

Sorafenib (BAY 43-9006) SDS | MSDS

1.PRODUCT AND COMPANY IDENTIFICATION

Product identifier

- **Product Name:** Sorafenib (BAY 43-9006)
- **Catalog Number:** S7397
- **CAS Number:** 284461-73-0
- **IUPAC Name:**
4-[4-[[4-chloro-3-(trifluoromethyl)phenyl]carbamoylamino]phenoxy]-N-methyl-pyridine-2-carboxamide

Relevant identified uses and uses advised against

- **Identified uses:** For research and development use only; laboratory chemicals; manufacture of substances.
- **Uses advised against:** Not for pharmaceutical, household, or other unapproved uses.

Details of the supplier

- **Company :** Selleck Chemicals
- **TollFree :** +1 877 796-6397
- **Tel :** +1 832 582-8158
- **Fax :** +1 832 582-8590

Emergency telephone number

- **Emergency phone #:** +1 832 582-8158

2. HAZARDS IDENTIFICATION

GHS Classification

- Reproductive toxicity: Category 1B
- Effects on or via lactation
- Specific target organ toxicity - repeated exposure: Category 1
- Short-term (acute) aquatic hazard: Category 1
- Long-term (chronic) aquatic hazard: Category 1

Pictogram:



Signal word: Danger

Hazard statements

- H360: May damage fertility or the unborn child.

- H362: May cause harm to breast-fed children.
- H372: Causes damage to organs through prolonged or repeated exposure.
- H410: Very toxic to aquatic life with long lasting effects.

Precautionary statements

- P201: Obtain special instructions before use.
- P202: Do not handle until all safety precautions have been read and understood.
- P260: Do not breathe powder.
- P263: Avoid contact during pregnancy/while nursing.
- P264: Wash skin thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P308 + P313: IF exposed or concerned: Get medical advice/attention.
- P391: Collect spillage.
- P405: Store locked up.
- P501: Dispose of contents/container to an approved waste disposal plant.

Other hazards

None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture: Substance

CAS-No.: 284461-73-0

Components

- **Chemical Name:**
4-[4-[[4-chloro-3-(trifluoromethyl)phenyl]carbamoylamino]phenoxy]-N-methyl-pyridine-2-carboxamide
- **CAS No.:** 284461-73-0
- **Concentration (% w/w):** ≥ 90 - $\leq 100\%$
- **Trade Secret:** Actual concentration is withheld as a trade secret.

4. FIRST AID MEASURES

General advice: Show this safety data sheet to the doctor in attendance.

If inhaled: After inhalation: fresh air. Call in physician.

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/shower. Consult a physician.

In case of eye contact: After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed: After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

Protection of first-aiders: For personal protection see section 8.

Notes to physician: N/A.

5. FIREFIGHTING MEASURES

Suitable extinguishing media: Water, Foam, Carbon dioxide (CO₂), Dry powder.

Unsuitable extinguishing media: For this substance/mixture no limitations of extinguishing agents are given.

Specific hazards during firefighting: Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

Hazardous combustion products: Carbon oxides, Nitrogen oxides (NO_x), Hydrogen chloride gas, Hydrogen fluoride.

Specific extinguishing methods: N/A.

Further information: Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Special protective equipment for fire-fighters: Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Advice for non-emergency personnel: Avoid generation and inhalation of powder in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: For personal protection see section 8.

Environmental precautions: Do not let product enter drains.

Methods and materials for containment and cleaning up: Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully. Dispose of properly. Clean up affected area. Avoid generation of powder.

7. HANDLING AND STORAGE

Advice on safe handling: Work under hood. Do not inhale substance/mixture. For precautions see section 2.

Further information on storage conditions: Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons.

Storage class: 6.1D, Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects.

Recommended storage temperature: 36 - 46 °F / 2 - 8 °C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters: Contains no substances with occupational exposure limit values.

Engineering measures: N/A.

Personal protective equipment

- **Respiratory protection:** Required when powder is generated. Recommended Filter type: Filter type P3 (based on DIN EN 143, DIN 14387).
- **Hand protection:** Nitrile rubber gloves. Full contact/Splash contact: Material thickness 0.11 mm, Break through time 480 min (e.g., KCL 741 Dermatrill L).
- **Eye protection:** Safety glasses tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
- **Skin and body protection:** Protective clothing.
- **Hygiene measures:** Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance:** powder
- **Color:** N/A
- **Odor:** N/A
- **Odor Threshold:** N/A
- **pH:** N/A
- **Melting point:** 386.8 °F / 197.1 °C
- **Boiling point:** Decomposes below the boiling point.
- **Flash point:** N/A
- **Evaporation rate:** N/A
- **Flammability (powder, gas):** The product is not flammable.
- **Flammability (liquids):** N/A
- **Burning rate:** N/A
- **Upper/Lower explosion limit:** N/A
- **Vapor pressure:** N/A
- **Relative vapour density:** N/A
- **Relative density:** N/A
- **Density:** 1.46 g/cm³ (68 °F / 20 °C)
- **Water solubility:** 0.0001 g/l (77 °F / 25 °C)
- **Partition coefficient: n-octanol/water:** log Pow: 3.3 (77 °F / 25 °C). Bioaccumulation is not expected.
- **Autoignition temperature:** N/A
- **Decomposition temperature:** > 491 °F / > 255 °C
- **Viscosity:** N/A
- **Flow time:** N/A
- **Explosive properties:** N/A
- **Oxidizing properties:** None

- **Molecular weight:** 464.82 g/mol
- **Particle size:** N/A

10. STABILITY AND REACTIVITY

Reactivity: Flammable organic substances in fine distribution may have a powder explosion potential when whirled up.

Chemical stability: The product is chemically stable under standard ambient conditions (room temperature).

Possibility of hazardous reactions: N/A.

Conditions to avoid: No information available.

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products: In the event of fire: see section 5.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

- **Acute toxicity:** LD50 Oral - Rat - male and female - > 2,000 mg/kg (OECD 401). LD50 Dermal - Rat - male and female - > 2,000 mg/kg (OECD 402). Inhalation: N/A.
- **Skin corrosion/irritation:** Skin - Rabbit: No irritation - 4 h (OECD 404).
- **Serious eye damage/eye irritation:** Eyes - Rabbit: Slight irritation (OECD 405).
- **Respiratory or skin sensitization:** Local lymph node assay (LLNA) - Mouse: Negative (OECD 429).
- **Germ cell mutagenicity:** Ames test (Salmonella typhimurium): Negative. Chromosome aberration test in vitro (Chinese hamster lung cells): Positive. Micronucleus (Mouse bone marrow): Negative.
- **Carcinogenicity:** IARC, NTP, and OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen.
- **Reproductive toxicity:** May damage the unborn child. May damage fertility. Studies indicate a hazard to babies during the lactation period.
- **STOT - single exposure:** N/A.
- **STOT - repeated exposure:** Causes damage to organs through prolonged or repeated exposure.
- **Aspiration hazard:** N/A.

11.2 Additional Information

RTECS: US4588870. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

Ecotoxicity

- **Toxicity to fish:** LC0 (Danio rerio): ≥ 0.012 mg/l - 96 h.
- **Toxicity to daphnia:** EC0 (Daphnia magna): ≥ 0.031 mg/l - 48 h.
- **Toxicity to algae:** ErC50 (Desmodesmus subspicatus): > 0.001 mg/l - 72 h.

- **M-Factor (Acute aquatic toxicity):** 100
- **Toxicity to fish (Chronic):** NOEC (Pimephales promelas): 0.0024 mg/l - 28 d.
- **Toxicity to daphnia (Chronic):** NOEC (Daphnia magna): ≥ 0.001 mg/l - 21 d.
- **M-Factor (Chronic aquatic toxicity):** 100
- **Toxicity to microorganisms:** NOEC (activated sludge): ≥ 32 mg/l - 30 min.

Persistence and degradability: Aerobic biodegradability (activated sludge): 2% - 28 d (Not biodegradable).

Bioaccumulative potential: log Pow: 3.3. Bioaccumulation is not expected.

Mobility in soil: N/A.

Other adverse effects: N/A.

13. DISPOSAL CONSIDERATIONS

Waste from residues: Waste material must be disposed of in accordance with national and local regulations. Leave chemicals in original containers

16. OTHER INFORMATION

Revision Date: 2026/07/08

Further Information: The information provided is believed to be correct but is not exhaustive and should be used only as a guideline based on current knowledge. It does not represent a guarantee of the properties of the product. Selleck Chemicals Corporation and its Affiliates shall not be held liable for any damage resulting from handling or contact with the product.