



MATERIAL SAFETY DATA SHEET (MSDS)

Version 3.11 Revision Date 1/20/2020 Print Date 1/20/2020

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

| Product name: | GSK2292767 |
|---------------------------|--------------|
| Product Catalogue Number: | 522376 |
| Brand: | MedKoo |
| CAS-No: | 1254036-66-2 |

1.2 Relevant identified uses of the substance or mixture and uses advised against Laboratory chemicals, Synthesis of substances. Identified uses:

1.3 Details of the supplier of the safety data sheet

| Company: | MedKoo Biosciences, Inc. |
|------------|--|
| | 2500 Gateway Centre Blvd. Suite 400, Morrisville, NC27560, USA |
| Telephone: | 919-636-5577 |
| Fax: | 919-980-4831 |

1.4 Emergency telephone number

Emergency Phone # 911 (in USA) or local emergency phone#

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Acute Toxicity: Oral, Category 4 Aquatic Toxicity (Acute), Category 1 Aquatic Toxicity (Chronic), Category 1

2.2 GHS Label elements, including precautionary statements

Pictogram:

| Signal word: | Warning | |
|---------------------------|---|--|
| Hazard statement(s) | | |
| H302: | Harmful if swallowed. | |
| H400: | Very toxic to aquatic life. | |
| H410: | Very toxic to aquatic life with long lasting effects. | |
| Precautionary statement(s |) | |
| P264: | Wash hands thoroughly after handling. | |
| P273: | Avoid release to the environment. | |

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| P273: | Avoid release to the environment. |
|--------------|--|
| P301 + P312: | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. |
| P330: | Rinse mouth. |
| P391: | Collect spillage. |

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS: Adverse Human HealthEffects and Symptoms:

Harmful if swallowed.

Material may be irritating to the mucous membranes and upper respiratory tract. May be harmful by inhalation or skin absorption. May cause eye, skin, or respiratory system irritation.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

| Synonyms: | GSK2292767; GSK-2292767; GSK 2292767 |
|-------------------|--------------------------------------|
| Formula: | $C_{24}H_{28}N_6O_5S$ |
| Molecular weight: | 512.58 |
| CAS-No: | 1254036-66-2 |

Hazardous components

| Component | Classification | Concentration |
|------------|---|---------------|
| GSK2292767 | Acute Tox.(O) 4: H302Aquatic (A) 1: H400Aquatic (C) 1: H410 | <= 100 % |
| | | |

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.Move out of dangerous area. If inhaled

Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel.Get immediate medical attention.

In case of skin contact

Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

In case of eye contact

Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.

If swallowed

Wash out mouth with water provided person is conscious. Never give anything by mouth to anunconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so bymedical personnel.

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Recommended storage temperature: 2 - 8 °C for short term (weeks to 3 months) or -20°C for long term (3 months to years).

Keep in a dry place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

| Component | CAS-No. | Value | Control parameters | Basis |
|------------|--------------|-------|--------------------|-------|
| GSK2292767 | 1254036-66-2 | N/A | N/A | N/A |

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Full contact

Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min Material tested:Dermatril® (KCL 740 / Aldrich Z677272, Size M)

Splash contact

Material: Nitrile rubber Minimum layer thickness: 0.11 mm Break through time: 480 min

Data source

KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, e-mail sales@kcl.de, test method: EN374. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| information on basic physical and | |
|--|--|
| a) Appearance Form: | Color: White to off-white |
| | Form: Crystalline Solid |
| b) Odour | No data available |
| c) Odour Threshold | No data available |
| d) pH | No data available |
| e) Melting point/freezing | No data available |
| point f) Initial bailing point and | No dete evoilable |
| f) Initial boiling point and boiling range | No data available |
| g) Flash point | No data available |
| h) Evaporation rate | No data available |
| i) Flammability (solid, gas) | No data available |
| j) Upper/lower flammability or | No data available |
| explosive limits | |
| k) Vapour pressure | No data available |
| I) Vapour density | No data available |
| m) Relative density | No data available |
| n) Solubility Notes | ~0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2); ~14 mg/ml in DMSO; ~16 |
| , , | mg/ml in DMF |
| Partition coefficient: noctanol/ | log Pow: > 99 |
| water | |
| p) Auto-ignition temperature | No data available |
| q) Decomposition temperature | No data available |
| r) Viscosity | No data available |
| s) Explosive properties | No data available |
| t) Oxidizing properties | No data available |
| | |

9.2 Other safety information

No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity : No data available

10.2 Chemical stability: Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions: No data available

- 10.4 Conditions to avoid: No data available
- 10.5 Incompatible materials: No data available

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx) Other decomposition products - No data available In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

| Acute toxicity | No data available |
|----------------|-----------------------------------|
| Inhalation: | No data available |
| Inhalation: | Irritating to respiratory system. |
| Dermal | No data available |

Skin corrosion/irritation: No data available Serious eye damage/eye irritation: No data available

Respiratory or skin sensitisation

Germ cell mutagenicity: No data available Hamster: No data available Lungs: No data available Cytogenetic analysis: No data available Mouse: No data available Micronucleus test: No data available

Carcinogenicity

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

Reproductive toxicity - Rat - No data available Maternal Effects: No data available Reproductive toxicity - Rat - No data available Effects on Newborn: No data available Developmental Toxicity - Rat - No data available Specific Developmental Abnormalities: No data available

Specific target organ toxicity - single exposure Inhalation - May cause respiratory irritation.

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: No data available

Additional Information

RTECS: DA8340700

Alopecia., Liver injury may occur., Kidney injury may occur., Nausea, Headache, Vomiting, bone marrow depression Stomach - Irregularities - No data available Central nervous system - No data available Kidney - Irregularities - No data available Heart - Irregularities - No data available Stomach - Irregularities - No data available Stomach - Irregularities - No data available Kidney - Irregularities - No data available Stomach - Irregularities - No data available

12. ECOLOGICAL INFORMATION

12.1 Toxicity: Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

12.2 Persistence and degradability: No data available

- 12.3 Bioaccumulative potential: No data available
- 12.4 Mobility in soil: No data available
- 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects: No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

14.1 - DOT (US): Not dangerous goods

14.2 - LAND TRANSPORT (European ADR/RID):

ADR/RID Shipping Name: Environmentally hazardous substances, solid, n.o.s. (GSK2292767) UN Number: 3077 Packing Group: III

14.3 - AIR TRANSPORT (ICAO/IATA):

ICAO/IATA Shipping Name: Environmentally hazardous substances, solid, n.o.s. (GSK2292767) UN Number: 3077, Packing Group: III Hazard Class: 9-Class 9 IATA Classification: 9

15. REGULATORY INFORMATION

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

| Massachusett | s Right To Know Components | |
|--------------------------------|----------------------------|---------------|
| Components | CAS-No. | Revision data |
| GSK2292767 | 1254036-66-2 | N/A |
| Pennsylvania | Right To Know Components | |
| Components | CAS-No. | Revision data |
| GSK2292767 | 1254036-66-2 | N/A |
| New Jersey Ri | ght To Know Components | |
| Components | CAS-No. | Revision data |
| GSK2292767 | 1254036-66-2 | N/A |
| California Prop. 65 Components | | |
| Components | CAS-No. | Revision data |
| GSK2292767 | 1254036-66-2 | N/A |

16. OTHER INFORMATION

HMIS Rating

Health hazard: 2 Chronic Health Hazard: * Flammability: 0 Physical Hazard 0

NFPA Rating

Health hazard: 2 Fire Hazard: 0 Reactivity Hazard: 0

Further information

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Preparation Information

MedKoo Biosciences, Inc. Product Safety – multiple Region Tel: 919-636-5577

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