2'-Deoxy-5'-O-DMT-N2-isobutyrylguanosine 3'-CE

phosphoramidite: sc-283481

MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

| Product Name: Product Number: | 2'-Deoxy-5'-O-DMT-N2-isobutyrylguanosine 3'-CE phosphoramidite scNumber |
|----------------------------------|--|
| Supplier: | Santa Cruz Biotechnology, Inc. 2145 Delaware Avenue Santa Cruz, CA 95060 800.457.3801 or 831.457.3800 |
| Emergency: | ChemWatch Within the US & Canada: 877-715-9305 Outside the US & Canada: +800 2436 2255 (1-800-CHEMCALL) or call +613 9573 3112 |

2. HAZARDS IDENTIFICATION

Emergency Overview OSHA Hazards No known OSHA hazards Not a dangerous substance according to GHS. **HMIS Classification** Health hazard: 0 Flammability: 0 Physical hazards: 0 **NFPA** Rating Health hazard: 0 Fire: 0 **Reactivity Hazard:** 0 **Potential Health Effects** Inhalation May be harmful if inhaled. May cause respiratory tract irritation. May be harmful if absorbed through skin. May cause skin irritation. Skin Eyes May cause eye irritation. May be harmful if swallowed. Ingestion

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula:C44H54N7O8PMolecular Weight:839.92CAS #:93183-15-4No ingredients are hazardous according to OHSA criteria.

4. FIRST AID MEASURES

If inhaled If breathed in, move person into fresh air. If not breathing, give artificial respiration. In case of skin contact Wash off with soap and plenty of water. In case of eye contact Flush eyes with water as a precaution. If swallowed

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



The Power to Question

5. FIREFIGHTING MEASURES

Suitable extinguishing media

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

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Hazardous decomposition products formed under fire conditions - carbon oxides, nitrogen oxides (NOx), oxides of phosphorus

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid dust formation. Avoid breathing vapors, mist or gas.
Environmental precautions
Do not let product enter drains.
Methods and materials for containment and cleaning up
Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Store at 4° C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand 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.

Eye protection

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

Skin and body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

General industrial hygiene practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

| Form | solid |
|------------------------------|-------------------|
| Melting point/freezing point | no data available |
| Flash point | no data available |
| Autoignition temperature | no data available |
| Upper explosion limit | no data available |
| Density | no data available |
| Relative vapor density | no data available |
| Odor Threshold | no data available |

pH Boiling point Ignition temperature Lower explosion limit Vapor pressure Water solubility Odor Evaporation rate no data available Partition coefficient n-octanol/water

no data available

10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.
Possibility of hazardous reactions
no data available
Conditions to avoid
no data available
Materials to avoid
Strong oxidizing agents
Hazardous decomposition products
Hazardous decomposition products formed under fire conditions - carbon oxides, nitrogen oxides (NOx), oxides
of phosphorus.
Other decomposition products
no data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity Oral LD50 no data available Inhalation LC50 no data available Dermal LD50 no data available Other information on acute toxicity no data available Skin corrosion/irritation no data available Serious eye damage/eye irritation no data available Respiratory or skin sensitization no data 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. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. 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. No component of this product present at levels greater than or equal to 0.1% is identified as a OSHA: carcinogen or potential carcinogen by OSHA. **Reproductive toxicity** no data available Teratogenicity no data available Specific target organ toxicity - single exposure (Globally Harmonized System) no data available Specific target organ toxicity - repeated exposure (Globally Harmonized System) no data available Aspiration hazard no data available **Potential Health Effects** Inhalation May be harmful if inhaled. May cause respiratory tract irritation. Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation. May be harmful if swallowed. Ingestion

Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. **Synergistic effects** no data available

Additional Information RTECS: Not available

12. ECOLOGICAL INFORMATION

Toxicity no data available Bioaccumulative potential no data available PBT and vPvB assessment no data available

Persistence and degradability no data available Mobility in soil no data available Other adverse effects no data available

13. DISPOSAL CONSIDERATIONS

Product 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

OSHA Hazards

No known OSHA hazards SARA 302 Components SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. SARA 313 Components SARA 313: 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 No SARA Hazards Massachusetts Right To Know Components No components are subject to the Massachusetts Right to Know Act. Pennsylvania Right To Know Components DG(DMF) Amidite CAS-No. 93183-15-4 New Jersey Right To Know Components DG(DMF) Amidite CAS-No. 93183-15-4

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

The above information is believed to be correct but does not purport to be complete and should be used only as a guide. The burden of safe use of this material rests entirely with the user.

1/20/2014