SIGMA-ALDRICH

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SAFETY DATA SHEET

Version 5.1 Revision Date 11/16/2017 Print Date 11/09/2018

1. PRODUCT AND COMPANY IDENTIFICATION 1.1 Product identifiers Product name : Atazanavir Product Number SML1796 : Brand Sigma CAS-No. 198904-31-3 5 1.2 Relevant identified uses of the substance or mixture and uses advised against Identified uses : Laboratory chemicals, Synthesis of substances 1.3 Details of the supplier of the safety data sheet Company 5 Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA +1 800-325-5832 Telephone +1 800-325-5052 Fax 1.4 **Emergency telephone number** Emergency Phone # +1-703-527-3887 (CHEMTREC) 5 2. HAZARDS IDENTIFICATION 2.1

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Eye irritation (Category 2A), H319

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

2.2 GHS Label elements, including precautionary statements

Pictogram

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| Signal word | Warning |
|---|--|
| Hazard statement(s) H319 | Causes serious eye irritation. |
| Precautionary statement(s) P264 P280 P305 + P351 + P338 P337 + P313 | Wash skin thoroughly after handling. Wear eye protection/ face protection. 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. |

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 **Substances**

Synonyms

: 1,14-Dimethyl (3S,8S,9S,12S)-3,12-bis(1,1-dimethylethyl)-8-hydroxy-

4,11-dioxo-9-(phenylmethyl)-6-[[4-(2-pyridinyl)phenyl]methyl]-2,5 BMS-232632

| Formula | : | C38H52N6O7 |
|------------------|---|--------------|
| Molecular weight | : | 704.86 g/mol |
| CAS-No. | : | 198904-31-3 |

Hazardous components

| Component | Classification | Concentration | |
|---|---------------------|---------------|--|
| 1,14-Dimethyl (3S,8S,9S,12S)-3,12-bis(1,1-dimethylethyl)-8-hydroxy-4,11-dioxo-9-(phenylmethyl)-6- | | | |
| [[4-(2-pyridinyl)phenyl]methyl]-2,5 | | | |
| | Eye Irrit. 2A; H319 | 90 - 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

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed 4.3 No data available

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 vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust. For personal protection see section 8.

6.2 **Environmental precautions**

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. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. 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 -20 °C

Recommended storage temperature -20 °C

Keep in a dry place. Keep in a dry place. Storage class (TRGS 510): 13: Non Combustible Solids

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 Contains no substances with occupational exposure limit values. Hazardous components without workplace control parameters

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

Safety glasses with side-shields conforming to EN166 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.

Body Protection

Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties Form: powder a) Appearance b) Odour No data available c) Odour Threshold No data available d) pH No data available e) Melting point/freezing Melting point/range: 198 - 200 °C (388 - 392 °F) point Initial boiling point and No data available f) boiling range g) Flash point No data available No data available h) Evaporation rate Flammability (solid, gas) No data available i) No data available j) Upper/lower flammability or explosive limits k) Vapour pressure No data available Vapour density No data available I) 1.178 g/cm3 m) Relative density n) Water solubility No data available Partition coefficient: n-No data available 0) octanol/water p) Auto-ignition No data available temperature Decomposition No data available q) temperature No data available r) Viscosity s) Explosive properties No data available Oxidizing properties No data available t) Other safety information No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity No data available

9.2

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 Strong oxidizing agents

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

Dermal: No data available

No data available

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

Eye irritation Information given is based on data obtained from similar substances.

Respiratory or skin sensitisation No data available

INO Gala available

Germ cell mutagenicity

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

No data available

No data available

Specific target organ toxicity - single exposure No data available

Specific target organ toxicity - repeated exposure

No data available

Aspiration hazard No data available

Additional Information

RTECS: Not available

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

12. ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

- **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

Contact a licensed professional waste disposal service to dispose of this material. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

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

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

| 1,14-Dimethyl (3S,8S,9S,12S)-3,12-bis(1,1-dimethylethyl)-8- hydroxy-4,11-dioxo-9-(phenylmethyl)-6-[[4-(2- pyridinyl)phenyl]methyl]-2,5 | CAS-No. 198904-31-3 | Revision Date |
|--|------------------------|---------------|
| 1,14-Dimethyl (3S,8S,9S,12S)-3,12-bis(1,1-dimethylethyl)-8- hydroxy-4,11-dioxo-9-(phenylmethyl)-6-[[4-(2- pyridinyl)phenyl]methyl]-2,5 | CAS-No. 198904-31-3 | Revision Date |
| New Jersey Right To Know Components | | |
| 1,14-Dimethyl (3S,8S,9S,12S)-3,12-bis(1,1-dimethylethyl)-8- | CAS-No. 198904-31-3 | Revision Date |

hydroxy-4,11-dioxo-9-(phenylmethyl)-6-[[4-(2pyridinyl)phenyl]methyl]-2,5

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

| Eye Irrit. | Eye irritation |
|------------|--------------------------------|
| H319 | Causes serious eye irritation. |

0

0

HMIS Rating

| Health hazard: | 2 |
|------------------------|---|
| Chronic Health Hazard: | |
| Flammability: | 0 |
| Physical Hazard | 0 |
| NFPA Rating | |
| Health hazard: | 2 |

Health hazard: Fire Hazard: Reactivity Hazard:

Further information

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Preparation Information

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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