



Cell Signaling

TECHNOLOGY®

SAFETY DATA SHEET (SDS): According to the OSHA Hazard Communication Standard 29 CFR 1910.1200

Issuing Date: 2014-03-19

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Version: 1

SECTION 1. Identification

Product identifier

Product No. 12961
Product name Axitinib
UN number UN3077
Other means of identification 12961S

Recommended use of the chemical and restrictions on use

Identified uses This product is intended for research purposes only.
Uses advised against This product is not intended for use in diagnostic procedures or therapeutics.
This product is not intended for use in humans or animals.

Manufacturer, importer, supplier

Manufacturer address Cell Signaling Technology, Inc.
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Email address support@cellsignal.com
Company phone number 978-867-2300
Emergency telephone number In case of emergency call CHEMTREC 1-800-424-9300

SECTION 2. Hazard(s) identification

Classification

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

Germ cell mutagenicity	Category 2
Reproductive toxicity	Category 2
Specific target organ toxicity - repeated exposure (STOT RE)	Category 2

GHS Label elements, including precautionary statements



Signal Word

Warning**Hazard statement(s)**

Suspected of causing genetic defects
 Suspected of damaging fertility or the unborn child
 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
 Use personal protective equipment as required
 Avoid release to the environment
 IF exposed or concerned: Get medical advice/attention

Supplementary Hazard Information

Hazards not otherwise classified (HNOC) Very toxic to aquatic life.

SECTION 3. Composition/information on ingredients

Formula C₂₂H₁₈N₄OS
Molecular Weight 386.47
Chemical nature Monoconstituent substance
Synonyms Axitinib; Inlyta; AG 013736; Benzamide, N-methyl-2-((3-((1E)-2-(2-pyridinyl)ethenyl)-1H-indazo)-6-yl)thio)-

Chemical Name	CAS No.	Weight %
N-methyl-2-[3-((E)2-pyridin-2-yl-vinyl)-1H-indazol-6-ylsulfanyl]-benzamide	319460-85-0	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.
Ingestion Clean mouth with water and afterwards drink plenty of water.

Most important symptoms and effects, both acute and delayed

Diarrhea, hypertension, fatigue, decreased appetite, nausea, dysphonia, palmar-plantar erythrodysesthesia (hand-foot) syndrome, weight decrease, vomiting, asthenia, and constipation

Indication of any immediate medical attention and special treatment needed

Notes to physician 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 Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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 Ensure adequate ventilation.

Other information No information available.

Environmental precautions

Do not flush into surface water or sanitary sewer system.

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 and collect in suitable container for disposal. Avoid dust formation. Clean contaminated surface thoroughly.

SECTION 7. Handling and storage

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Packaging material No information available.

Incompatible products None known based on information supplied.

SECTION 8. Exposure controls/personal protection

Control parameters

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

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.
Skin and body protection	Wear protective gloves/clothing.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hygiene measures	Handle in accordance with good industrial hygiene and safety practice.

SECTION 9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid
Appearance	Crystalline powder
Odor	No information available
Color	White to off-white
Odor Threshold	No information available
pH	No information available
Melting point/freezing point	213-224 °C
Initial boiling point and boiling range	No information available
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Upper flammability limit	No information available
Lower flammability limit	No information available
Vapor pressure	No information available
Vapor density	No information available
Relative density	No information available
Solubility	Practically insoluble
Solubility in other solvents	No information available
Partition coefficient: n-octanol/water	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Explosive properties	No information available
Oxidizing properties	No information available
Molecular Weight	386.47
VOC content	No information available
Viscosity	No information available
Density	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.
Hazardous polymerization	None under normal processing.

Conditions to Avoid

No information available.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

SECTION 11. Toxicological information**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	Target Organ Effects. Reproductive Toxicity.

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

Symptoms	No information available.
Corrosivity	No information available.
Sensitization	No information available.
Mutagenic effects	Genotoxic in the ivivomouse bone marrow micronucleus assay.
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	This material is classified as a Pregnancy Category D: Positive evidence of risk. In female mice, reduced fertility and embryonic viability were observed at all doses tested (=15 mg/kg/dose administered orally twice daily) following at least 15 days of treatment. In repeat-dose toxicology studies, findings in the male reproductive tract were observed in the testes/epididymis (decreased organ weight, atrophy or degeneration, decreased numbers of germinal cells, hypospermia or abnormal sperm forms, reduced sperm density and count) at =15 mg/kg/dose administered orally twice daily in mice and =1.5 mg/kg/dose administered orally twice daily in dogs.
STOT - single exposure	No information available.
STOT - repeated exposure	Subjects who received starting doses of 10 mg twice daily or 20 mg twice daily experienced adverse reactions which included hypertension, seizures associated with hypertension, and fatal hemoptysis. Toxicities in bone and teeth were observed in immature mice and dogs administered oral axitinib twice daily for 1 month or longer.
Target Organ Effects	Reproductive system, Respiratory system, Heart, Skeletal system, Teeth.
Neurological effects	No information available.
Aspiration Hazard	No information available.

SECTION 12. Ecological information

Ecotoxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
N-methyl-2-[3-((E)2-pyridin-2-yl-vinyl)-1H-indazol-6-ylsulfanyl]-benzamide	EC50 0.9 mg/L (Pseudokirchneriella subcapitata) 72 h	LC50 >0.055 mg/L (Cyprinodon variegatus) 96 h	-

Persistence and degradability OECD 21 Day(s) NOEC = 0.088 mg/L (Daphnia magna)
 OECD 32 Day(s) NOEC = 0.0035 mg/L (Pimephales promelas).

Bioaccumulation No information available.

Mobility No information available

Chemical Name	Octanol-Water Partition Coefficient
N-methyl-2-[3-((E)2-pyridin-2-yl-vinyl)-1H-indazol-6-ylsulfanyl]-benzamide	3.5

Other adverse effects

Bacterial Inhibition: OECD EC50 > 1000 mg/L (Activated sludge).

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

DOT

UN number UN3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s. (Axitinib)

Transport hazard class(es) 9

Packing Group III

Special precautions for user 146, 335, A112, B54, B120, IB8, IP3, N20, T1, TP33

Emergency Response Guide Number 171

IATA

UN number UN3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s. (Axitinib)

Transport hazard class(es) 9

Packing Group III

Special precautions for user A158, A179, A97

IMDG/IMO

UN number	UN3077
UN proper shipping name	Environmentally hazardous substance, solid, n.o.s. (Axitinib)
Transport hazard class(es)	9
Packing group	III
EmS No.	F-A, S-F
Special precautions for user	274, 335, 966, 967

SECTION 15. Regulatory information

North American Inventory Listing

Component	TSCA	DSL	NDSL
N-methyl-2-[3-((E)2-pyridin-2-yl-vinyl)-1H-indazol-6-ylsulfanyl]-benzamide 319460-85-0 (100)	Not Listed	Not Listed	Not Listed

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	Yes
Chronic Health Hazard	Yes
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. EPA Label Information

This product does not contain any substances regulated as pesticides.

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