
<th>LC50 Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-(2-Amino-3-methoxyphenyl)-4H-1-benzopyran-4-one</td>
<td>&lt; 300 mg/kg ( Rat )</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Information on likely routes of exposure

- **Inhalation**
  - There is no data available for this product.
- **Eye contact**
  - There is no data available for this product.
- **Skin contact**
  - There is no data available for this product.
- **Ingestion**
  - Toxic if swallowed.
- **Symptoms**
  - No information available.
- **Skin corrosion/irritation**
  - No information available.
- **Serious eye damage/eye irritation**
  - No information available.
- **Sensitization**
  - No information available.
- **Mutagenic effects**
  - No information available.
- **Carcinogenic effects**
  - No information available.
- **Reproductive toxicity**
  - No information available.
- **STOT - single exposure**
  - No information available.
- **STOT - repeated exposure**
  - No information available.
- **Aspiration Hazard**
  - No information available.
- **Other information**
  - No information available.

### SECTION 12: Ecological information

12.1. Toxicity

No information available.

**Unknown Aquatic Toxicity**

100% of the mixture consists of components of unknown hazards to the aquatic environment.

12.2. Persistence and degradability
12.3. Bioaccumulative potential

Bioaccumulation: No information available.
Bioconcentration factor (BCF): No information available.

12.4. Mobility in soil

No information available.

12.5. Results of PBT and vPvB assessment

No information available.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues / unused products: Dispose of in accordance with local regulations.
Contaminated packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.
Other information: Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

IMDG/IMO
14.1 UN number UN2811
14.2 UN proper shipping name Toxic solid, organic, n.o.s. (2-(2-Amino-3-methoxyphenyl)-4H-1-benzopyran-4-one)
14.3 Transport hazard class(es) 6.1
14.4 Packing group III
14.5 Environmental hazards None
14.6 Special precautions for user EmS No. None
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not regulated

ADR/RID
14.1 UN number UN2811
14.2 UN proper shipping name Toxic solid, organic, n.o.s. (2-(2-Amino-3-methoxyphenyl)-4H-1-benzopyran-4-one)
14.3 Transport hazard class(es) 6.1
14.4 Packing group III
14.5 Environmental hazards None
14.6 Special precautions for user None
   Classification Code T2
   Tunnel Restriction Code (E)

IATA
14.1 UN number UN2811
14.2 UN proper shipping name Toxic solid, organic, n.o.s. (2-(2-Amino-3-methoxyphenyl)-4H-1-benzopyran-4-one)
14.3 Transport hazard class(es) 6.1
14.4 Packing group III
**SECTION 15: Regulatory information**

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

**Candidate List of Substances of Very High Concern for Authorization Information**

This product does not contain Substances of Very High Concern (SVHC).

**SEVESO Directive Information**

This product does not contain substances identified in the SEVESO Directive.

**International inventories**

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA 8(b)</td>
<td>-</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>-</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>-</td>
</tr>
<tr>
<td>ENCS</td>
<td>-</td>
</tr>
<tr>
<td>IECSC</td>
<td>Complies</td>
</tr>
<tr>
<td>KECL</td>
<td>-</td>
</tr>
<tr>
<td>PICCS</td>
<td>-</td>
</tr>
<tr>
<td>AICS</td>
<td>-</td>
</tr>
</tbody>
</table>

**International inventories legend**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances
- ENCS - Japan Existing and New Chemical Substances
- IECSC - China Inventory of Existing Chemical Substances
- KECL - Korean Existing and Evaluated Chemical Substances
- PICCS - Philippines Inventory of Chemicals and Chemical Substances
- AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out

**SECTION 16: Other information**

**Full text of H-Statements referred to under Sections 2 and 3**

H301 - Toxic if swallowed

**Classification procedure:** Expert judgment and weight of evidence determination.

**Issuing Date:** 2014-02-04

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.