

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name SB202190

Pure substance/preparation Preparation

Identified uses **For in vitro Research Use Only (RUO).**
Not intended for use in humans or animals.
Not intended for therapeutic or diagnostic procedures.

Manufacturer
Cell Signaling Technology, Inc.
3 Trask Lane
Danvers, MA 01923
TEL: 978-867-2300

2. HAZARDS IDENTIFICATION

| | |
|--|-----------------------------|
| Emergency Overview | |
| The product contains no substances which at their given concentration, are considered to be hazardous to health. | Odor None |
| Appearance crystalline powder | Physical State Solid |

Potential Health Effects

Acute Toxicity

| | |
|-------------------|--|
| Eyes | May cause irritation. |
| Skin | May cause irritation. |
| Inhalation | May cause irritation to mucous membranes. |
| Ingestion | No known effect based on information supplied. |

Chronic Effects

| | |
|--------------------------------------|---|
| Chronic toxicity | No known effect based on information supplied. |
| Aggravated Medical Conditions | None known. |
| Environmental hazard | See Section 12 for additional Ecological Information. |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS-No | Weight % |
|--|-------------|----------|
| 4-(4'-fluorophenyl)-2-(4-hydroxyphenyl)-5-(4'-pyridyl)1H-imidazole | 152121-30-7 | >95 |

4. FIRST AID MEASURES

Eye contact Rinse immediately with plenty of water and seek medical advice.

Skin contact Rinse immediately with plenty of water and seek medical advice.

Inhalation Move to fresh air.

Ingestion Never give anything by mouth to an unconscious person. Clean mouth with water.

5. FIRE-FIGHTING MEASURES

Flammable Properties Not flammable.
Suitable Extinguishing Media Dry chemical, CO, alcohol-resistant foam or water spray.
Protective Equipment and Precautions for Firefighters As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA **Health Hazard** 1 **Flammability** 0 **Stability** 0 **Physical and chemical hazards** -

6. ACCIDENTAL RELEASE MEASURES

Personal precautions Avoid contact with skin, eyes and clothing.

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

Methods for cleaning up Prevent product from entering drains.

7. HANDLING AND STORAGE

Advice on safe handling Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.

Technical measures/Storage conditions Keep container tightly closed. Recommended storage temperature -20 °C

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures Showers, eyewash stations, and ventilation systems.

Hygiene measures When using, do not eat, drink or smoke Wear suitable gloves and eye/face protection Wash hands before breaks and at the end of workday Wash hands with water as a precaution Regular cleaning of equipment, work area and clothing is recommended Avoid breathing vapors, mist or gas

Personal Protective Equipment

Respiratory protection None required under normal usage. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

Eye/Face Protection Safety glasses with side-shields

Skin and body protection Protective gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-------------------------------------|--|
| Physical State | Solid |
| Appearance | crystalline powder |
| Color | White to off-white |
| Odor | None |
| pH | No information available |
| Solubility | soluble in alcohols, chlorinated solvents, dimethyl sulfoxide (DMSO) |
| Melting point/range | No information available |
| Melting point (°C) VALUE | 240-243 |
| Boiling Point/Range | No information available |
| Flash point | No information available |
| Autoignition temperature | No information available |
| Flammability Limits in Air | No information available |
| Explosive properties | No information available |
| VOC Content | No information available |
| Initial Boiling Point | No information available |
| Solubility | soluble in alcohols, chlorinated solvents, dimethyl sulfoxide (DMSO) |
| Evaporation Rate | No information available |
| Solubility | soluble in alcohols, chlorinated solvents, dimethyl sulfoxide (DMSO) |
| Decomposition Temperature °C | No information available |

10. STABILITY AND REACTIVITY

| | |
|---|--|
| Stability | Stable under normal conditions. |
| Conditions to Avoid | Strong acids |
| Hazardous Decomposition Products | Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide. |

11. TOXICOLOGICAL INFORMATION

Caution - substance not yet tested completely

| | |
|-----------------------------|--|
| Acute Toxicity | No information available. |
| Carcinogenicity | There are no known carcinogenic chemicals in this product. |
| Irritation | No information available. May cause irritation. |
| Target Organ Effects | None known. |

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

| | |
|--------------------------------------|---------------------------|
| Persistence and degradability | No information available. |
|--------------------------------------|---------------------------|

Bioaccumulation No information available.
Mobility No information available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods Dispose of in accordance with all applicable national environmental laws and regulations.

14. TRANSPORT INFORMATION

DOT Not regulated
MEX Not regulated
IATA Not regulated

15. REGULATORY INFORMATION

OSHA Regulatory Status

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and available for employees and other users of this product

International Inventories

| | |
|---------------|---|
| TSCA | - |
| DSL/NDSL | - |
| EINECS/ELINCS | - |
| ENCS | - |
| IECSC | - |
| KECL | - |
| PICCS | - |
| AICCS | - |
| NZIoC | - |

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

| | |
|-----------------------------------|----|
| Acute Health Hazard | No |
| Chronic Health Hazard | No |
| Fire Hazard | No |
| Sudden Release of Pressure Hazard | No |
| Reactive Hazard | No |

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any substances regulated as hazardous air pollutants (HAPS) under Section 112 of the Clean Air Act Amendments of 1990.

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

TSCA

U.S. State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated by state right-to-know regulations.

International Regulations

Mexico - Grade

No information available.

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Not Determined

16. OTHER INFORMATION

Revision Date: 2012-03-20

Revision Note No information available.

Disclaimer

The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text

End of Material Safety Data Sheet