

Safety Data Sheet (SDS) According to the OSHA Hazard Communication Standard 29 CFR 1910.1200

Issuing Date: 2017-11-07 Version: 1

SECTION 1. Identification

Product identifier

Product No 16483 Product name Ibrutinib

Recommended use of the chemical and restrictions on use

Identified usesThis product is intended for research purposes only.

Manufacturer, importer, supplier

Manufacturer address Cell Signaling Technology, Inc.

3 Trask Lane Danvers, MA 01923 United States

TEL: +1 978 867 2300 FAX: +1 978 867 2400 www.cellsignal.com support@cellsignal.com

Emergency telephone number In case of emergency call CHEMTREC 1-800-424-9300

SECTION 2. Hazard(s) identification

Classification

Email address

Website

This substance/mixture is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute oral toxicity	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Carcinogenicity	Category 2
Reproductive toxicity	Category 1B
Specific target organ toxicity - single exposure (STOT SE)	Category 3
Specific target organ toxicity - repeated exposure (STOT RE)	Category 2

GHS Label elements, including precautionary statements



Signal Word Danger

Hazard statement(s)

Harmful if swallowed. Causes skin irritation. Causes serious eye damage. May cause respiratory irritation. May damage fertility or the unborn child. Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure.

Precautionary Statement(s)

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Use personal protective equipment as required.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Store in a well-ventilated place. Keep container tightly closed.

Dispose of contents/container to an approved waste disposal plant.

Supplementary Hazard Information

No information available.

Hazards not otherwise classified (HNOC)

Not applicable.

SECTION 3. Composition/information on ingredients

Chemical Name	CAS No	Weight %
Ibrutinib	936563-96-1	100

SECTION 4. First-aid measures

Eye contact Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

Skin contact Wash skin with soap and water.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial

respiration.

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

a physician. Do not induce vomiting without medical advice.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Advice for emergency responders

General advice For further assistance, contact your local Poison Control Center.

Protection of first-aiders Ensure that medical personnel are aware of the material(s) involved, and take precautions

to protect themselves.

SECTION 5. Fire-fighting measures

Extinguishing media

Suitable Extinguishing Media Water spray. Carbon dioxide (CO₂). Dry chemical. Foam. **Unsuitable Extinguishing Media** CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Explosion Data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

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.

SECTION 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Other information

Avoid breathing vapors or mists. Ensure adequate ventilation.

No information available.

Environmental precautions

Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Methods and material for containment and cleaning up

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

Pick up and transfer to properly labeled containers. Decontaminate floor with

decontamination solution letting stand for at least 15 minutes.

SECTION 7. Handling and storage

Precautions for safe handling

Do not breathe dust.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage

conditions

Keep container tightly closed in a dry and well-ventilated place. Keep at -20 °C.

Packaging material No information available.

Incompatible products Bases. Acids.

SECTION 8. Exposure controls/personal protection

Control parameters

Appropriate engineering controls

Showers, eyewash stations, and ventilation systems.

Individual protection measures, such as personal protective equipment

Personal protective equipment (PPE) needs to be selected depending on the implemented engineering controls, frequency/duration of work activities and the concentrations of the hazardous substance.

Eye/face protection Safety glasses with side-shields Wear protective gloves/clothing. Skin and body protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved Respiratory protection

respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be

Remarks Method

provided in accordance with current local regulations.

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

skin, eyes and clothing.

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid **Appearance**

Powder Color White

Odor No information available **Odor Threshold** No information available

Property Values

No information available

Melting point/freezing point

Initial boiling point and boiling range

Flash point **Evaporation rate** No information available

Flammability (solid, gas) No information available Upper flammability limit No information available No information available Lower flammability limit No information available Vapor pressure Vapor density No information available Relative density No information available No information available. Solubility Solubility in other solvents No information available. Partition coefficient: n-octanol/waterNo information available **Autoignition temperature** No information available

No information available **Decomposition temperature Viscosity** No information available Viscosity, dynamic No information available **Explosive properties** No information available Oxidizing properties No information available

Other information

No information available Softening point Molecular Weight No information available **VOC** content No information available **Density** No information available. **Bulk Density VALUE** No information available.

SECTION 10. Stability and reactivity

Reactivity

No information available.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous reactions None under normal processing. None under normal processing. Hazardous polymerization

Conditions to Avoid

Excessive heat. Exposure to light.

Incompatible Materials

Bases, Acids,

Hazardous Decomposition Products

Carbon dioxide (CO₂). Carbon monoxide (CO). Nitrogen oxides (NOx).

SECTION 11. Toxicological information

Information on likely routes of exposure

Inhalation May cause irritation of respiratory tract. May be harmful if inhaled.

Eye contact May cause irritation.

Skin contactMay be harmful in contact with skin. **Ingestion**May be harmful if swallowed.

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.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

SymptomsNo information available.SensitizationNo information available.Mutagenic effectsNo information available.

Carcinogenicity No component of this product present at levels greater than or equal to 0.1% is identifiable

as probable, possible or confirmed carcinogen by IARC, ACGIH, NTP, or OSHA.

Reproductive toxicity
STOT - single exposure
STOT - repeated exposure
Neurological effects
Aspiration Hazard
No information available.
No information available.
No information available.

SECTION 12. Ecological information

Ecotoxicity

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

Persistence and degradability
Bioaccumulation
Mobility
No information available.
No information available.
No information available

Other adverse effects

No information available.

SECTION 13. Disposal considerations

Waste Disposal Methods

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

Disposal considerations

Do not empty into drains; dispose of this material and its container in a safe way.

SECTION 14. Transport information

This material is not subject to regulation as a hazardous material for shipping.

SECTION 15. Regulatory information

North American Inventory Listing

Canadian Workplace Hazardous Materials Information System (WHMIS) Classification

This product does not meet the criteria for classification under the Hazardous Products Act. **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).

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.

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 under applicable state right-to-know regulations

U.S. FIFRA Label Information

This product does not contain any substances regulated as pesticides.

US Commerce Department - Export Administration Regulations Information

This product does not contain any substances regulated under the Chemical Weapons Convention (CWC).

U.S. Drug Enforcement Administration Information

This product does not contain any substances regulated under the DEA.

SECTION 16. Other information

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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.

End of Safety Data Sheet