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# SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION		
48488		
[5'-O-(4, 4'-Dimethoxytrityl)-2'-deoxythymidine](p-thio-pCyEt)[2'- deoxyguanosine(isobutyryl)-3'		
[5'-O-DMT-2'-dT](P-thio-pCyEt)[2'-dG(iBu)-3'-CE phosphoramidite];		
(800) 535-5053 (USA) 352-323-3500 (INTERNATIONAL)		
(800) 869-9290		
(630) 766-2112		

# SECTION 2. HAZARD IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

NOT A HAZARDOUS SUBSTANCE OR MIXTURE

**GHA LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS** NOT A HAZARDOUS SUBSTANCE OR MIXTURE

HAZARDS NOT NONE OTHERWISE CLASSIFIED (HNOC) OR NOT COVERED BY GHS

# SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF:

C57H70N10O14P2S

MW: 1213.25

CAS RN:

# **SECTION 4. FIRST-AID MEASURES**

DESCRIPTION OF FIRST AID MEASURES	
GENERAL ADVICE	IMMEDIATELY REMOVE ANY CLOTHING CONTAMINATED BY THE PRODUCT. MOVE OUT OF DANGEROUS AREA. CONSULT A PHYSICIAN AND SHOW THIS SAFETY DATA SHEET
IF INHALED	MOVE PERSON TO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. IF BREATHING IS DIFFICULT, GIVE OXYGEN AND CONSULT A PHYSICIAN
IN CASE OF SKIN CONTACT	IMMEDIATELY FLUSH SKIN WITH RUNNING WATER FOR AT LEAST 15 MINUTES WHILE REMOVING CONTAMINATED CLOTHING AND SHOES. WASH CLOTHING BEFORE REUSE. CONSULT A PHYSICIAN IMMEDIATELY
IN CASE OF EYE CONTACT	IMMEDIATELY WASH SKIN WITH COPIOUS AMOUNTS OF WATER FOR AT LEAST 15 MINUTES. ASSURE ADEQUATE FLUSHING OF THE EYES BY SEPARATING THE EYELIDS WITH FINGERS. IF IRRITATION PERSISTS, CONSULT A PHYSICIAN.
IF SWALLOWED	DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. 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
INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED	NO DATA AVAILABLE

# SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING<br/>MEDIAUSE WATER SPRAY, DRY CHEMICAL, CARBON DIOXIDE OR<br/>CHEMICAL FOAM.

SPECIAL HAZARDS<br/>ARISING FROM THE<br/>SUBSTANCE OR MIXTURECARBON OXIDES, NITROGEN OXIDES (NOX), SULPHUR OXIDES,<br/>POTASSIUM OXIDESADVICE FOR<br/>FIREFIGHTERSWEAR SELF CONTAINED BREATHING APPARATUS FOR FIRE<br/>FIGHTING IF NECESSARY.

FURTHER INFORMATION NO DATA AVAILABLE

### SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL	WEAR PROTECTIVE EQUIPMENT AND KEEP UNPROTECTED
PRECAUTIONS,	PERSONNEL AWAY. ENSURE ADEQUATE VENTILATION. REMOVE ALL
PROTECTIVE EQUIPMENT	SOURCES OF IGNITION. PREVENT FURTHER LEAK OR SPILL IF SAFE
AND EMERGENCY	TO DO SO.
PROCEDURES	FOR PERSONAL PROTECTION SEE SECTION 8.
ENVIRONMENTAL PRECAUTIONS	PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.
METHODS AND	PREVENT FURTHER LEAK OR SPILL IF SAFE TO DO SO. VACUUM,
MATERIALS FOR	SWEEP UP, OR ABSORB WITH INERT MATERIAL AND PLACE INTO A
CONTAINMENT AND	SUITABLE DISPOSAL CONTAINER. CONSULT LOCAL REGULATIONS
CLEANING UP	FOR DISPOSAL
REFERENCE TO OTHER SECTIONS	FOR DISPOSAL SEE SECTION 13.

#### **SECTION 7. HANDLING AND STORAGE**

PRECAUTIONS FOR SAFE HANDLING	AVOID CONTACT WITH SKIN, EYES, AND PERSONAL CLOTHING. WASH HANDS THOROUGHLY AFTER HANDLING. AVOID BREATHING FUMES. USE ONLY WITH ADEQUATE VENTILATION. WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES, AND EYE/FACE PROTECTION. KEEP AWAY FROM SOURCES OF IGNITION. MINIMIZE DUST GENERATION AND ACCUMULATION. KEEP CONTAINER TIGHTLY CLOSED. OPEN AND HANDLE CONTAINER WITH CARE. DO NOT EAT, DRINK, OR SMOKE WHILE HANDLING. FOR PRECAUTIONS SEE SECTION 2.
CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES	STORE IN A TIGHTLY CLOSED CONTAINER WHEN NOT IN USE. STORE IN A COOL, DRY, WELL-VENTILATED AREA AWAY FROM INCOMPATIBLE SUBSTANCES. KEEP AWAY FROM SOURCES OF IGNITION.

**RECOMMENDED** Store at ≤ -20 °C **STORAGE TEMPERATURE** 

SPECIFIC END USE(S) FOR LABORATORY USE ONLY

#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### **CONTROL PARAMETERS**

COMPONENTS WITHCONTAINS NO SUBSTANCES WITH OCCUPATIONAL EXPOSURE LIMITWORKPLACE CONTROLVALUES.PARAMETERS

### **EXPOSURE CONTROLS**

APPROPRIATE AVOID CONTACT WITH SKIN, EYES, AND CLOTHING. WASH HANDS ENGINEERING CONTROLS BEFORE BREAKS AND IMMEDIATELY AFTER HANDLING THE PRODUCT. FACILITIES STORING OR UTILIZING THIS MATERIAL SHOULD BE EQUIPPED WITH AN EYEWASH FOUNTAIN. USE ADEQUATE VENTILATION TO KEEP AIRBORNE CONCENTRATIONS LOW.

#### 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 EN166 (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.

RESPIRATORYWHERE RISK ASSESSMENT INDICATES AIR-PURIFYINGPROTECTIONRESPIRATORS ARE REQUIRED USE A DUST MASK TYPE N95 (US) OR<br/>TYPE P1 (EN 143) RESPIRATOR. RESPIRATORS AND COMPONENTS<br/>MUST TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT<br/>STANDARDS - 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. DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.

### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

#### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES APPEARANCE White or off-white to faint yellow powder ODOR NO DATA AVAILABLE ODOR THESHOLD NO DATA AVAILABLE NO DATA AVAILABLE pН MELTING/FREEZING POINT INITIAL BOILING POINT AND BOILING RANGE FLASH POINT **EVAPORATION RATE** NO DATA AVAILABLE FLAMMABILITY (SOLID, NO DATA AVAILABLE GAS) UPPER/LOWER NO DATA AVAILABLE FLAMMABILITY OR EXPLOSIVE LIMITS VAPOR PRESSURE NO DATA AVAILABLE VAPOR DENSITY NO DATA AVAILABLE RELATIVE DENSITY WATER SOLUBILITY NO DATA AVAILABLE PARTITION COEFFICIENT: NO DATA AVAILABLE N- OCTANOL/ WATER **AUTO-IGNITION** NO DATA AVAILABLE TEMPERATURE DECOMPOSITION NO DATA AVAILABLE **TEMPERATURE** VISCOSITY NO DATA AVAILABLE **EXPLOSIVE PROPERTIES** NO DATA AVAILABLE **OXIDIZING PROPERTIES** NO DATA AVAILABLE **OTHER SAFETY** NO DATA AVAILABLE INFORMATION

### SECTION 10. STABILITY AND REACTIVITY

#### REACTIVITY

NO DATA AVAILABLE

CHEMICAL STABILITY

STABLE UNDER RECOMMENDED STORAGE CONDITIONS.

POSSIBILITY OF<br/>HAZARDOUS REACTIONSNO DATA AVAILABLECONDITIONS TO AVOIDHEAT, FLAMES AND SPARKSINCOMPATIBLE<br/>MATERIALSSTRONG OXIDIZING AGENTSHAZARDOUS<br/>DECOMPOSITION<br/>PRODUCTSCARBON MONOXIDE, NITROGEN OXIDES, HYDROGEN CHLORIDE<br/>IN THE EVENT OF FIRE: SEE SECTION 5

## SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS	
ΑСUTE ΤΟΧΙΟΙΤΥ	NO DATA AVAILABLE
SKIN CORROSION/ IRRITATION	NO DATA AVAILABLE
SERIOUS EYE DAMAGE/ EYE IRRITATION	NO DATA AVAILABLE
RESPIRATORY OR SKIN SENSITISATION	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.
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
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 OF THIS SUBSTANCE HAVE NOT BEEN THOROUGHLY INVESTIGATED.

### SECTION 12. ECOLOGICAL INFORMATION

ΤΟΧΙΟΙΤΥ	NO DATA AVAILABLE
PERSISTENCE AND DEGRADABILITY	NO DATA AVAILABLE
BIOACCUMULATIVE POTENTIAL	NO DATA AVAILABLE
MOBILITY IN SOIL	NO DATA AVAILABLE
RESULTS OF PBT AND VPVB ASSESSMENT	PBT/VPVB ASSESSMENT NOT AVAILABLE AS CHEMICAL SAFETY ASSESSMENT NOT REQUIRED/NOT CONDUCTED
OTHER ADVERSE EFFECTS	NO DATA AVAILABLE

### SECTION 13. DISPOSAL CONSIDERATIONS

## WASTE TREATMENT METHODS

**PRODUCT**OFFER SURPLUS AND NON-RECYCLABLE CHEMICAL TO A LICENSED<br/>DISPOSAL COMPANY. CONTACT A LICENSED PROFESSIONAL WASTE<br/>DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL.

CONTAMINATED	DISPOSE OF AS UNUSED PRODUCT.
PACKAGING	

### SECTION 14. TRANSPORT INFORMATION

### DOT (US)

NOT DANGEROUS GOODS

# IMDG

NOT DANGEROUS GOODS

### ΙΑΤΑ

NOT DANGEROUS GOODS

### SECTION 15. REGULATORY INFORMATION

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.
MASSACHUSETTS RIGHT TO KNOW COMPONENTS	NO COMPONENTS ARE SUBJECT TO THE MASSACHUSETTS RIGHT TO KNOW ACT.

### PENNSYLVANIA RIGHT TO KNOW COMPONENTS

[5'-O-(4, 4'-Dimethoxytrityl)-2'deoxythymidine](p-thiopCyEt)[2'deoxyguanosine(isobutyryl)-3'

#### NEW JERSEY RIGHT TO KNOW COMPONENTS

CAS RN

CAS RN

**REVISION DATE** 

**REVISION DATE** 

[5'-O-(4, 4'-Dimethoxytrityl)-2'deoxythymidine](p-thiopCyEt)[2'deoxyguanosine(isobutyryl)-3'

### 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.

### SECTION 16. OTHER INFORMATION

SDS LEGEND	
MW:	MOLECULAR WEIGHT
MF:	MOLECULAR FORMULA
VOC:	VOLATILE ORGANIC COMPOUNDS
ACGIH:	AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGINISTS
CAS RN:	CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER
OSHA:	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PEL:	PERMISSIBLE EXPOSURE LIMIT (OSHA)
TLV:	THRESHOLD LIMIT VALUE (ACGIH)

IMPORTANT:

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Version 1.0

Revised 08/06/2024