

Safety Data Sheet

SECTION 1. IDENTIFICATION:

Trade name: Trametinib, DMSO Solvate

Product Number: [T-8188](#)

Manufacturer/Supplier:

LC Laboratories

165 New Boston Street

Woburn, MA 01801 USA

1-781-937-0777 Fax: 1-781-938-5420

SECTION 2. HAZARD(S) IDENTIFICATION:

Hazard Description: Toxic; substance not fully investigated

Harmful if swallowed; toxic upon repeated ingestion of low doses

Based on animal studies using the 1:1 DMSO solvate of this compound, ingestion may result in adverse effects in the following organs: heart, liver, kidney, lungs, gastrointestinal tract, adrenal glands, thymus, spleen, skin, and bone marrow

Ingestion may result in adverse effects on the development of human offspring

Exposure may cause irritation to the eyes, skin, mucous membranes, and upper respiratory tract

Signal Word: Danger

GHS Hazard Statements:

H302 - Harmful if swallowed

H313 - May be harmful in contact with skin

H333 - May be harmful if inhaled

H335 - May cause respiratory irritation

H361 - Suspected of damaging fertility or the unborn child

H372 - Causes damage to organs through prolonged or repeated exposure

GHS Precautionary Statements:

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P264 - Wash any exposed skin thoroughly after handling

P280 - Wear protective gloves/eye protection/face protection

P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P330 - Rinse mouth

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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS:

Chemical Name: *N*-[3-[3-cyclopropyl-5-[(2-fluoro-4-iodophenyl)amino]-3,4,6,7-tetrahydro-6,8-dimethyl-2,4,7-trioxopyrido[4,3-*d*]pyrimidin-1(2*H*)-yl]phenyl]-acetamide

Synonyms: GSK-1120212, JTP-74057, Mekinist

Hazardous Ingredient: Trametinib

CAS Registry Number: 1187431-43-1

Molecular Weight: 693.53

Molecular Formula: $C_{26}H_{23}FIN_5O_4 \cdot C_2H_6OS$

SECTION 4. FIRST-AID MEASURES:

After Inhalation: If inhaled, remove to fresh air; if breathing is difficult, give oxygen; if breathing stops, give artificial respiration

After skin contact: flush with copious amounts of water; remove contaminated clothing and shoes; call a physician

After eye contact: check for and remove contact lenses; flush with copious amounts of water; assure adequate flushing by separating the eyelids with fingers; call a physician

After swallowing: if swallowed, wash out mouth with copious amounts of water; call a physician

SECTION 5. FIRE-FIGHTING MEASURES:

Suitable extinguishing agents: water spray, carbon dioxide, dry chemical powder or foam

Protective equipment: wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes

Unusual fire hazard: may emit toxic fumes under fire conditions such as carbon monoxide, etc.

SECTION 6. ACCIDENTAL RELEASE MEASURES:

Person-related safety precautions: cordon off area of spill; wear self-contained breathing apparatus, protective clothing and heavy rubber gloves

Measures for cleaning/collecting: absorb solutions with finely- powdered liquid-binding material (diatomite, universal binders); decontaminate surfaces and equipment by scrubbing with alcohol; dispose of contaminated material according to Section 13

SECTION 7. HANDLING AND STORAGE:

Information for safe handling: avoid contact with skin, eyes and clothing; material may be an irritant

Storage: store solid and solutions at -20 °C

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION:

Personal protective equipment as follows:

Breathing equipment: NIOSH/MSHA-approved respirator

Protection of hands: chemical-resistant rubber gloves

Eye protection: chemical safety goggles

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES:

Form: crystalline solid; granular or powder

Color: white to off-white

Odor: none

Melting point/Melting range: 293-303 °C

Danger of explosion: none

Solubility in / Miscibility with water: very poorly soluble in water; maximum solubility in plain water is estimated to be about 5-10 µM; buffers, serum, or other additives may increase or decrease the aqueous solubility

Solvent content:

Organic solvents: soluble in DMSO at 20 mg/mL with warming; very poorly soluble in ethanol

SECTION 10. STABILITY AND REACTIVITY:

Stability: avoid acids and bases

Thermal decomposition / conditions to be avoided: protect from light and heat

Dangerous products of decomposition: thermal decomposition may produce toxic gases such as carbon monoxide and carbon dioxide, and nitrogen oxides

SECTION 11. TOXICOLOGICAL INFORMATION:

RTECS #: not available

Acute toxicity: oral toxicity (lethal dose): 1 mg/kg/day - 14 day study (rat) - toxicity data from the GlaxoSmithKline MSDS dated June 10, 2010 for the 1:1 DMSO solvate

Primary irritant effect:

On the skin: may be an irritant; may be harmful if absorbed through the skin

On the eye: may be an irritant

Inhalation: may be an irritant; may be harmful if inhaled

Ingestion: harmful if swallowed; toxic upon repeated ingestion of low doses

SECTION 12. ECOLOGICAL INFORMATION:

General notes: no data available

Treat as potentially toxic if released into the environment

SECTION 13. DISPOSAL CONSIDERATIONS:

Dispose of in accordance with prevailing country, federal, state and local regulations

SECTION 14. TRANSPORT INFORMATION:

UN number: 2811

DOT: Toxic solid, organic, n.o.s. (*N*-[3-[3-cyclopropyl-5-[(2-fluoro-4-iodophenyl)amino]-3,4,6,7-tetrahydro-6,8-dimethyl-2,4,7-trioxypyrido[4,3-*d*]pyrimidin-1(2*H*)-yl]phenyl]-acetamide), Class: 6.1, Packing

group: III

IATA: Toxic solid, organic, n.o.s. (*N*-[3-[3-cyclopropyl-5-[(2-fluoro-4-iodophenyl)amino]-3,4,6,7-tetrahydro-6,8-dimethyl-2,4,7-trioxopyrido[4,3-*d*]pyrimidin-1(2*H*)-yl]phenyl]-acetamide), Class: 6.1, Packing group: III

SECTION 15. REGULATORY INFORMATION:

Code letter and hazard designation of product:

T: Toxic; Xn: Harmful

EU Risk And Safety phrases:

S22: Do not breathe dust

S24/25: Avoid contact with skin and eyes

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible)

S53: Avoid exposure - obtain special instructions before use

R48/25: Toxic: danger of serious damage to health by prolonged exposure if swallowed

R63: Possible risk of harm to the unborn child

SECTION 16. OTHER INFORMATION:

The above information is believed to be correct based on our present knowledge but does not purport to be complete. For research use only by trained personnel. The burden of safe use of this material rests entirely with the user. LC Laboratories disclaims all liability

Reviewed: March 7, 2019